REVISION RECORD FOR THE STATE OF CALIFORNIA

SUPPLEMENT

July 1, 2018

2016 Title 24, Part 2, Vol. 1, California Building Code

General Information:

- 1. The date of this supplement is for identification purposes only. See the History Note Appendix at the end of the code.
- 2. This supplement is issued by the California Building Standards Commission in order to provide new and/or replacement pages containing recently adopted provisions for California Code of Regulations, Title 24, Part 2, Volume 1, of the 2016 *California Building Code*. Instructions are provided below.
- 3. Health and Safety Code Section 18938.5 establishes that only building standards in effect at the time of the application for a building permit may be applied to the project plans and construction. This rule applies to both adoptions of building standards for Title 24 by the California Building Standards Commission and local adoptions and ordinances imposing building standards. The new building standards provided with the enclosed blue supplement pages must not be enforced before the effective date.
- 4. Not all code text on the enclosed blue supplement pages is a new building standard. New, amended, or repealed building standards are identified by margin symbols. An explanation of margin symbols is provided in the code before the table of contents.
- 5. You may wish to retain the superseded material with this revision record so that the prior wording of any section can be easily ascertained.

Title 24, Part 2, Vol. 1

Insert Blue-Colored Pages
xxi through xxvi
13 through 16
35 through 40
47 and 48
51 through 58
65 through 68
81 and 82
91 and 92
99 through 102
105 through 108
113 and 114
121 and 122
125 through 134
143 and 144
149 through 156
161 and 162
177 and 178
185 and 186
191 and 192

197 and 198	197 and 198
203 and 204	203 and 204
285 through 292	285 through 292.2
295 through 304	295 through 304
307 and 308	307 and 308
311 and 312	311 and 312
323 through 326	323 through 326
333 through 340	333 through 340
355 and 356	355 and 356
359 and 360	359 and 360
377 through 380	377 through 380
389 through 394	389 through 394
401 through 404	401 through 404
513 through 522	513 through 522
537 and 538	537 and 538
541 and 542	541 and 542
545 and 546	545 and 546
555 and 556	555 and 556
575 and 576	575 and 576
579 through 582	579 through 582
597 and 598	597 and 598
601 and 602	601 and 602
613 and 614	613 and 614
629 through 718	629 through 718.4
797 and 798	797 and 798

VOLU	ME 1	110	Inspec	tions	30
		111	Certifi	cate of Occupancy	31
CHAP'	TER 1 SCOPE AND ADMINISTRATION3	112	Servic	e Utilities	32
		113	Board	of Appeals	32
DIVISI	ON I CALIFORNIA ADMINISTRATION 3	114		ions	
		115		Vork Order	
Section		116	-	e Structures and Equipment	
1.1	General	110	Olisare	Successed and Equipment	00
1.2	Building Standards Commission 5	CHAP	PTER 2	DEFINITIONS	45
1.3	Board of State and Community Corrections 7	Section	n		
1.4	Department of Consumer Affairs	201	_	al	45
1.5	Reserved	202		tions	
1.6	Department of Food and Agriculture	202	Delliii	tions	45
1.7	California Department of Public Health8	СНАР	PTER 3	USE AND OCCUPANCY	
1.8	Department of Housing and		12110	CLASSIFICATION	93
	Community Development 8	Section	n		
1.8.2	Authority and Abbreviations 8	301		al	03
1.8.3	Local Enforcing Agency9	302		fication	
1.8.4	Permits, Fees, Applications and Inspections 10	303		bly Group A	
1.8.5	Right of Entry for Enforcement	304			
1.8.6	Local Modification by			ess Group B	
	Ordinance or Regulation11	305		tional Group E	
1.8.7	Alternate Materials, Designs, Tests and	306		y Group F	
	Methods of Construction	307		nazard Group H	
1.8.8	Appeals Board	308		tional Group I	
1.8.9	Unsafe Buildings or Structures	309		ntile Group M	
1.8.10	Other Building Regulations	310		ential Group R	
1.9	Division of the State Architect	311		e Group S	
1.10	Office of Statewide Health Planning	312	-	and Miscellaneous Group U	
	and Development	313		atories Group L [SFM]	
1.11	Office of the State Fire Marshal	314	Organi	ized Camps Group C [SFM]	104
1.12	State Librarian				
1.13	Reserved	CHAP	PTER 4	SPECIAL DETAILED	
1.14	California State Lands Commission21			REQUIREMENTS BASED ON USE AND OCCUPANCY	100
D. W. W. G.	YOU IN GOOD AND ADDRESS OF THE OWN	G		USE AND OCCUPANCE	103
	ON II SCOPE AND ADMINISTRATION23	Section			
101	General	401			
102	Applicability	402		ed Mall and Open Mall Buildings	
103	Department of Building Safety24	403	-	ise Buildings	
104	Duties and Powers of Building Official 24	404		1S	
105	Permits	405		ground Buildings	
106	Floor and Roof Design Loads28	406	Motor-	-vehicle-related Occupancies	118
107	Submittal Documents	407	Group	I-2	122
108	Temporary Structures and Uses	408	Group	I-3	127
109	Fees30	409	Motion	n Picture Projection Rooms	132

410	Stages, Platforms and Technical Production Areas	CHAI	PTER 5	GENERAL BUILDING HEIGHTS AND AREAS	173
411	Special Amusement Buildings 134	Section	n		
412	Aircraft-related Occupancies	501	Genera	al	173
413	Combustible Storage	502		tions	
414	Hazardous Materials138	503		al Building Height and	175
415	Groups H-1, H-2, H-3, H-4 and H-5	202	Area	a Limitations	174
416	Application of Flammable Finishes 152	504	Buildi	ng Height and Number of Stories	175
417	Drying Rooms	505		nines and Equipment Platforms	
418	Organic Coatings	506		ng Area	
419	Live/work Units	507		ited Area Buildings	
420	Groups R-1, R-2, R-2.1, R-3, R-3.1 and R-4153	508		Use and Occupancy	
421	Hydrogen Fuel Gas Rooms	509		ntal Uses	
422	Ambulatory Care Facilities	510		ll Provisions	
423	Storm Shelters				
424	Children's Play Structures	CHAI	PTER 6	TYPES OF CONSTRUCTION	191
425	Hyperbaric Facilities	Section	n		
426	Combustible Dusts,	601	Genera	al	191
	Grain Processing and Storage	602	Constr	ruction Classification	191
435	Special Provisions for Licensed	603	Combi	ustible Material in	
	24-Hour Care Facilities in a		Typ	es I and II Construction	194
10.6	Group R-2.1, R-3.1, R-4 [SFM]				
436	Group I-4 [SFM]	CHAI	PTER 7	FIRE AND SMOKE	
437	Reserved			PROTECTION FEATURES	197
438	Reserved	Section	n		
439	Road Tunnels, Bridges, and Other Limited-Access Highways [SFM] 161	701	Genera	al	197
440	Horse Racing Stables [SFM]	702	Defini	tions	197
441	Pet Kennels and Pet Boarding	703		esistance Ratings and Fire Tests	198
441	Facilities [SFM]	704		esistance Rating of	100
442	Combustion Engines and	5 0.5		ctural Members	
	Gas Turbines [SFM]	705		or Walls	
443	Fixed Guideway Transit and Passenger Rail	706		Valls	
	Systems [SFM]	707		arriers	
444	Explosives [SFM]	708		artitions	
445	Reserved	709		Barriers	
446	Winery Caves [SFM]	710		Partitions	
447	Reserved	711		ontal Assemblies	
448	Reserved	712		al Openings	
449	Public Libraries [SL AND SFM] 163	713		Enclosures	
450	Group C [SFM]	714		ations	
451	Reserved	715		esistant Joint Systems	
452	School Facilities for Kindergarten through	716	_	ng Protectives	
_	12th Grade and Group E Day Care166	717		and Air Transfer Openings	
453	Group L [SFM]167	718		aled Spaces	
454	Reserved	719		esistance Requirements for Plaster	
455	Large Family Day-care Homes [SFM]170	720	Therm	al- and Sound-insulating Materials	232

	721	Prescriptive Fire Resistance	916	Gas Detection Systems
	722	Calculated Fire Resistance	917	Emergency Responder Radio Coverage 355
	СНАРТ	ΓER 7A MATERIALS AND	СНАР	TER 10 MEANS OF EGRESS
	CIMIT	CONSTRUCTION METHODS	Section	
		FOR EXTERIOR WILDFIRE		
		EXPOSURE285	1001	Administration
	Section		1002	Definitions
	701A	Scope, Purpose and Application	1003	General Means of Egress
	702A	Definitions	1004	Occupant Load
	703A	Standards of Quality287	1005	Means of Egress Sizing
	704A	Ignition-resistant Construction	1006	Number of Exits and
	705A	Roofing		Exit Access Doorways
	706A	Vents	1007	Exit and Exit Access
	707A	Exterior Covering	1000	Doorway Configuration
ı	708A	Exterior Windows, Skylights and Doors 291	1008	Means of Egress Illumination
ı	709A	Decking	1009	Accessible Means of Egress
	710A	Accessory Structures	1010	Doors, Gates and Turnstiles
			1011	Stairways
	CHAPT	TER 8 INTERIOR FINISHES293	1012	Ramps
	Section		1013	Exit Signs
	801	General	1014	Handrails
	802	Definitions	1015	Guards
	803	Wall and Ceiling Finishes	1016	Exit Access
		Interior Floor Finish	1017	Exit Access Travel Distance
	804		1018	Aisles
	805	Combustible Materials in Types I and II Construction297	1019	Exit Access Stairways and Ramps 393
	806	Decorative Materials and Trim	1020	Corridors
	807	Insulation	1021	Egress Balconies
	808	Acoustical Ceiling Systems	1022	Exits
	808	Acoustical Certific Systems	1023	Interior Exit Stairways and Ramps 396
	СНАРТ	TER 9 FIRE PROTECTION SYSTEMS 305	1024	Exit Passageways
	Section		1025	Luminous Egress Path Markings
		0 1	1026	Horizontal Exits
	901	General	1020	
	902	Definitions		Exterior Exit Stairways and Ramps
	903	Automatic Sprinkler Systems	1028	Exit Discharge
	904	Alternative Automatic	1029	Assembly
	005	Fire-extinguishing Systems	1030	Emergency Escape and Rescue 409
	905	Standpipe Systems	CILAD	TED 11 DECEDIVED 411
	906	Portable Fire Extinguishers	СНАР	TER 11 RESERVED
	907	Fire Alarm and Detection Systems	CILAD	TED 114 HOUGING A COECCIDII ITY 415
	908	Emergency Alarm Systems		TER 11A HOUSING ACCESSIBILITY 415
	909	Smoke Control Systems	Section	
	910	Smoke and Heat Removal	1101A	• •
	911	Fire Command Center	1102A	Building Accessibility 415
	912	Fire Department Connections	1103A	
	913	Fire Pumps	1104A	•
	914	Emergency Responder Safety Features 352	1105A	
	915	Carbon Monoxide Detection	1106A	Site and Building Characteristics

1107A	Definitions	1147A Reserved
1108A	General Requirements for Accessible Parking	1148A Reserved
	and Exterior Routes of Travel	1149A Reserved
	Parking Facilities	1150A Site Impracticality Tests
1110A	Exterior Accessible Routes	
1111A	Changes in Level on Accessible Routes 421	CHAPTER 11B ACCESSIBILITY TO PUBLIC
1112A	Curb Ramps on Accessible Routes 421	BUILDINGS, PUBLIC ACCOMMODATIONS,
1113A		COMMERCIAL BUILDINGS
11111	Accessible Routes	AND PUBLIC HOUSING 511
1114A	Exterior Ramps and Landings on Accessible Routes	
1115A	Exterior Stairways	DIVISION 1 – APPLICATION AND ADMINISTRATION
	Hazards on Accessible Routes	Section
	General Requirements for Accessible	11B-101 Purpose
111/11	Entrances, Exits, Interior Routes of	11B-102 Dimensions for Adults and Children 511
	Travel and Facility Accessibility 425	11B-103 Equivalent Facilitation 511
	Egress and Areas of Refuge 425	11B-104 Conventions
1119A	Interior Accessible Routes	11B-105 Referenced Standards
	Reserved	11B-106 Definitions
	Changes in Level on Accessible Routes 426	11B-107 Special Conditions Appeals Action 513
1122A	Interior Ramps and Landings on Accessible Routes	11B-108 Maintenance of Accessible Features 513
1123A	Interior Stairways	DIVISION 2 – SCOPING REQUIREMENTS
1124A	Elevators and Platform	11B-201 Application
	(Wheelchair) Lifts428	11B-202 Existing Buildings and Facilities 514
	Hazards on Accessible Routes	11B-203 General Exceptions 516
1126A	Doors, Gates and Windows	11B-203 General Exceptions 510 11B-204 Protruding Objects 517
1127A		11B-205 Operable Parts
	Covered Dwelling Units	11B-206 Accessible Routes
	Reserved	11B-207 Accessible Means of Egress
1130A	Accessible Route within Covered Multifamily Dwelling Units	11B-208 Parking Spaces
1121 A		11B-209 Passenger Drop-off and Loading
	Changes in Level on Accessible Routes	Zones and Bus Stops
1132A 1133A	Kitchens	11B-210 Stairways
1133A 1134A	Bathing and Toilet Facilities	11B-211 Drinking Fountains
1135A	Laundry Rooms	11B-212 Kitchens, Kitchenettes, Wet Bars and Sinks524
	Electrical Receptacle,	11B-213 Toilet Facilities and Bathing Facilities 524
1130/1	Switch and Control Heights	11B-214 Washing Machines and Clothes Dryers 525
1137A		11B-215 Fire Alarm Systems and Carbon
1138A	Space Allowances and Reach Ranges 447	Monoxide Alarm Systems 525
1139A	Accessible Drinking Fountains	11B-216 Signs
1140A	_	11B-217 Telephones
1141A	Accessible Swimming Pools 450	11B-218 Transportation Facilities
1142A	Electrical Receptacle, Switch and	11B-219 Assistive Listening Systems
	Control Heights	11B-220 Automatic Teller Machines, Fare
1143A	Signage	Machines and Point-of-sale Devices 529
1144A	Reserved	11B-221 Assembly Areas
1145A	Reserved	11B-222 Dressing, Fitting, and Locker Rooms 531
1146A	Reserved	11B-223 Medical care and Long-term Care Facilities 531

11B-224	Transient Lodging Guest Rooms, Housing at a Place of Education and Social Service Center Establishments532	11B-406	Transitions and Islands
11B-225	Storage	11B-407	Elevators
11B-225	Dining Surfaces and Work Surfaces 534	11B-408	Limited-use/Limited-application Elevators 565
11B-227	Sales and Service	11B-409	Private Residence Elevators
		11B-410	Platform Lifts
11B-228	Depositories, Vending Machines, Change Machines, Mail Boxes, Fuel Dispensers and Electric Vehicle Charging Stations 534	11B-411	Destination-oriented Elevators
11B-229	Windows	ELEMEN	N 5 – GENERAL SITE AND BUILDING
11B-230	Two-way Communication Systems 535	11B-501	General
11B-231	Judicial Facilities	11B-501 11B-502	Parking Spaces
11B-232	Detention Facilities and Correctional Facilities	11B-503	Passenger Drop-off and Loading Zones 576
11B-233	Residential Facilities	11B-504	Stairways
11B-234	Amusement Rides	11B-505	Handrails
11B-235	Recreational Boating Facilities 539	DIVISIO	N 6 – PLUMBING ELEMENTS AND
11B-236	Exercise Machines and Equipment539	FACILIT	
11B-237	Fishing Piers and Platforms 539	11B-601	General
11B-238	Golf Facilities	11B-602	Drinking Fountains
11B-239	Miniature Golf Facilities539	11B-603	Toilet and Bathing Rooms 580
11B-240	Play Areas	11B-604	Water Closets and Toilet Compartments 581
11B-241	Saunas and Steam Rooms 540	11B-605	Urinals
11B-242	Swimming Pools, Wading Pools, and Spas 540	11B-606	Lavatories and Sinks
11B-243	Shooting Facilities with Firing Positions 541	11B-607	Bathtubs
11B-244	Religious Facilities	11B-608	Shower Compartments
11B-245	Public Accommodations Located	11B-609	Grab Bars
112 2.0	in Private Residences	11B-610	Seats
11B-246	Outdoor Developed Areas541	11B-611	Washing Machines and Clothes Dryers 593
11B-247	Detectable Warnings and Detectable Directional Texture	11B-612	Saunas and Steam Rooms
DIVIGIO	NA DVIVIDING DE OGRA		N 7 – COMMUNICATION ELEMENTS AND
	N 3 – BUILDING BLOCKS	FEATUR	
11B-301	General	11B-701	General
11B-302	Floor or Ground Surfaces 543	11B-702	Fire Alarm Systems 594
11B-303	Changes in Level	11B-703	Signs
11B-304	Turning Space	11B-704	Telephones
11B-305	Clear Floor or Ground Space544	11B-705	Detectable Warnings and
11B-306	Knee and Toe Clearance	115 506	Detectable Directional Texture 600
11B-307	Protruding Objects	11B-706	Assistive Listening Systems 602
11B-308	Reach ranges	11B-707	Automatic Teller Machines, Fare Machines and Point-of-sale Devices
11B-309	Operable Parts	11B-708	Two-way Communication Systems 604
DIVISIO	N 4 – ACCESSIBLE ROUTES	DIII	NO CHECKLE BOOMS CRACES AND
11B-401	General	DIVISION ELEMEN	N 8 – SPECIAL ROOMS, SPACES, AND
11B-402	Accessible Routes		
11B-403	Walking Surfaces 549	11B-801	General
11B-404	Doors, Doorways, and Gates 550	11B-802	Wheelchair Spaces, Companion Seats, and Designated Aisle Seats
11B-405	Ramps		and Semi-ambulant Seats 605

11B-803	Dressing, Fitting, and Locker Rooms 606	1215	Reserved
11B-804	Kitchens, Kitchenettes and Wet Bars 606	1216	Reserved
11B-805	Medical Care and Long-term Care Facilities . 608	1217	Reserved
11B-806	Transient Lodging Guest Rooms 609	1218	Reserved
11B-807	Holding Cells and Housing Cells 609	1219	Reserved
11B-808	Courtrooms	1220	Reserved
11B-809	Residential Dwelling Units610	1221	Reserved
11B-810	Transportation Facilities 611	1222	Reserved
11B-811	Storage	1223	Reserved
11B-812	Electric Vehicle Charging Stations	1224	[OSHPD 1] Hospitals
DIVISIO	N 9 – BUILT-IN ELEMENTS	1225	[OSHPD 2] Skilled Nursing and Intermediate-care Facilities 676
11B-901	General	1226	[OSHPD 3] Clinics
11B-902	Dining Surfaces and Work Surfaces 615	1227	[OSHPD 4] Correctional Treatment Centers 696
11B-903	Benches	1228	Acute Psychiatric Hospitals 701
11B-904	Check-out Aisles and Sales	1229	Reserved
112 70.	and Service Counters	1230	[BSCC] Minimum Standards for Juvenile Facilities
DIVISIO	N 10 – RECREATION FACILITIES	1231	[BSCC] Local Detention
11B-1001	General	1232	Reserved
	Amusement Rides 617	1233	Reserved
	Recreational Boating Facilities 618	1234	Reserved
	Exercise Machines and Equipment620	1235	[DPH] Sanitary Control of Shellfish
	Fishing Piers and Platforms 621		(Plants and Operations)
	Golf Facilities	1236	[DPH] Laboratory Animal Quarters 717
	Miniature Golf Facilities 622	1237	[DPH] Wild Animal Quarantine Facilities 717
	Play Areas	1238	Reserved718
	Swimming Pools,	1239	Reserved718
	Wading Pools, and Spas624	1240	[AGR] Meat and Poultry Processing Plants 718
11B-1010	Shooting Facilities with Firing Positions 628	1241	[AGR] Collection Centers and Facilities 718.1
		1242	[AGR] Renderers
CHAPTE Section	ER 12 INTERIOR ENVIRONMENT630	1243	[AGR] Horsemeat and Pet Food Establishments
	General	1244	Reserved718.2
	Definitions	1245	Reserved718.2
	Ventilation	1246	Reserved718.2
	Femperature Control	1247	Reserved718.2
	Lighting	1248	Reserved718.2
	Yards or Courts	1249	Reserved718.2
	Sound Transmission	1250	[CA] Pharmacies
	nterior Space Dimensions	1251	[CA] Veterinary Facilities
	Access to Unoccupied Spaces	1252	[CA] Barber Colleges and Shops718.3
	Foilet and Bathroom Requirements	1253	[CA] Schools of Cosmetology, Cosmetological
	HCD 1 & HCD 2] Garage Door Springs 636		Establishments and Satellite Classrooms 718.4
	HCD 1] Pollutant Control	1254	[CA] Acupuncture Offices718.4
	Reserved	ATT : =	
	Reserved	CHAP	TER 13 ENERGY EFFICIENCY 719

- 5. For applications subject to the Factory-Built Housing Law as referenced in Section 1.8.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.
- 1.8.9.2 Actions and proceedings. Subject to other provisions of law, punishments, penalties and fines for violations of building standards are contained in the following statutes and regulations:
 - 1. For applications subject to the State Housing Law as referenced in Section 1.8.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.
 - 2. For applications subject to the Mobilehome Parks Act as referenced in Section 1.8.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.
 - 3. For applications subject to the Special Occupancy Parks Act as referenced in Section 1.8.3.2.3 of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
 - 4. For applications subject to the Employee Housing Act as referenced in Section 1.8.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.
 - 5. For applications subject to the Factory-Built Housing Law as referenced in Section 1.8.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

SECTION 1.8.10 OTHER BUILDING REGULATIONS

1.8.10.1 Existing structures. Notwithstanding other provisions of law, the replacement, retention, and extension of original materials and the use of original methods of construction for any existing building or accessory structure, or portions thereof, shall be permitted in accordance with the provisions of this code and the California Existing Building Code, as adopted by the Department of Housing and Community Development. For additional information, see California Health and Safety Code, Sections 17912, 17920.3, 17922 and 17958.8.

1.8.10.2 Moved structures. Subject to the requirements of California Health and Safety Code Sections 17922, 17922.3

and 17958.9, local ordinances or regulations relating to a moved residential building or accessory structure thereto, shall permit the replacement, retention, and extension of original materials and the use of original methods of construction so long as the structure does not become or continue to be a substandard building.

SECTION 1.9 DIVISION OF THE STATE ARCHITECT

1.9.1 Division of the State Architect—Access Compliance.

General. The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other improvements to which this code applies in compliance with state law to ensure that these improvements are accessible to and usable by persons with disabilities. Additions, alterations and structural repairs in all buildings and facilities shall comply with these provisions for new buildings, except as otherwise provided and specified herein.

The provisions of these regulations shall apply to any portable buildings leased or owned by a school district, and shall also apply to temporary and emergency buildings and facilities. Temporary buildings and facilities are not of permanent construction but are extensively used or are essential for public use for a period of time. Examples of temporary buildings or facilities covered include, but are not limited to: reviewing stands, temporary classrooms, bleacher areas, exhibit areas, temporary banking facilities, temporary health screening services or temporary safe pedestrian passageways around a construction site.

In addition, to incorporate standards at least as restrictive as those required by the federal government for barrier-free design under (1) Title III (Public Accommodations and Commercial Facilities), Subpart D (New Construction and Alteration) (see 28 C.F.R., Part 36), and (2) Title II (Public Entities), Section 35.151 (New Construction and Alterations) (see 28 C.F.R., Part 35) both from the Americans with Disabilities Act of 1990, 2004 Americans with Disabilities Act Accessibility Guidelines, as adopted by the U.S. Department of Justice (see 36 C.F.R. Part 1191, Appendices B and D), and (3) under the Fair Housing Amendments Act of 1988. Some of these regulations may be more stringent than state law in order to meet the federal requirement.

1.9.1.1 Application. See Government Code commencing with Section 4450.

Publicly funded buildings, structures, sidewalks, curbs and related facilities shall be accessible to and usable by persons with disabilities as follows:

- **1.9.1.1.1** All buildings, structures, sidewalks, curbs and related facilities constructed in the state by the use of state, county or municipal funds, or the funds of any political subdivision of the state.
- 1.9.1.1.2 All buildings, structures and facilities that are leased, rented, contracted, sublet or hired by any municipal, county or state division of government, or by a special district.

- **1.9.1.1.3** All publicly funded buildings used for congregate residences or for one- or two-family dwelling unit purposes shall conform to the provisions applicable to living accommodations.
- 1.9.1.1.4 All existing publicly funded buildings and facilities when alterations, structural repairs or additions are made to such buildings or facilities. For detailed requirements on existing buildings, see Chapter 11B, Division 2, Section 11B-202.
- 1.9.1.1.5 With respect to buildings, structures, sidewalks, curbs and related facilities not requiring a building permit, building standards published in the California Building Standards Code relating to access for persons with disabilities and other regulations adopted pursuant to Government Code Section 4450, and in effect at the time construction is commenced, shall be applicable.
- 1.9.1.2 Application. See Health and Safety Code commencing with Section 19952.

All privately funded public accommodations, as defined, and commercial facilities, as defined, shall be accessible to persons with disabilities as follows:

- Exception: Certain types of privately funded multistory buildings do not require installation of an elevator to provide access above and below the first floor. See Chapter 11B.
- **1.9.1.2.1** Any building, structure, facility, complex or improved area, or portions thereof, which are used by the general public.
- 1.9.1.2.2 Any sanitary facilities which are made available for the public, clients or employees in such accommodations or facilities.
- **1.9.1.2.3** Any curb or sidewalk intended for public use that is constructed in this state with private funds.
- 1.9.1.2.4 All existing privately funded public accommodations when alterations, structural repairs or additions are made to such public accommodations as set forth under Chapter 11B.
- **1.9.1.3 Application**—Public housing and private housing available for public use. See Government Code Sections 4450 and 12955.1(c).

1.9.1.4 Enforcing agency.

- 1.9.1.4.1 The director of the Department of General Services where state funds are utilized for any project or where funds of counties, municipalities or other political subdivisions are utilized for the construction of elementary, secondary or community college projects.
- **1.9.1.4.2** The governing bodies where funds of counties, municipalities or other political subdivisions are utilized except as otherwise provided above.
- 1.9.1.4.3 The building department of every city, county or city and county within the territorial area of its city, county or city and county, where private funds are utilized. "Building department" means the department,

- bureau or officer charged with the enforcement of laws or ordinances regulating the erection or construction, or both the erection and construction, of buildings.
- 1.9.1.5 Special conditions for persons with disabilities requiring appeals action ratification. Whenever reference is made in these regulations to this section, the findings and determinations required to be rendered by the local enforcing agency shall be subject to ratification through an appeals process.
- 1.9.1.6 Authority cited—Government Code Section 4450.
- 1.9.1.7 Reference cited—Government Code Sections 4450 through 4461 and 12955.1(c) and Health and Safety Code Sections 18949.1, 19952 through 19959.
- **1.9.1.8** Adopting agency identification. The provisions of this code applicable to buildings identified in this Subsection 1.9.1 will be identified in the Matrix Adoption Tables under the acronym DSA-AC.
- 1.9.2 Division of the State Architect—Structural Safety.
 - 1.9.2.1 DSA-SS Division of the State Architect-Structural Safety.

Application—Public elementary and secondary schools, community colleges and state-owned or state-leased essential services buildings.

Enforcing agency—The Division of the State Architect—Structural Safety (DSA-SS) has been delegated the responsibility and authority by the Department of General Services to review and approve the design and observe the construction of public elementary and secondary schools, community colleges and state-owned or state-leased essential services buildings.

Authority cited—Education Code Sections 17310 and 81142 and Health and Safety Code Section 16022.

Reference—Education Code Sections 17280 through 17317, and 81130 through 81147 and Health and Safety Code Sections 16000 through 16023.

1.9.2.1.1 Applicable administrative standards.

- 1. Title 24, Part 1, California Code of Regulations:
 - 1.1. Sections 4-301 through 4-355, Group 1, Chapter 4, and Sections 4-401 through 4-435, Group 2, Chapter 4, for public elementary and secondary schools and community colleges.
 - 1.2. Sections 4-201 through 4-249, Chapter 4, for state-owned or state-leased essential services buildings.
- 2. Title 24, Part 2, California Code of Regulations: [applies to public elementary and secondary schools, community colleges and state-owned or state-leased essential services building(s)]:
 - 2.1. Sections 1.1 and 1.9.2.1 of Chapter 1, Division I.
 - 2.2. Sections 102.1, 102.2, 102.3, 102.4, 102.5, 104.9, 104.10, 104.11, 106.1, 107.2.7 and 110.3.8.1 of Chapter 1, Division II.

1.9.2.1.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10, 11 and 12, California Code of Regulations, for school buildings, community colleges and state-owned or state-leased essential service buildings.

The provisions of Title 24, Part 2, as adopted and amended by the Division of the State Architect—Structural Safety, shall apply to the applications listed in Section 1.9.2.1.

The Division of the State Architect—Structural Safety adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16A, 17A, 18A, 19A, 20, 21A, 22A, 23, 24, 25, 26, 30, 31, 32, 33, and 35.

1.9.2.1.3 Amendments. Division of the State Architect—Structural Safety amendments in this code appear preceded with the acronym [DSA-SS].

Exception: Chapters 16A, 17A, 18A, 19A, 21A, and 22A— Amendments appearing in these chapters without an acronym have been co-adopted by DSA-SS and OSHPD.

1.9.2.1.4 Reference to other chapters. Where reference is made within this code to sections in Chapters 16, 17, 18, 19, 21, and 22, the respective sections in Chapters 16A, 17A, 18A, 19A, 21A, and 22A shall apply instead.

1.9.2.2 DSA-SS/CC Division of the State Architect-Structural Safety/Community Colleges

Application—Community Colleges. The Division of the State Architect has been delegated the authority by the Department of General Services to promulgate alternate building standards for application to community colleges, which a community college may elect to use in lieu of standards promulgated by DSA-SS in accordance with Section 1.9.2.1.

Enforcing agency—Division of the State Architect-Structural Safety/Community Colleges (DSA-SS/CC)

The Division of the State Architect has been delegated the authority by the Department of General Services to review and approve the design and oversee construction of community colleges electing to use the alternative building standards as provided in this section.

Authority cited—Education Code Section 81053.

Reference—Education Code Sections 81052, 81053, and 81130 through 81147.

1.9.2.2.1 Applicable administrative standards.

- 1. Title 24, Part 1, California Code of Regulations:
 - 1.1. Sections 4-301 through 4-355, Group 1, Chapter 4, and Sections 4-401 through 4-435, Group 2, Chapter 4.
- 2. Title 24, Part 2, California Code of Regulations:

- 2.1. Sections 1.1 and 1.9.2 of Chapter 1, Division I
- 2.2. Sections 102.1, 102.2, 102.3, 102.4, 102.5, 104.9, 104.10, 104.11, 106.1, 107.2.7 and 110.3.8.1 of Chapter 1, Division II.
- 1.9.2.2.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10, 11, and 12, California Code of Regulations.

The Division of the State Architect-Structural Safety/Community Colleges [DSA-SS/CC] adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16, 17A, 18A, 19, 20, 21, 22, 23, 24, 25, 26, 30, 31, 32, 33, and 35.

1.9.2.2.3 Amendments. Division of the State Architect—Structural Safety/Community Colleges amendments in this code appear preceded with the acronym [DSA-SS/CC].

Exception: Chapters 17A, and 18A—Amendments appearing in these chapters without an acronym have been co-adopted by DSA-SS, DSA-SS/CC, and OSHPD.

1.9.2.2.4 Reference to other chapters. Where reference is made within this code to sections in Chapters 17 and 18, the respective sections in Chapters 17A and 18A shall apply instead.

SECTION 1.10 OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

1.10.1 OSHPD 1. Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Application—General acute care hospitals and acute psychiatric hospitals, excluding distinct part units or distinct part freestanding buildings providing skilled nursing or intermediate care services. For structural regulations: Skilled nursing facilities and/or intermediate care facilities except those skilled nursing facilities and intermediate care facilities of single-story, Type V, wood or light steel-frame construction.

Enforcing agency—Office of Statewide Health Planning and Development (OSHPD). The office shall enforce the Division of the State Architect-Access Compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility types.

1.10.1.1 Applicable administrative standards.

- 1. Title 24, Part 1, California Code of Regulations: Chapters 6 and 7.
- 2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1, Division I, and Sections 101–105.1.2, portions of Section 105.2 as indicated in the adoption matrix and Sections 105.3-116, Chapter 1, Division II.

1.10.1.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9 and 11.

The provisions of Title 24, Part 2, as adopted and amended by OSHPD, shall apply to the applications listed in Section 1.10.1.

OSHPD 1 adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16A, 17A, 18A, 19A, 20, 21A, 22A, 23, 24, 25, 26, 30, 31, 32, 33, 34A, 35, and Appendix L.

- 1.10.1.3 Identification of amendments. For applications listed in Section 1.10.1, amendments appear in this code preceded with the acronym [OSHPD 1], unless the entire chapter is applicable.
- 1.10.1.4 Reference to other chapters. Where reference is made within this code to sections in Chapters 16, 17, 18, 19, 21, 22 and 34, the respective sections in Chapters 16A, 17A, 18A, 19A, 21A, 22A and 34A shall apply instead.

Authority—Health and Safety Code Sections 127010, 127015, 1275 and 129850.

References—Health and Safety Code Sections 19958, 127010, 127015, 129680, 1275 and 129675 through 130070.

1.10.2 OSHPD 2. Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Application—Skilled nursing facilities and intermediate care facilities, including distinct part skilled nursing and intermediate care services on a general acute care or acute psychiatric hospital license, provided either are in a separate unit or a freestanding building. For structural regulations: Single-story, Type V skilled nursing facility and/or intermediate care facilities utilizing wood or light steel-frame construction.

Enforcing agency—Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce the Division of the State Architect—Access Compliance regulations and the regulations of the Office of the State Fire Marshal for the above-stated facility type.

1.10.2.1 Applicable administrative standards.

- 1. Title 24, Part 1, California Code of Regulations: Chapter 7.
- 2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1, Division I, and Sections 101-103, portions of Section 104 and 105 as indicated in the adoption matrix and Sections 106–116, Chapter 1, Division II.
- 1.10.2.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10 and 11.

The provisions of Title 24, Part 2, as adopted and amended by OSHPD, shall apply to the applications listed in Section 1.10.2.

OSHPD 2 adopts the following building standards in Title 24, Part 2:

Chapters 2 through 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 30, 31, 32, 33 and 35.

1.10.2.3 Identification of amendments. For applications listed in Section 1.10.2, amendments appear in this code preceded with the acronym [OSHPD 2].

Authority—Health and Safety Code Sections 127010, 127015, 1275 and 129850.

References—Health and Safety Code Sections 127010, 127015, 1275 and 129680.

1.10.3 OSHPD 3. Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Application—Licensed clinics and any freestanding building under a hospital license where outpatient clinical services are provided.

Enforcing agency—Local building department.

1.10.3.1 Applicable administrative standards.

- 1. Title 24, Part 1, California Code of Regulations: Chapter 7.
- 2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1, Division I, and portions of Section 101 as adopted, Sections 102-103, portions of Sections 104-107 as indicated in the adoption matrix, and Sections 108-116, Chapter 1, Division II.
- 1.10.3.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10 and 11.

The provisions of Title 24, Part 2, as adopted and amended by OSHPD, shall apply to the applications listed in Section 1.10.3.

OSHPD 3 adopts the following building standards in Title 24, Part 2:

Chapter 12.

1.10.3.3 Identification of amendments. For applications listed in Section 1.10.3, amendments appear in this code without the acronym [OSHPD 3]. Adoptions are shown in the adoption matrix.

Authority—Health and Safety Code Sections 127010, 127015 and 1226.

References—Health and Safety Code Sections 127010, 127015, 129885 and 1226, Government Code Section 54350 and State Constitution Article 11, Section 7.

1.10.4 OSHPD 4. Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Application—Correctional treatment centers.

Enforcing agency—Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

		BSC-			нс			DSA	hority A			HPD	_								
Adopting agency	BSC	CG	SFM	1		1/AC	AC	_		1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х																				
Adopt entire chapter as																					
amended (amended sections			Х	X	X	X		Х	Х	Х	X		X								
listed below)																					
Adopt only those sections that are listed below							Х					X		X	X						
Chapter / Section					ļ																
201.3			Х	Х	Х	Х												-			
				۸	Λ	Α.															
201.4			Х																		
202			Х	Х	Х	Х															
Access Aisle							Χ														
Accessibility				Х	Х	Χ	Х														
Accessibility Function Button							Х														
Accessible				Х	Х	Х	Х														
Accessible Element							Х														
Accessible Means of Egress							Х														
Accessible Route				Χ	Х	Х	Х														
Accessible Space				Х	Х	Х	Х														
Active Equipment/Component						1		Х	Х	Χ	Χ	Х	Х								
Adaptable							Х														
Adaptable Dwelling Unit						Χ															
Addition (2nd paragraph							Х														
only)							^														
Adjusted Construction Cost							Х														
Administrative Authority							Х														
Aged Home or Institution			Χ																		
Aisle (2nd paragraph only)							Х														
Alteration							Х														
Alternative System										Χ			Х								
Amusement Attraction							Х														
Amusement Ride							Х														
Amusement Ride Seat							Х														
ANSI							Х														
Approved (with notes)			Х	Х	Х	Х															
Approved (2nd paragraph				Ħ	Ħ	t i	\ \ \														
only) (w/o notes)							Х														
Approved Agency				Х	Х	1		Х	Х												
Approved Listing Agency				Х	Х	1															
Approved Testing Agency				Х			Х														
Area of Refuge							Х														
Area of Sport Activity							Х														
Assembly Area							Х														
Assistive Device						Х															
Assistive Listening System						1	.,														
(ALS)							Х														
Automatic Door				Х	Х	Х	Х														
Automatic Teller Machine (ATM)							Х														
Auxiliary Area						1									Х						
Backwash		-			 		-								X				-		
Bather		-			 		-								X				-		
Bathroom		<u> </u>				Х	Х					1		<u> </u>	<u> </u>			 			

		DCC			HCE)	DSA		OSHPD					1	1	1	1			1	
Adopting agency	BSC	BSC- CG	SFM	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х																				
Adopt entire chapter as amended (amended sections listed below)			х	х	х	х		х	х	x	X		х								
Adopt only those sections that are listed below							Х					X		Х	х						
Chapter / Section																					
Bedridden Person			Х																		
Blended Transition							Х														
Boarding Pier							Х														
Boat Launch Ramp							Х														
Boat Slip							Х														
Building			Х																		
Building (with exception)				Χ	Х	Х															
Building (w/o notes)							Х														
Building Entrance on an Accessible Route						Х															
Building, Existing				Х	Х																
Building Official							Х														
Care and Supervision			Х																		
Carriage Unit						Х															
Catastrophically Injured			Х																		
Catch Pool							Х														
CCR							Х														
CDF Director			Х																		
Cell			Х																		
Cell Complex			Х																		
Cell Tiers			Х																		
Cellular Concrete				Х	Х																
Central Control Building			Х																		
Characters				Х	Х	Х	Х														
Charter School			Х																		
Child-Care Center			Х																		
Child or Children			Х																		
Children's Use							Х														
Chronically III			Х																		
Circulation Path							Х														
Clean Pool Water															Х						
Clear							Х														
Clear Floor Space						Х	Х														
Clear Pool Water															Х						
Clinic, Outpatient			Х																		
Closed-Circuit Telephone							Х														
Commercial Facilities							Х														
Common Use				†	†	†	Х														
Common Use Areas						Х															
Community Care Facility			Х																		
Comply With							Х														
Concrete, Cellular				Х	Х	Х															

	1				HC		DEFINITIONS		_		HPD			1	ı	1	1		1		
Adopting agency	BSC	BSC- CG	SFM	1	2		AC		SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х			Ė	-	.,,,,,		- 50	35,00	Ė	1	Ť	H					-			
Adopt entire chapter as amended (amended sections listed below)			х	х	х	х		х	х	х	х		х								
Adopt only those sections that are listed below							х					х		х	х						
Chapter / Section																					
Congregate Living Health Facility (CLHF)			Х																		
Congregate Residence			Х			Х															
Control Room			Х																		
Correctional Hospitals			Х																		
Correctional Medical or Mental Health Housing Suite			Х																		
Correctional Mental Health Facilities			Х																		
Correctional Nursing Facilities			Х	\vdash							1										
Correctional Treatment Centers			Х																		
Corrosion Resistant				\vdash							1				Х						
Courtroom Dock			Х																		
Courthouse Holding Facility [SFM]			Х																		
Covered Multifamily Dwellings						Х															
Cross Slope						Х	Х														
Curb Cut				Χ	Х	Х	Х														
Curb Ramp				Χ	Х	Х	Х														
Custody Station			Х																		
Day-Care			Х																		
Day-Care Home, Family			Х																		
Day-Care Home, Large Family			Х																		
Day-Care Home, Small Family			Х																		
Day Room			Х																		
Deck															Х						
Department				Χ	Х																
Designated Public Transportation							х														
Destination-Oriented Elevator							Х														
Detached Single-Family Dwelling				Х	Х																
Detectable Warning				Χ	Χ	Х	Х														
Detention Elevator [SFM]			Х																		
Detention Program Suite			Х																		
Detention Treatment Room [SFM]			Х																		
Detoxification Facilities			Х	<u> </u>						-	1	-									
Directional Sign				Χ	Х		Х														
Disability							Х														
Dormitory			Х				Х														
Dormitory [SFM]			Х	T							t										
Drain	t										1			t	Х						
Drive-up Electric Vehicle Charging Station							Х														
Dwelling Unit						Х															
Effective Particle Size															Х						
Efficiency Dwelling Unit				Х																	
Electric Vehicle			Х								1										

Г	1					IONS	_				-										
Adopting agency	BSC	BSC- CG	SFM	1	HC 2	D 1/AC	AC	DS/	SS/CC			HPD 3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х	CG		-	2	I/AC	AC	55	55/00	-	2	3	4								
Adopt entire chapter as																				<u> </u>	
amended (amended sections listed below)			Х	X	X	X		Х	X	X	X		X								
Adopt only those sections that are listed below							x					X		Х	х						
Chapter / Section																					
Electric Vehicle (EV)							Х														
Electric Vehicle (EV) Charger							Х														
Electric Vehicle Charging Space (EV Space)							Х														
Electric Vehicle Charging Station (EVCS)							Х														
Electric Vehicle (EV) Connector							Х														
Element							Χ														
Elevated Play Component							Χ														
Elevator, Passenger				Χ	Χ		Х														<u> </u>
Employee Work Area							Х														
Enforcement				Х	Χ																
Enforcement Agent								Χ	Х	Χ			Χ								
Enforcing Agency			Х	Х	Χ		Х			Χ	Χ	Χ	Χ		Х						
Entrance				Х	Χ	Χ	Х														
Equipment Area															Х						
Equivalent Facilitation						Χ	Х														
Existing Building or Facility							Х														
Exit							Χ														
Exterior Covering			Х																		
Facility							Х														
Family				Χ																	
Fire Appliance			Х																		
Fire Hazard Severity Zones			Х																		
Fire Protection Plan			Х																		
Fire-Retardant Treated Wood			Х																		
Fire-Smoke Barrier			Χ																		
Fireworks			Х																		
Foster Care Facilities			Х																		
Foster Family Home			Χ																		
Freestanding Acute Psychiatric Building (APB)										Х											
Freestanding Skilled Nursing Building (SNB)										Х											
Full-Time Care			Х																		
Functional Area			- 1				Х														
Gangway							Х														
Gas Detection System			Х																		
General Acute Care Building			<u> </u>																		-
(GAC Building)							V			Х										<u> </u>	
Golf Car Passage				V	V	V	X													<u> </u>	<u> </u>
Grab Bar				Х	Х	Χ	Х													<u> </u>	├
Grade (Adjacent Ground Elevation)						Х	Х														
Grade Break							Χ														
Ground Floor						Χ	Х														
Ground Level Play Component							Χ														
Group Home			Χ	L																	
Guard (or Guardrail)				Χ	Χ	Χ	Х														
Hall Call Console							Х														
Handrail							Х														

(continued)

Adopting agency		DOO	T	HCD				OSHPD					1			Ι		1	T		
	BSC	BSC- CG	SFM	1	2	1/AC	AC	DS/	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х																				
Adopt entire chapter as amended (amended sections listed below)			х	x	х	х		х	Х	х	х		х								
Adopt only those sections that are listed below							Х					х		х	х						
Chapter / Section																					
Handwashing Fixture										Χ	Х	Х	Х								
Hazardous Substance			Х																		
Health Care Provider							Х														
Heavy Timber			Х																		
High-Rise Building			Х																		
High-Rise Building Access			Х																		
Historic Buildings							Х														
Holding Facility			Х																		
Hospitals and Psychiatric Hospitals			Х																		
Hotel or Motel				Х	Х																
Housing at a Place of Education				, , , , , , , , , , , , , , , , , , ,	-	Х	Х														
Housing Pod	-		Х			-		-													
Housing Unit	-		X	<u> </u>		-															
HPM			X																		
If, If Then			^				Х														
							^														
Ignition-Resistant Material			Х																		
Incidental Structural Alterations, Additions or Repairs										Х	х		х								
Infant			Х																		
Intake and Release Areas			Х																		
Intended to be occupied as a Residence				†	†	†															
Inlet															Х						
International Symbol of Accessibility						Х	Х														
Key Station							Х														
Kick Plate				Х	Х	Х	Х														
Kitchen or Kitchenette						<u> </u>	X	1													
Labeled				Х	Х																
Laboratory [SFM]			Х		<u> </u>																
Laboratory Suite [SFM]			X					1													
Ladder			† · ·					1							Х						
Lavatory	1					Х	Х	1							-					-	
Level Area	<u> </u>		<u> </u>			X	- •	 													
Licensing Agency						<u> </u>				Х											
Lift, Platform (Wheelchair)						Х				^											
Liquid Tight Floor [SFM]	-		Х			 ^`		1													
Listed			X	Х	Х																
Listing Agency				X	X																
Lobby	-		Х	X	X	-															
Local Agency Very High Fire Hazard Severity Zone			X																		
Lodging House	-			Х		Х															
Log Wall Construction	 		Х	<u> </u>		 		1													
Mail Boxes	1		 ^`	<u> </u>	1	1	Х	1					-	1							

	1		1	-	НС		DEFINITION					HPD		1	l	1	1				
Adopting agency	BSC	BSC- CG	SFM	1	2	1/AC	AC	SS		1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х																				
Adopt entire chapter as amended (amended sections listed below)			х	х	х	х		х	х	х	х		х								
Adopt only those sections that are listed below							Х					x		х	х						
Chapter / Section																					
Major Structural Alterations, Additions or Repairs										х	Х		Х								
Marked Crossing				Χ	Χ	Χ	Х														
May							Х														
Medical Pool															Х						
Mezzanine							Χ														
Minor Structural Alteration, Additions or Repairs										Х	Х		Х								
Monolithic										Х											
Monolithic Ceiling									t	Х				t							
Motel				Х	Х				t					t							
Motion Picture and Television Production Studio Sound Stage, Approved Production Facilities and Production Locations			х																		
Multi-bedroom Housing Unit							Х														
Multilevel Assembly Seating				†	†	†															
Multistory Dwelling Unit						Χ															
Multistory Unit				†	†	†															
Newly Constructed						Χ															
Next Generation Attenuation (NGA)								Х	х	Х			Х								
NFPA							Х														
Non-General Acute Care Building (Non-GAC Building)										Х											
Nonambulatory Persons			Х																		
Noncombustible			Х																		
Normal				Χ	Х																
Nosing							Х														
NPC 1, NPC 2, NPC 3/NPC 3R, NPC 4 and NPC 5										Х											
Nursing Homes			Х																		
Occupant Load	1						Х														
Occupiable Space							Х		İ												
Open Riser				Х	Х	Х	Х		İ												
Operable Part	1			Х	Х	Х	Х														
Organized Camps			Х						İ												
Overflow System									İ						Х						
Passage Door						Х			İ												
Passenger Elevator				Х	Х		Х		İ												
Passive Solar Energy Collector				Х	Х																
Path of Travel	1						Х														
Pedestrian						Х	Х		İ												
Pedestrian Way				Χ	Χ	Χ	Х														

electrical systems are not alterations unless they affect the usability of the building or facility.

ALTERNATING TREAD DEVICE. A device that has a series of steps between 50 and 70 degrees (0.87 and 1.22 rad) from horizontal, usually attached to a center support rail in an alternating manner so that the user does not have both feet on the same level at the same time.

ALTERNATIVE SYSTEM. [OSHPD 1 & 4] Alternative materials, design and methods of construction in accordance with Section 104.11, Section 11.1.4 of ASCE 7 or structural design criteria as approved by the enforcement agency.

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided.

AMUSEMENT ATTRACTION. [DSA-AC] Any facility, or portion of a facility, located within an amusement park or theme park which provides amusement without the use of an amusement device. Amusement attractions include, but are not limited to, fun houses, barrels and other attractions without seats.

AMUSEMENT RIDE. [DSA-AC] A system that moves persons through a fixed course within a defined area for the purpose of amusement.

AMUSEMENT RIDE SEAT. [DSA-AC] A seat that is builtin or mechanically fastened to an amusement ride intended to be occupied by one or more passengers.

ANCHOR BUILDING. An exterior perimeter building of a group other than H having direct access to a covered or open mall building but having required means of egress independent of the mall.

[BS] ANCHORED MASONRY VENEER. Veneer secured with approved mechanical fasteners to an approved backing

ANNULAR SPACE. The opening around the penetrating item.

[F] ANNUNCIATOR. A unit containing one or more indicator lamps, alphanumeric displays or other equivalent means in which each indication provides status information about a circuit, condition or location.

ANSI. [DSA-AC] The American National Standards Institute.

[A] APPROVED. Acceptable to the building official or enforcing agency.

[HCD 1, HCD 2 & DSA-AC] "Approved" means meeting the approval of the enforcing agency, except as otherwise provided by law, when used in connection with any system, material, type of construction, fixture or appliance as the result of investigations and tests conducted by the agency, or by reason of accepted principles or tests by national authorities or technical, health or scientific organizations or agencies.

Notes: [HCD 1 & HCD 2]

1. See Health and Safety Code Section 17920 for "Approved" as applied to residential construction and buildings or structures accessory thereto, as referenced in Section 1.8.2.1.1.

- 2. See Health and Safety Code Section 17921.1 for "Approved" as applied to the use of hotplates in residential construction referenced in Section 1.8.2.1.1.
- 3. See Health and Safety Code Section 19966 for "Approved" as applied to factory-built housing as referenced in Section 1.8.3.2.5.
- 4. See Health and Safety Code Section 18201 for "Approved" as applied to mobilehome parks as referenced in Section 1.8.2.1.3.
- 5. See Health and Safety Code Section 18862.1 for "Approved" as applied to special occupancy parks as referenced in Section 1.8.2.1.3.

[A] APPROVED AGENCY. An established and recognized agency that is regularly engaged in conducting tests or furnishing inspection services, where such agency has been approved by the building official.

[HCD 1 & HCD 2] "Approved agency" shall mean "Listing agency" and "Testing agency."

[DSA-SS, DSA-SS/CC] This term is synonymous with "laboratory of record" as referenced in Section 4-335 of the California Administrative Code.

[BS] APPROVED FABRICATOR. An established and qualified person, firm or corporation approved by the building official pursuant to Chapter 17 of this code.

APPROVED LISTING AGENCY. [HCD 1 & HCD 2] Any agency approved by the enforcing agency, unless otherwise provided by law, which is in the business of listing and labeling and which makes available at least an annual published report of such listings in which specific information is included that the product has been tested to recognized standards and found to comply.

[A] APPROVED SOURCE. An independent person, firm or corporation, approved by the building official, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

APPROVED TESTING AGENCY. [HCD 1, HCD 2 & DSA-AC] Any agency, which is determined by the enforcing agency, except as otherwise provided by law, to have adequate personnel and expertise to carry out the testing of systems, materials, types of construction, fixtures or appliances.

[BS] AREA (for masonry).

Gross cross-sectional. The area delineated by the out-toout specified dimensions of masonry in the plane under consideration.

Net cross-sectional. The area of masonry units, grout and mortar crossed by the plane under consideration based on out-to-out specified dimensions.

AREA, BUILDING. The area included within surrounding exterior walls (or exterior walls and fire walls) exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above.

AREA OF REFUGE. An area where persons unable to use stairways can remain temporarily to await instructions or assistance during emergency evacuation.

AREA OF SPORT ACTIVITY. That portion of an indoor or outdoor space where the play or practice of a sport occurs.

AREAWAY. A subsurface space adjacent to a building open at the top or protected at the top by a grating or guard.

ASSEMBLY AREA. [DSA-AC] A building or facility, or portion thereof, used for the purpose of entertainment, educational or civic gatherings, or similar purposes. For the purposes of these requirements, assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses, auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands or convention centers.

ASSEMBLY SEATING, MULTILEVEL. See "Multilevel assembly seating."

ASSISTIVE DEVICE. [HCD 1-AC] An aid, tool or instrument used by persons with disabilities to assist in activities of daily living.

ASSISTIVE LISTENING SYSTEM (ALS). [DSA-AC] An amplification system utilizing transmitters, receivers and coupling devices to bypass the acoustical space between a sound source and a listener by means of induction loop, radio frequency, infrared or direct-wired equipment.

ATRIUM. An opening connecting two or more stories other than enclosed stairways, elevators, hoistways, escalators, plumbing, electrical, air-conditioning or other equipment, which is closed at the top and not defined as a mall. Stories, as used in this definition, do not include balconies within assembly groups or mezzanines that comply with Section 505.

ATTIC. The space between the ceiling beams of the top story and the roof rafters.

[F] AUDIBLE ALARM NOTIFICATION APPLIANCE. A notification appliance that alerts by the sense of hearing.

AUTOCLAVED AERATED CONCRETE (AAC). Low density cementitious product of calcium silicate hydrates, whose material specifications are defined in ASTM C1386.

[F] AUTOMATIC. As applied to fire protection devices, a device or system providing an emergency function without the necessity for human intervention and activated as a result of a predetermined temperature rise, rate of temperature rise or combustion products.

AUTOMATIC DOOR. A door equipped with a power-operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat or manual switch.

- [F] AUTOMATIC FIRE-EXTINGUISHING SYSTEM. An approved system of devices and equipment which automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire.
- **[F] AUTOMATIC SMOKE DETECTION SYSTEM.** A fire alarm system that has initiation devices that utilize smoke detectors for protection of an area such as a room or space with detectors to provide early warning of fire.
- [F] AUTOMATIC SPRINKLER SYSTEM. An automatic sprinkler system, for fire protection purposes, is an integrated

system of underground and overhead piping designed in accordance with fire protection engineering standards. The system includes a suitable water supply. The portion of the system above the ground is a network of specially sized or hydraulically designed piping installed in a structure or area, generally overhead, and to which automatic sprinklers are connected in a systematic pattern. The system is usually activated by heat from a fire and discharges water over the fire area.

AUTOMATIC TELLER MACHINE (ATM). [DSA-AC] Any electronic information processing device that accepts or dispenses cash in connection with a credit, deposit or convenience account. The term does not include devices used solely to facilitate check guarantees or check authorizations, or which are used in connection with the acceptance or dispensing of cash on a person-to-person basis, such as by a store cashier.

[F] AUTOMATIC WATER MIST SYSTEM. A system consisting of a water supply, a pressure source, and a distribution piping system with attached nozzles, which, at or above a minimum operating pressure, defined by its listing, discharges water in fine droplets meeting the requirements of NFPA 750 for the purpose of the control, suppression or extinguishment of a fire. Such systems include wet-pipe, drypipe and pre-action types. The systems are designed as engineered, pre-engineered, local-application or total flooding systems.

AUXILIARY AREA. A public dressing, locker, shower or toilet area or building space intended to be used by bathers.

[F] AVERAGE AMBIENT SOUND LEVEL. The root mean square, A-weighted sound pressure level measured over a 24-hour period, or the time any person is present, whichever time period is less.

AWNING. An architectural projection that provides weather protection, identity or decoration and is partially or wholly supported by the building to which it is attached. An awning is comprised of a lightweight frame structure over which a covering is attached.

BACKING. The wall or surface to which the veneer is secured.

BACKWASH. Is the process of thoroughly cleansing the filter media and/or elements and the contents of the filter vessel.

BALANCED DOOR. A door equipped with double-pivoted hardware so designed as to cause a semicounterbalanced swing action when opening.

- **[F] BALED COTTON.** A natural seed fiber wrapped in and secured with industry accepted materials, usually consisting of burlap, woven polypropylene, polyethylene or cotton or sheet polyethylene, and secured with steel, synthetic or wire bands or wire; also includes linters (lint removed from the cottonseed) and motes (residual materials from the ginning process).
- **[F] BALED COTTON, DENSELY PACKED.** Cotton made into banded bales with a packing density of not less than 22 pounds per cubic foot (360 kg/m³), and dimensions complying with the following: a length of 55 inches (1397 mm), a width of 21 inches (533.4 mm) and a height of 27.6 to 35.4 inches (701 to 899 mm).
- [BS] BALLAST. In roofing, ballast comes in the form of large stones or paver systems or light-weight interlocking

[BS] CAST STONE. A building stone manufactured from Portland cement concrete precast and used as a trim, veneer or facing on or in buildings or structures.

CATASTROPHICALLY INJURED. As termed, means a person whose origin of disability was acquired through trauma or nondegenerative neurologic illness, for whom it has been determined by the Department of Health Services Certification and Licensing that active rehabilitation would be beneficial.

CATCH POOL. [DSA-AC] A pool or designated section of a pool used as a terminus for water slide flumes.

CCR. [DSA-AC] The California Code of Regulations.

CDF DIRECTOR. [SFM] (See Chapter 7A, Section 702A for defined term.)

[F] CEILING LIMIT. The maximum concentration of an air-borne contaminant to which one may be exposed. The ceiling limits utilized are those published in DOL 29 CFR Part 1910.1000. The ceiling Recommended Exposure Limit (REL-C) concentrations published by the U.S. National Institute for Occupational Safety and Health (NIOSH), Threshold Limit Value—Ceiling (TLV-C) concentrations published by the American Conference of Governmental Industrial Hygenists (ACGIH), Ceiling Work place Environmental Exposure Level (WEEL-Ceiling) Guides published by the American Industrial Hygiene Association (AIHA), and other approved, consistent measures are allowed as surrogates for hazardous substances not listed in DOL 29 CFR Part 1910.1000.

CEILING RADIATION DAMPER. A listed device installed in a ceiling membrane of a fire-resistance-rated floor/ceiling or roof/ceiling assembly to limit automatically the radiative heat transfer through an air inlet/outlet opening. Ceiling radiation dampers include air terminal units, ceiling dampers and ceiling air diffusers.

CELL (*Detention or correctional facility*) [SFM]. A sleeping or housing unit in a detention or correctional facility for the confinement of not more than two inmates or prisoners.

[BS] CELL (masonry). A void space having a gross cross-sectional area greater than $1^{1}/_{2}$ square inches (967 mm²).

CELL COMPLEX. A cluster or group of cells or dormitories in a jail, prison or other detention facility, together with rooms used for accessory purposes, all of which open into the cell complex, and are used for functions such as dining, counseling, exercise, classrooms, sick call, visiting, storage, staff offices, control rooms or similar functions, and interconnecting corridors all within the cell complex.

CELL TIER. Levels of cells vertically stacked above one another within a housing unit.

CELL TIERS. Cells, dormitories and accessory spaces. Cell tiers are located one level above the other, and do not exceed two levels per floor. A cell tier shall not be considered a story or mezzanine. The aggregate area of a tier within a housing pod shall not be greater than one-third of the floor area of that pod when supported by non-rated construction, and shall be no greater than two-thirds of the floor area of the pod when the tier floor and supporting elements meet the fire rating requirements of a floor.

CELLULAR CONCRETE. [HCD 1 & HCD 2] A lightweight product consisting of portland cement and selected gas-forming chemicals or foaming agents which create homogeneous voids in the hardened concrete.

[BS] CEMENT PLASTER. A mixture of portland or blended cement, Portland cement or blended cement and hydrated lime, masonry cement or plastic cement and aggregate and other approved materials as specified in this code.

CENTRAL CONTROL BUILDING. A secure building within a prison where the fire and life safety systems, communication systems, security systems and exterior lighting systems are monitored and where security operations necessitate the remote locking of required means of egress or at the door with a key to maintain a high security area

CERAMIC FIBER BLANKET. A high-temperature mineral wool insulation material made of alumina-silica ceramic or calcium magnesium silicate soluble fibers and weighing 4 to 10 pounds per cubic foot (pcf) (64 to 160 kg/m³).

CERTIFICATE OF COMPLIANCE. A certificate stating that materials and products meet specified standards or that work was done in compliance with approved construction documents.

[A] CHANGE OF OCCUPANCY. A change in the purpose or level of activity within a building that involves a change in application of the requirements of this code.

CHARACTERS. Letters, numbers, punctuation marks and typographic symbols.

CHARTER SCHOOL A public school providing instruction from kindergarten through 12th grade, established pursuant to Education Code, Title 2, Division 4, Part 26.8, Section 47600, et seq.

CHILD CARE CENTER. Any facility of any capacity other than a large or small family day-care home as defined in these regulations in which less than 24-hour-per-day nonmedical supervision is provided for children in a group setting.

CHILD OR CHILDREN. A person or persons under the age of 18 years.

CHILDREN'S USE. [DSA-AC] Describes spaces and elements specifically designed for use primarily by people 12 years old and younger.

[M] CHIMNEY. A primarily vertical structure containing one or more flues, for the purpose of carrying gaseous products of combustion and air from a fuel-burning appliance to the outdoor atmosphere.

Factory-built chimney. A listed and labeled chimney composed of factory-made components, assembled in the field in accordance with manufacturer's instructions and the conditions of the listing.

Masonry chimney. A field-constructed chimney composed of solid masonry units, bricks, stones, or concrete.

Metal chimney. A field-constructed chimney of metal.

[M] CHIMNEY TYPES.

High-heat appliance type. An approved chimney for removing the products of combustion from fuel-burning, high-heat appliances producing combustion gases in

excess of 2000°F (1093°C) measured at the appliance flue outlet (see Section 2113.11.3).

Low-heat appliance type. An approved chimney for removing the products of combustion from fuel-burning, low-heat appliances producing combustion gases not in excess of 1000°F (538°C) under normal operating conditions, but capable of producing combustion gases of 1400°F (760°C) during intermittent forces firing for periods up to 1 hour. Temperatures shall be measured at the appliance flue outlet.

Masonry type. A field-constructed chimney of solid masonry units or stones.

Medium-heat appliance type. An approved chimney for removing the products of combustion from fuel-burning, medium-heat appliances producing combustion gases not exceeding 2000°F (1093°C) measured at the appliance flue outlet (see Section 2113.11.2).

CHRONICALLY ILL. See "Terminally ill."

CIRCULATION PATH. An exterior or interior way of passage from one place to another for pedestrians. [DSA-AC] An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways and landings.

[F] CLEAN AGENT. Electrically nonconducting, volatile or gaseous fire extinguishant that does not leave a residue upon vaporation.

CLEAN POOL WATER. Is a pool water that is free of dirt, oils, scum, algae, floating materials or other visible organic and inorganic materials that would sully the water.

CLEAR. [DSA-AC] Unobstructed.

CLEAR FLOOR SPACE. [DSA-AC & HCD 1-AC] The minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.

CLEAR POOL WATER. Pool water that is free from cloudiness and is transparent.

[E] CLIMATE ZONE. A geographical region that has been assigned climatic criteria as specified in Chapters 3CE and 3RE of the *California Energy Code*.

CLINIC, OUTPATIENT. Buildings or portions thereof used to provide medical care on less than a 24-hour basis to persons who are not *classified as nonambulatory or bedridden or* rendered incapable of self-preservation by the services provided.

CLOSED-CIRCUIT TELEPHONE. [DSA-AC] A telephone with a dedicated line such as a house phone, courtesy phone or phone that must be used to gain entry to a facility.

[F] CLOSED SYSTEM. The use of a solid or liquid hazardous material involving a closed vessel or system that remains closed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal operations; and all uses of compressed gases. Examples of closed systems for solids and liquids include product conveyed through a piping system into a closed vessel, system or piece of equipment.

[BS] COASTAL A ZONE. Area within a special flood hazard area, landward of a V zone or landward of an open coast without mapped coastal high hazard areas. In a coastal A zone, the principal source of flooding must be astronomical tides, storm surges, seiches or tsunamis, not riverine flooding. During the base flood conditions, the potential for breaking wave height shall be greater than or equal to 1½ feet (457 mm). The inland limit of the coastal A zone is (a) the Limit of Moderate Wave Action if delineated on a FIRM, or (b) designated by the authority having jurisdiction.

[BS] COASTAL HIGH HAZARD AREA. Area within the special flood hazard area extending from offshore to the inland limit of a primary dune along an open coast and any other area that is subject to high-velocity wave action from storms or seismic sources, and shown on a Flood Insurance Rate Map (FIRM) or other flood hazard map as velocity Zone V, VO, VE or V1-30.

[BS] COLLAR JOINT. Vertical longitudinal space between wythes of masonry or between masonry wythe and backup construction that is permitted to be filled with mortar or grout.

[BS] COLLECTOR. A horizontal diaphragm element parallel and in line with the applied force that collects and transfers diaphragm shear forces to the vertical elements of the lateral force-resisting system or distributes forces within the diaphragm, or both.

COMBINATION FIRE/SMOKE DAMPER. A listed device installed in ducts and air transfer openings designed to close automatically upon the detection of heat and resist the passage of flame and smoke. The device is installed to operate automatically, controlled by a smoke detection system, and where required, is capable of being positioned from a fire command center

[F] COMBUSTIBLE DUST. Finely divided solid material that is 420 microns or less in diameter and which, when dispersed in air in the proper proportions, could be ignited by a flame, spark or other source of ignition. Combustible dust will pass through a U.S. No. 40 standard sieve.

[F] COMBUSTIBLE FIBERS. Readily ignitable and freeburning materials in a fibrous or shredded form, such as cocoa fiber, cloth, cotton, excelsior, hay, hemp, henequen, istle, jute, kapok, oakum, rags, sisal, Spanish moss, straw, tow, wastepaper, certain synthetic fibers or other like materials. This definition does not include densely packed baled cotton.

[F] COMBUSTIBLE LIQUID. A liquid having a closed cup flash point at or above 100°F (38°C). Combustible liquids shall be subdivided as follows:

Class II. Liquids having a closed cup flash point at or above 100°F (38°C) and below 140°F (60°C).

Class IIIA. Liquids having a closed cup flash point at or above 140°F (60°C) and below 200°F (93°C).

Class IIIB. Liquids having a closed cup flash point at or above 200°F (93°C).

The category of combustible liquids does not include compressed gases or cryogenic fluids.

COMMERCIAL FACILITIES [DSA-AC] Facilities whose operations will affect commerce and are intended for non-residential use by a private entity. Commercial facilities shall not include (1) facilities that are covered or expressly exempted from coverage under the Fair Housing Act of 1968, as amended (42 U.S.C. 3601 - 3631); (2) aircraft; or (3) railroad locomotives, railroad freight cars, railroad cabooses, commuter or intercity passenger rail cars (including coaches, dining cars, sleeping cars, lounge cars and food service cars), any other railroad cars described in Section 242 of the Americans With Disabilities Act or covered under Title II of the Americans With Disabilities Act, or railroad rights-of-way. For purposes of this definition, "rail" and "railroad" have the meaning given the term "railroad" in Section 202(e) of the Federal Railroad Safety Act of 1970 (45 U.S.C. 431(e)).

COMMERCIAL MOTOR VEHICLE. A motor vehicle used to transport passengers or property where the motor vehicle:

- 1. Has a gross vehicle weight rating of 10,000 pounds (4540 kg) or more; or
- Is designed to transport 16 or more passengers, including the driver.

COMMON PATH OF EGRESS TRAVEL. That portion of the exit access travel distance measured from the most remote point within a story to that point where the occupants have separate and distinct access to two exits or exit access doorways.

COMMON USE. Interior or exterior circulation paths, rooms, spaces or elements that are not for public use and are made available for the shared use of two or more people.

COMMON USE AREAS. [HCD 1-AC] Private use areas within multifamily residential facilities where the use of these areas is limited exclusively to owners, residents and their guests. The areas may be defined as rooms or spaces or elements inside or outside of a building.

COMMUNITY CARE FACILITY. Any facility, place or building that is maintained and operated to provide nonmedical residential care, day treatment, adult day care or foster family agency services for children, adults, or children and adults, including, but not limited to, the physically handicapped, mentally impaired, incompetent persons, and abused or neglected children, and includes the following as defined in Health and Safety Code Section 1502:

- 1. Residential facility
- 2. Adult day program
- 3. Therapeutic day services facility
- 4. Foster family agency
- 5. Foster family home
- 6. Small-family home
- 7. Social rehabilitation facility
- 8. Community treatment facility
- 9. Full-service adoption agency
- 10. Noncustodial adoption agency
- 11. Transitional shelter care facility
- 12. Transitional housing placement facility

COMPLY WITH. [DSA-AC] Comply with means to meet one or more provisions of this code.

[F] COMPRESSED GAS. A material, or mixture of materials, that:

- 1. Is a gas at 68°F (20°C) or less at 14.7 pounds per square inch atmosphere (psia) (101 kPa) of pressure; and
- 2. Has a boiling point of 68°F (20°C) or less at 14.7 psia (101 kPa) which is either liquefied, nonliquefied or in solution, except those gases which have no other health- or physical-hazard properties are not considered to be compressed until the pressure in the packaging exceeds 41 psia (282 kPa) at 68°F (20°C).

The states of a compressed gas are categorized as follows:

- 1. Nonliquefied compressed gases are gases, other than those in solution, which are in a packaging under the charged pressure and are entirely gaseous at a temperature of 68°F (20°C).
- 2. Liquefied compressed gases are gases that, in a packaging under the charged pressure, are partially liquid at a temperature of 68°F (20°C).
- 3. Compressed gases in solution are nonliquefied gases that are dissolved in a solvent.
- 4. Compressed gas mixtures consist of a mixture of two or more compressed gases contained in a packaging, the hazard properties of which are represented by the properties of the mixture as a whole.

[BS] CONCRETE

Carbonate aggregate. Concrete made with aggregates consisting mainly of calcium or magnesium carbonate, such as limestone or dolomite, and containing 40 percent or less quartz, chert or flint.

Cellular. See CELLULAR CONCRETE.

Lightweight aggregate. Concrete made with aggregates of expanded clay, shale, slag or slate or sintered fly ash or any natural lightweight aggregate meeting ASTM C330 and possessing equivalent fire-resistance properties and weighing 85 to 115 pcf (1360 to 1840 kg/m³).

Perlite. A lightweight insulating concrete having a dry unit weight of approximately 30 pcf (480 kg/m³) made with perlite concrete aggregate. Perlite aggregate is produced from a volcanic rock which, when heated, expands to form a glass-like material of cellular structure.

Sand-lightweight. Concrete made with a combination of expanded clay, shale, slag, slate, sintered fly ash, or any natural lightweight aggregate meeting ASTM C330 and possessing equivalent fire-resistance properties and natural sand. Its unit weight is generally between 105 and 120 pcf (1680 and 1920 kg/m³).

Siliceous aggregate. Concrete made with normal-weight aggregates consisting mainly of silica or compounds other than calcium or magnesium carbonate, which contains more than 40-percent quartz, chert or flint.

Vermiculite. A light weight insulating concrete made with vermiculite concrete aggregate which is laminated micaceous material produced by expanding the ore at high temperatures. When added to a Portland cement slurry the

resulting concrete has a dry unit weight of approximately 30 pcf (480 kg/m³).

congregate Living Health Facility (CLHF) means a residential home with a capacity, except as provided in paragraph (3), of no more than 12 beds, that provides inpatient care, including the following basic services: medical supervision, 24-hour skilled nursing and supportive care, pharmacy, dietary, social, recreational, and at least one type of service specified in paragraph (1). The primary need of congregate living health facility residents shall be for availability of skilled nursing care on a recurring, intermittent, extended, or continuous basis. This care is generally less intense than that provided in general acute care hospitals but more intense than that provided in skilled nursing facilities.

- (1) Congregate living health facilities shall provide one of the following services:
 - (A) Services for persons who are mentally alert, persons with physical disabilities, who may be ventilator dependent.
 - (B) Services for persons who have a diagnosis of terminal illness, a diagnosis of a life-threatening illness, or both. Terminal illness means the individual has a life expectancy of six months or less as stated in writing by his or her attending physician and surgeon. A "life-threatening illness" means the individual has an illness that can lead to a possibility of a termination of life within five years or less as stated in writing by his or her attending physician and surgeon.
 - (C) Services for persons who are catastrophically and severely disabled. A person who is catastrophically and severely disabled means a person whose origin of disability was acquired through trauma or nondegenerative neurologic illness, for whom it has been determined that active rehabilitation would be beneficial and to whom these services are being provided. Services offered by a congregate living health facility to a person who is catastrophically disabled shall include, but not be limited to, speech, physical, and occupational therapy.
- (2) A congregate living health facility license shall specify which of the types of persons described in paragraph (1) to whom a facility is licensed to provide services.
- (3)
- (A) A facility operated by a city and county for the purposes of delivering services under this section may have a capacity of 59 beds.
- (B) A congregate living health facility not operated by a city and county servicing persons who are terminally ill, persons who have been diagnosed with a life-threatening illness, or both, that is located in a county with a population of 500,000 or more persons, or located in a county of the 16th class pursuant to Section 28020 of the Government Code, may have not more than

- 25 beds for the purpose of serving persons who are terminally ill.
- (C) A congregate living health facility not operated by a city and county serving persons who are catastrophically and severely disabled, as defined in subparagraph (C) of paragraph (1) that is located in a county of 500,000 or more persons may have not more than 12 beds for the purpose of serving persons who are catastrophically and severely disabled.
- (5) A congregate living health facility shall have a noninstitutional, homelike environment.

CONGREGATE RESIDENCE.—Any building or portion thereof that contains facilities for living, sleeping and sanitation, as required by this code, and may include facilities for eating and cooking, for occupancy by other than a family. A congregate residence may be a shelter, convent, monastery, dormitory, fraternity or sorority house, but does not include jails, hospitals, nursing homes, hotels or lodging houses.

- **[F] CONSTANTLY ATTENDED LOCATION.** A designated location at a facility staffed by trained personnel on a continuous basis where alarm or supervisory signals are monitored and facilities are provided for notification of the fire department or other emergency services.
- [A] CONSTRUCTION DOCUMENTS. Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit.

CONSTRUCTION TYPES. See Section 602.

Type I. See Section 602.2.

Type II. See Section 602.2.

Type III. See Section 602.3.

Type IV. See Section 602.4.

Type V. See Section 602.5.

[F] CONTROL AREA. Spaces within a building where quantities of hazardous materials not exceeding the maximum allowable quantities per control area are stored, dispensed, used or handled. See also the definition of "Outdoor control area" in the *California Fire Code*.

CONTROL ROOM. A room that has staff that provides direct supervision of one or more cell tiers, pods, dormitories, housing units, sally ports, central holding areas, individual holding cells within central holding areas, as well as any number of courtroom holding cells and arraignment docks, and may have fire and personal alarm annunciation, ability to open and close doors, communicate with Central Control and monitor activities inside the area of control and the space immediately outside the Control Room's zone of influence.

CONTROLLED LOW-STRENGTH MATERIAL. A self-compacted, cementitious material used primarily as a backfill in place of compacted fill.

CONVENTIONAL LIGHT-FRAME CONSTRUCTION.

A type of construction whose primary structural elements are formed by a system of repetitive wood-framing members. See Section 2308 for conventional light-frame construction provisions.

CORNICE. A projecting horizontal molded element located at or near the top of an architectural feature.

CORRECTIONAL HOSPITALS. Facilities that provide care and treatment for medical, psychiatric, obstetrical, or surgical treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.

CORRECTIONAL MEDICAL OR MENTAL HEALTH HOUSING SUITE. Within a state prison, correctional treatment facility, local detention facility, or juvenile facility, a correctional medical or mental health housing suite shall be a group of patient rooms or cells and support spaces, including nurses' stations, located around shared circulation.

CORRECTIONAL MENTAL HEALTH FACILITIES.Facilities that provide care and treatment for psychiatric treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.

CORRECTIONAL NURSING FACILITIES. Facilities that provide care, including both intermediate care facilities and skilled nursing facilities, where any of the persons are incapable of self-preservation or classified as non-ambulatory or bedridden within a detention facility such as a prison or jail.

CORRECTIONAL TREATMENT CENTERS. Facilities that provide emergency and acute care and treatment for medical, psychiatric, obstetrical, or surgical treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.

CORRIDOR. An enclosed exit access component that defines and provides a path of egress travel.

CORRIDOR, OPEN-ENDED. See "Open-ended corridor."

CORRIDOR DAMPER. A listed device intended for use where air ducts penetrate or terminate at horizontal openings in the ceilings of fire-resistance-rated corridors, where the corridor ceiling is permitted to be constructed as required for the corridor walls.

[BS] CORROSION RESISTANCE. The ability of a material to withstand deterioration of its surface or its properties when exposed to its environment.

CORROSION RESISTANT. Capable of maintaining original surface characteristics under the prolonged influence of the use environment.

[F] CORROSIVE. A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the point of contact. A chemical shall be considered corrosive if, when tested on the intact skin of albino rabbits by the method described in DOTn 49 CFR, Part 173.137, such chemical destroys or changes irreversibly the structure of the tissue at the point of contact following an exposure period of 4 hours. This term does not refer to action on inanimate surfaces.

COURT. An open, uncovered space, unobstructed to the sky, bounded on three or more sides by exterior building walls or other enclosing devices.

COURTROOM DOCK. An area within a courtroom where persons may be restrained and are awaiting court proceedings.

COURTHOUSE HOLDING FACILITY [SFM]. A room, cell, cell complex or building for the confinement of persons for the purpose of a court appearance for a period not to exceed 12 hours.

COVERED MALL BUILDING. A single building enclosing a number of tenants and occupants, such as retail stores, drinking and dining establishments, entertainment and amusement facilities, passenger transportation terminals, offices and other similar uses wherein two or more tenants have a main entrance into one or more malls. Anchor buildings shall not be considered as a part of the covered mall building. The term "covered mall building" shall include open mall buildings as defined below.

Mall. A roofed or covered common pedestrian area within a covered mall building that serves as access for two or more tenants and not to exceed three levels that are open to each other. The term "mall" shall include open malls as defined below.

Open mall. An unroofed common pedestrian way serving a number of tenants not exceeding three levels. Circulation at levels above grade shall be permitted to include open exterior balconies leading to exits discharging at grade.

Open mall building. Several structures housing a number of tenants, such as retail stores, drinking and dining establishments, entertainment and amusement facilities, offices, and other similar uses, wherein two or more tenants have a main entrance into one or more open malls. Anchor buildings are not considered as a part of the open mall building.

COVERED MULTIFAMILY DWELLINGS. [HCD 1-AC] "Covered multifamily dwellings" means either of the following:

- 1. Buildings that consist of at least four condominium dwelling units or at least three apartment dwelling units if the buildings have at least one elevator.
- 2. The ground floor dwelling units in buildings that consist of at least four condominium dwelling units or at least three apartment dwelling units if the building does not have an elevator.

Covered multifamily dwellings include dwellings listed in Section 1102A.1. For purposes of this definition, dwelling units within a single structure separated by firewalls do not constitute separate buildings.

[BS] CRIPPLE WALL. A framed stud wall extending from the top of the foundation to the underside of floor framing for the lowest occupied floor level.

[F] CRITICAL CIRCUIT. A circuit that requires continuous operation to ensure safety of the structure and occupants.

[BS] CROSS-LAMINATED TIMBER. A prefabricated engineered wood product consisting of not less than three layers of solid-sawn lumber or structural composite lumber where the adjacent layers are cross oriented and bonded with structural adhesive to form a solid wood element.

CROSS SLOPE. The slope that is perpendicular to the direction of travel.

[F] CRYOGENIC FLUID. A liquid having a boiling point lower than -150°F (-101°C) at 14.7 pounds per square inch atmosphere (psia) (an absolute pressure of 101 kPa).

CURB CUT. An interruption of a curb at a pedestrian way, which separates surfaces that are substantially at the same elevation.

CURB RAMP. A sloping pedestrian way, intended for pedestrian traffic, which provides access between a walk or sidewalk and a surface located above or below an adjacent curb face.

CUSTODIAL CARE. Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities and other tasks of daily living. Custodial care includes persons receiving care who have the ability to respond to emergency situations and evacuate at a slower rate and/or who have mental and psychiatric complications.

CUSTODY STATION. A desk or platform staffed by one or more custody officers whose purpose is to supervise those in custody.

[BS] DALLE GLASS. A decorative composite glazing material made of individual pieces of glass that are embedded in a cast matrix of concrete or epoxy.

DAMPER. See "Ceiling radiation damper," "Combination fire/smoke damper," "Corridor damper," "Fire damper" and "Smoke damper."

[BS] DANGEROUS. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

- The building or structure has collapsed, has partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
- There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.

[F] DAY BOX. A portable magazine designed to hold explosive materials constructed in accordance with the requirements for a Type 3 magazine as defined and classified in Chapter 56 of the *California Fire Code*.

DAY-CARE. For the purposes of these regulations, means the care of persons during any period of a 24-hour day where permanent sleeping accommodations are not provided.

Note: "Daycare" shall not be construed to preclude the use of cots or mats for napping purposes, provided all employees, attendants and staff personnel are awake and on duty in the area where napping occurs.

DAY-CARE HOME, FAMILY. A home that regularly provides care, protection and supervision for 14 or fewer children, in the provider's own home, for periods of less than 24 hours per day, while the parents or guardians are away, and is either a large family day-care home or a small family day-care home.

DAY-CARE HOME, LARGE FAMILY. A provider's own home which is licensed to provide day care for periods less than 24 hours per day for nine to 14 persons, including children under the age of 10 years who reside at the home.

DAY-CARE HOME, SMALL FAMILY. A home which provides family day-care to eight or fewer children, including children under the age of 10 years who reside at the home, in the provider's own home, for periods of less than 24 hours per day. Small family day-care homes are exempted from state fire and life safety regulations other than those state and local standards applicable to Group R-3 occupancies. (See Health and Safety Code, Section 13143 (b).)

DAY ROOM. A room which is adjacent to a cell, or cell tier, or dormitory and which is used as a dining, exercise or other activity room for inmates.

[BS] DEAD LOAD. The weight of materials of construction incorporated into the building, including but not limited to walls, floors, roofs, ceilings, stairways, built-in partitions, finishes, cladding and other similarly incorporated architectural and structural items, and the weight of fixed service equipment, such as cranes, plumbing stacks and risers, electrical feeders, heating, ventilating and air-conditioning systems and automatic sprinkler systems.

DECK. Is an area surrounding a pool which is specifically constructed or installed for use by bathers.

[BS] DECORATIVE GLASS. A carved, leaded or Dalle glass or glazing material whose purpose is decorative or artistic, not functional; whose coloring, texture or other design qualities or components cannot be removed without destroying the glazing material and whose surface, or assembly into which it is incorporated, is divided into segments.

[F] DECORATIVE MATERIALS. All materials applied over the building interior finish for decorative, acoustical or other effect including, but not limited to, curtains, draperies, fabrics and streamers; and all other materials utilized for decorative effect including, but not limited to, bulletin boards, artwork, posters, photographs, batting, cloth, cotton, hay, stalks, straw, vines, leaves, trees, moss and similar items, foam plastics and materials containing foam plastics. Decorative materials do not include wall coverings, ceiling coverings, floor coverings, ordinary window shades, interior finish and materials 0.025 inch (0.64 mm) or less in thickness applied directly to and adhering tightly to a substrate.

[BS] DEEP FOUNDATION. A deep foundation is a foundation element that does not satisfy the definition of a shallow foundation.

DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

[A] **DEFERRED SUBMITTAL.** Those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period.

[F] DEFLAGRATION. An exothermic reaction, such as the extremely rapid oxidation of a flammable dust or vapor in air, in which the reaction progresses through the unburned material at a rate less than the velocity of sound. A deflagration can have an explosive effect.

[F] DELUGE SYSTEM. A sprinkler system employing open sprinklers attached to a piping system connected to a water supply through a valve that is opened by the operation of a detection system installed in the same areas as the sprinklers. When this valve opens, water flows into the piping system and discharges from all sprinklers attached thereto.

DEPARTMENT. [HCD 1 & HCD 2] The Department of Housing and Community Development.

[BS] DESIGN DISPLACEMENT. See Section 1905.1.1.

[BS] DESIGN EARTHQUAKE GROUND MOTION. The earthquake ground motion that buildings and structures are specifically proportioned to resist in Section 1613.

[BS] DESIGN FLOOD. The flood associated with the greater of the following two areas:

- Area with a flood plain subject to a 1-percent or greater chance of flooding in any year; or
- 2. Area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

[BS] DESIGN FLOOD ELEVATION. The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where a depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet (610 mm).

- [A] DESIGN PROFESSIONAL, REGISTERED. See "Registered design professional."
- [A] DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, REGISTERED. See "Registered design professional in responsible charge."

[BS] DESIGN STRENGTH. The product of the nominal strength and a resistance factor (or strength reduction factor).

DESIGNATED PUBLIC TRANSPORTATION. [DSA-AC] Transportation provided by a public entity (other than public school transportation) by bus, rail, or other conveyance (other than transportation by aircraft or intercity or commuter rail transportation) that provides the general public with general or special service, including charter service, on a regular and continuing basis.

[BS] DESIGNATED SEISMIC SYSTEM. Those nonstructural components that require design in accordance with Chapter 13 of ASCE 7 and for which the component importance factor, I_p , is greater than 1 in accordance with Section 13.1.3 of ASCE 7.

DESTINATION-ORIENTED ELEVATOR. [DSA-AC] Destination-oriented elevators are operated by the user selecting a destination floor at a hall call console located at or near an elevator landing. The destination-oriented elevator system then assigns an elevator car which transports the user to the selected destination floor. Destination-oriented elevators do not provide floor selection within elevator cars.

[F] DETACHED BUILDING. A separate single-story building, without a basement or crawl space, used for the storage or use of hazardous materials and located an approved distance from all structures.

DETACHED SINGLE-FAMILY DWELLING. [HCD 1 & HCD 2] Any single-family dwelling which is separated (detached) from adjacent buildings.

[BS] DETAILED PLAIN CONCRETE STRUCTURAL WALL. See Section 1905.1.1.

DETECTABLE WARNING. A standardized surface feature built in or applied to walking surfaces or other elements to warn of hazards on a circulation path.

[F] DETECTOR, HEAT. A fire detector that senses heat—either abnormally high temperature or rate of rise, or both.

DETENTION ELEVATOR. [SFM] Detention elevator shall mean an elevator which moves in-custody individuals within a secure and restrained environment.

DETENTION PROGRAM SUITE. Within a state prison, correctional treatment facility, local detention facility, or juvenile facility, a detention program suite shall be a group of program related spaces, not classified as group F uses, located around shared circulation.

DETENTION TREATMENT ROOM. [SFM] Detention treatment room shall mean a lockable room or rooms within Group I-3 occupancies used for recreational therapy, group rooms, interdisciplinary treatment team rooms, and interview rooms not classified solely as a Group I-2 occupancy.

[F] DETONATION. An exothermic reaction characterized by the presence of a shock wave in the material which establishes and maintains the reaction. The reaction zone progresses through the material at a rate greater than the velocity of sound. The principal heating mechanism is one of shock compression. Detonations have an explosive effect.

DETOXIFICATION FACILITIES. Facilities that provide treatment for substance abuse, serving care recipients who are incapable of self-preservation *or classified as non-ambulatory* or who are harmful to themselves or others.

[BS] DIAPHRAGM. A horizontal or sloped system acting to transmit lateral forces to vertical elements of the lateral forceresisting system. When the term "diaphragm" is used, it shall include horizontal bracing systems.

Diaphragm, blocked. In light-frame construction, a diaphragm in which all sheathing edges not occurring on a framing member are supported on and fastened to blocking.

Diaphragm boundary. In light-frame construction, a location where shear is transferred into or out of the diaphragm sheathing. Transfer is either to a boundary element or to another force-resisting element.

Diaphragm chord. A diaphragm boundary element perpendicular to the applied load that is assumed to take axial stresses due to the diaphragm moment.

Diaphram, unblocked. A diaphragm that has edge nailing at supporting members only. Blocking between supporting structural members at panel edges is not included. Diaphragm panels are field nailed to supporting members.

DIMENSIONS (for Chapter 21).

Nominal. The specified dimension plus an allowance for the joints with which the units are to be laid. Nominal dimensions are usually stated in whole numbers. Thickness is given first, followed by height and then length.

Specified. Dimensions specified for the manufacture or construction of a unit, joint or element.

DIRECT ACCESS. A path of travel from a space to an immediately adjacent space through an opening in the common wall between the two spaces.

DIRECTIONAL SIGN. [DSA-AC, HCD 1 & HCD 2] A publicly displayed notice which indicates by use of words or symbols a recommended direction or route of travel.

DISABILITY. [**DSA-AC**] Disability is (1) a physical or mental impairment that limits one or more of the major life activities of an individual, (2) a record of such an impairment, or (3) being regarded as having such an impairment.

[F] DISPENSING. The pouring or transferring of any material from a container, tank or similar vessel, whereby vapors, dusts, fumes, mists or gases are liberated to the atmosphere.

DOOR, BALANCED. See "Balanced door."

DOOR, LOW-ENERGY POWER-OPERATED. See "Low-energy power-operated door."

DOOR, POWER-ASSISTED. See "Power-assisted door."

DOOR, POWER-OPERATED. See "Power-operated door."

DOORWAY, EXIT ACCESS. See "Exit access doorway."

DORMITORY. A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses. **[SFM]** For Group 1-3 occupancies "Dormitory" is an area occupied by no less than three inmates.

DRAFTSTOP. A material, device or construction installed to restrict the movement of air within open spaces of concealed areas of building components such as crawl spaces, floor/ceiling assemblies, roof/ceiling assemblies and attics.

[BS] DRAG STRUT. See "Collector."

DRAIN. A fitting or fixture, usually at or near the bottom of a pool, through which water leaves the pool normally to the recirculation pump.

[BS] DRILLED SHAFT. A drilled shaft is a cast-in-place deep foundation element constructed by drilling a hole (with or without permanent casing) into soil or rock and filling it with fluid concrete.

Socketed drilled shaft. A socketed drilled shaft is a drilled shaft with a permanent pipe or tube casing that extends down to bedrock and an uncased socket drilled into the bedrock.

DRIVE-UP ELECTRIC VEHICLE CHARGING STA-TION. An electric vehicle charging station in which use is limited to 30 minutes maximum and is provided at a location where the electric vehicle approaches in the forward direction, stops in the vehicle space, charges the vehicle, and proceeds forward to depart the vehicle space. The arrangement of a drive-up electric vehicle charger and its associated vehicle space is similar to a gasoline filling station island.

[F] DRY-CHEMICAL EXTINGUISHING AGENT. A powder composed of small particles, usually of sodium bicarbonate, potassium bicarbonate, urea-potassium-based bicarbonate, potassium chloride or monoammonium phosphate, with added particulate material supplemented by special treatment to provide resistance to packing, resistance to moisture absorption (caking) and the proper flow capabilities.

[BS] DRY FLOODPROOFING. A combination of design modifications that results in a building or structure, including the attendant utilities and equipment and sanitary facilities, being water tight with walls substantially impermeable to the passage of water and with structural components having the capacity to resist loads as identified in ASCE 7.

DWELLING. A building that contains one or two dwelling units used, intended or designed to be used, rented, leased, let or hired out to be occupied for living purposes.

DWELLING UNIT. A single unit providing complete, independent living facilities for one or more persons, including

permanent provisions for living, sleeping, eating, cooking and sanitation. [HCD 1-AC] For the purposes of Chapter 11A, a single unit of residence for a family of one or more persons. Examples of dwelling units covered by Chapter 11A include condominiums, an apartment unit within an apartment building, and other types of dwellings in which sleeping accommodations are provided but toileting or cooking facilities are shared by occupants of more than one room or portion of the dwelling. Examples of the latter include dormitory rooms and sleeping accommodations in shelters intended for occupancy as residences for homeless persons.

DWELLING UNIT OR SLEEPING UNIT, MULTI-STORY. See "Multistory unit."

EFFECTIVE PARTICLE SIZE. The theoretical size of a sieve in mm that will pass 10 percent by weight of sand.

EFFICIENCY DWELLING UNIT. [HCD 1] A dwelling unit containing only one habitable room and includes an efficiency unit as defined by Health and Safety Code Section 17958.1. See Section 1208.4.

EGRESS COURT. A court or yard which provides access to a public way for one or more exits.

ELECTRIC VEHICLE (EV) [DSA-AC & SFM]. An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For the purpose of this code, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE (EV) CHARGER. Off-board charging equipment used to charge an electric vehicle.

ELECTRIC VEHICLE CHARGING SPACE (EV Space). A space intended for charging electric vehicles.

ELECTRIC VEHICLE CHARGING STATION (EVCS). One or more electric vehicle charging spaces served by an electric vehicle charger or other charging equipment. Where a multiport electric vehicle charger can simultaneously charge more than one vehicle, the number of electric vehicle charging stations shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.

ELECTRIC VEHICLE (EV) CONNECTOR. A device that, when electrically coupled (conductive or inductive) to an electric vehicle inlet, establishes an electrical connection to the electric vehicle for the purpose of power transfer and information exchange. This device is part of the electric vehicle coupler.

ELECTRICAL CIRCUIT PROTECTIVE SYSTEM. A specific construction of devices, materials, or coatings installed as a fire-resistive barrier system applied to electrical system components, such as cable trays, conduits and other raceways, open run cables and conductors, cables, and conductors.

ELEMENT. [DSA-AC] An architectural or mechanical component of a building, facility, space or site.

ELEVATED PLAY COMPONENT. [DSA-AC] A play component that is approached above or below grade and that is

cial services in accordance with H&SC Section 1255(a)(5) of a general acute care hospital defined in H&SC Section 1250(a) and all structures required for their continuous operation or access/egress.

FREESTANDING SKILLED NURSING BUILDING (SNB). [OSHPD 1] A freestanding building, as defined in the California Administrative Code Section 7-111, that provides skilled nursing and/or intermediate care as defined in the Health and Safety Code Section 1250(c) or (d), and all structures required for their continuous operation or access/egress.

FULL-TIME CARE. Shall mean the establishment and routine care of persons on an hourly, daily, weekly, monthly, yearly or permanent basis, whether for 24-hours per day or less, and where sleeping accommodations are provided.

FUNCTIONAL AREA. [DSA-AC] A room, space or area intended or designated for a group of related activities or processes.

GABLE. The triangular portion of a wall beneath the end of a dual-slope, pitched, or mono-slope roof or portion thereof and above the top plates of the story or level of the ceiling below.

GANGWAY. [DSA-AC] A variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure. Gangways that connect to vessels are not addressed by this code.

[F] GAS CABINET. A fully enclosed, ventilated noncombustible enclosure used to provide an isolated environment for compressed gas cylinders in storage or use. Doors and access ports for exchanging cylinders and accessing pressure-regulating controls are allowed to be included.

[F] GAS DETECTION SYSTEM. A system or portion of a combination system that utilizes one or more stationary sensors to detect the presence of a specified gas at a specified concentration and initiate one or more responses required by this code, such as notifying a responsible person, activating an alarm signal, or activating or deactivating equipment. A self-contained gas detection and alarm device is not classified as a gas detection system.

[F] GAS ROOM. A separately ventilated, fully enclosed room in which only compressed gases and associated equipment and supplies are stored or used.

[F] GASEOUS HYDROGEN SYSTEM. An assembly of piping, devices and apparatus designed to generate, store, contain, distribute or transport a nontoxic, gaseous hydrogen-containing mixture having not less than 95-percent hydrogen gas by volume and not more than 1-percent oxygen by volume. Gaseous hydrogen systems consist of items such as compressed gas containers, reactors and appurtenances, including pressure regulators, pressure relief devices, manifolds, pumps, compressors and interconnecting piping and tubing and controls.

GENERAL ACUTE CARE BUILDING (GAC Building). [OSHPD 1] Hospital buildings as defined in the California Administrative Code Section 7-111 and all structures required for their continuous operation or access/egress,

except Freestanding Skilled Nursing Building (SNB) and Acute Psychiatric Building (APB).

GLASS FIBERBOARD. Fibrous glass roof insulation consisting of inorganic glass fibers formed into rigid boards using a binder. The board has a top surface faced with asphalt and kraft reinforced with glass fiber.

GOLF CAR PASSAGE. [DSA-AC] A continuous passage on which a motorized golf car can operate.

GRAB BAR. [DSA-AC & HCD 1-AC] A bar for the purpose of being grasped by the hand for support.

GRADE (Adjacent Ground Elevation). [DSA-AC & HCD 1-AC] The lowest point of elevation of the finished surface of the ground, paving or sidewalk within the area between the building and the property line or, when the property line is more than 5 feet (1524 mm) from the building, between the building and a line 5 feet (1524 mm) from the building. See Health and Safety Code Section 19955.3(d).

GRADE BREAK. [DSA-AC] The line where two surface planes with different slopes meet.

[BS] GRADE (LUMBER). The classification of lumber in regard to strength and utility in accordance with American Softwood Lumber Standard DOC PS 20 and the grading rules of an approved lumber rules-writing agency.

GRADE PLANE. A reference plane representing the average of finished ground level adjoining the building at exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 feet (1829 mm) from the building, between the building and a point 6 feet (1829 mm) from the building.

GRADE PLANE, STORY ABOVE. See "Story above grade plane."

GRANDSTAND. Tiered seating supported on a dedicated structural system and two or more rows high and is not a building element (see "Bleachers").

GROSS LEASABLE AREA. The total floor area designed for tenant occupancy and exclusive use. The area of tenant occupancy is measured from the centerlines of joint partitions to the outside of the tenant walls. All tenant areas, including areas used for storage, shall be included in calculating gross leasable area.

GROUND FLOOR. The floor of a building with a building entrance on an accessible route. A building may have one or more ground floors.

GROUND LEVEL PLAY COMPONENT. [DSA-AC] A play component that is approached and exited at the ground level.

GROUP HOME. A facility that provides 24-hour care and supervision to children, provides services specified in this chapter to a specific client group, and maintains a structured environment, with such services provided at least in part by staff employed by the licensee. The care and supervision provided by a group home shall be nonmedical except as permitted by Welfare and Institutions Code Section 17736(b). Since small-family and foster family homes, by definition, care for six

or fewer children only, any facility providing 24-hour care for seven or more children must be licensed as a group home.

GROUP HOME. Group Home means a facility which provides 24-hour care and supervision to children, provides services specified in this chapter to a specific client group, and maintains a structured environment, with such services provided at least in part by staff employed by the licensee. The care and supervision provided by a group home shall be nonmedical except as permitted by Welfare and Institutions Code Section 17736(b). Since small family and foster family homes, by definition, care for six or fewer children only, any facility providing 24-hour care for seven or more children must be licensed as a group home.

[BS] GUARD [DSA-AC, HCD 1, HCD 2 & HCD 1-AC] OR GUARDRAIL. A building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level.

GUEST ROOM. A room used or intended to be used by one or more guests for living or sleeping purposes.

GYPSUM BOARD. The generic name for a family of sheet products consisting of a noncombustible core primarily of gypsum with paper surfacing. Gypsum wallboard, gypsum sheathing, gypsum base for gypsum veneer plaster, exterior gypsum soffit board, predecorated gypsum board and waterresistant gypsum backing board complying with the standards listed in Tables 2506.2, 2507.2 and Chapter 35 are types of gypsum board.

[BS] GYPSUM PANEL PRODUCT. The general name for a family of sheet products consisting essentially of gypsum.

[BS] GYPSUM PLASTER. A mixture of calcined gypsum or calcined gypsum and lime and aggregate and other approved materials as specified in this code.

[BS] GYPSUM VENEER PLASTER. Gypsum plaster applied to an approved base in one or more coats normally not exceeding $\frac{1}{4}$ inch (6.4 mm) in total thickness.

HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

HALL CALL CONSOLE. [DSA-AC] An elevator call user interface exclusive to a destination-oriented elevator system that requires the user to select a destination floor prior to entering the elevator car.

[F] HALOGENATED EXTINGUISHING SYSTEM. A fire-extinguishing system using one or more atoms of an element from the halogen chemical series: fluorine, chlorine, bromine and iodine.

[F] HANDLING. The deliberate transport by any means to a point of storage or use.

[BS] HANDRAIL. A horizontal or sloping rail intended for grasping by the hand for guidance or support.

HANDWASHING FIXTURE. Refer to the California Plumbing Code, Section 210.0.

HARDBOARD. A fibrous-felted, homogeneous panel made from lignocellulosic fibers consolidated under heat and pressure in a hot press to a density not less than 31 pcf (497 kg/m³).

HARDWARE. See "Fire exit hardware" and "Panic hardware."

[F] HAZARDOUS MATERIALS. Those chemicals or substances that are physical hazards or health hazards as classified in Section 307 and the *California Fire Code*, whether the materials are in usable or waste condition.

[F] HAZARDOUS PRODUCTION MATERIAL (HPM). A solid, liquid or gas associated with semiconductor manufacturing that has a degree-of-hazard rating in health, flammability or instability of Class 3 or 4 as ranked by NFPA 704 and which is used directly in research, laboratory or production processes which have as their end product materials that are not hazardous.

HAZARDOUS SUBSTANCE. [SFM] Hazardous Substance is a substance which, by reason of being explosive, flammable, toxic, poisonous, corrosive, oxidizing, irritant or otherwise harmful, is likely to cause injury.

[BS] HEAD JOINT. Vertical mortar joint placed between masonry units within the wythe at the time the masonry units are laid.

HEALTH CARE PROVIDER. [DSA-AC] See "Professional Office of a Health Care Provider"

[F] HEALTH HAZARD. A classification of a chemical for which there is statistically significant evidence that acute or chronic health effects are capable of occurring in exposed persons. The term "health hazard" includes chemicals that are toxic or highly toxic, and corrosive.

HEAT DETECTOR. See "Detector, heat."

HEAVY TIMBER. [SFM] (See Chapter 7A, Section 702A for defined term.)

HEIGHT, BUILDING. The vertical distance from grade plane to the average height of the highest roof surface.

HELICAL PILE. Manufactured steel deep foundation element consisting of a central shaft and one or more helical bearing plates. A helical pile is installed by rotating it into the ground. Each helical bearing plate is formed into a screw thread with a uniform defined pitch.

HELIPAD. A structural surface that is used for the landing, taking off, taxiing and parking of helicopters.

HELIPORT. An area of land or water or a structural surface that is used, or intended for the use, for the landing and taking off of helicopters, and any appurtenant areas that are used, or intended for use, for heliport buildings or other heliport facilities.

HELISTOP. The same as "heliport," except that no fueling, defueling, maintenance, repairs or storage of helicopters is permitted.

HIGH-PRESSURE DECORATIVE EXTERIOR-GRADE COMPACT LAMINATE (HPL). Panels consisting of layers of cellulose fibrous material impregnated with thermosetting resins and bonded together by a high-pressure process to form a homogeneous nonporous core suitable for exterior use.

HIGH-PRESSURE DECORATIVE EXTERIOR-GRADE COMPACT LAMINATE (HPL) SYSTEM. An exterior wall covering fabricated using HPL in a specific assembly including joints, seams, attachments, substrate, framing and other details as appropriate to a particular design.

HIGH-RISE BUILDING. *In other than Group I-2 occupancies "high-rise buildings" as used in this code:*

Existing high-rise structure. A high-rise structure, the construction of which is commenced or completed prior to July 1, 1974.

High-rise structure. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet above the lowest floor level having building access (see Section 403.1.2), except buildings used as hospitals as defined in Health and Safety Code Section 1250.

New high-rise building. A high-rise structure, the construction of which is commenced on or after July 1, 1974. For the purpose of this section, construction shall be deemed to have commenced when plans and specifications are more than 50 percent complete and have been presented to the local jurisdiction prior to July 1, 1974. Unless all provisions of this section have been met, the construction of such buildings shall commence on or before January 1, 1976.

New high-rise structure. A high-rise structure, the construction of which is commenced on or after July 1, 1974.

HIGH-RISE BUILDING ACCESS. An exterior door opening conforming to all of the following:

- 1. Suitable and available for fire department use.
- Located not more than 2 feet (610 mm) above the adjacent ground level.
- Leading to a space, room or area having foot traffic communication capabilities with the remainder of the building.
- 4. Designed to permit penetration through the use of fire department forcible-entry tools and equipment unless other approved arrangements have been made with the fire authority having jurisdiction.

[F] HIGHLY TOXIC. A material which produces a lethal dose or lethal concentration that falls within any of the following categories:

- 1. A chemical that has a median lethal dose (LD_{50}) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
- 2. A chemical that has a median lethal dose (LD₅₀) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.
- 3. A chemical that has a median lethal concentration (LC₅₀) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume or dust, when administered by continuous inhala-

tion for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.

Mixtures of these materials with ordinary materials, such as water, might not warrant classification as highly toxic. While this system is basically simple in application, any hazard evaluation that is required for the precise categorization of this type of material shall be performed by experienced, technically competent persons.

[A] HISTORIC BUILDINGS. Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law (see Sections 3409 and 3411.9). [DSA-AC] See "Qualified historical building or property," C.C.R., Title 24, Part 8.

HOLDING FACILITY. A detention or correctional facility or area where inmates, staff and public are not housed but are restrained.

[BF] HORIZONTAL ASSEMBLY. A fire-resistance-rated floor or roof assembly of materials designed to restrict the spread of fire in which continuity is maintained.

HORIZONTAL EXIT. An exit component consisting of fire-resistance-rated construction and opening protectives intended to compartmentalize portions of a building thereby creating refuge areas that afford safety from the fire and smoke from the area of fire origin.

HOSPITALS AND PSYCHIATRIC HOSPITALS. Facilities that provide care or treatment for the medical, psychiatric, obstetrical, or surgical treatment of care recipients who are incapable of self-preservation *or classified as nonambulatory or bedridden*.

HOTEL OR MOTEL. [HCD 1 & HCD 2] Any building containing six or more guest rooms intended or designed to be used, or which are used, rented or hired out to be occupied, or which are occupied for sleeping purposes by guests.

HOUSING AT A PLACE OF EDUCATION. Housing operated by or on behalf of an elementary, secondary, undergraduate, or postgraduate school, or other place of education, including dormitories, suites, apartments, or other places of residence.

HOUSING POD. A section of a housing unit designed to segregate different populations. Housing Pods contain sleeping areas, dayroom space, showers, toilet facilities, and support space.

HOUSING UNIT. A building or portion of a building intended to lodge inmates on a 24-hour basis where accommodations are provided for sleeping and other inmate support areas. A Housing Unit may contain one or more housing pods.

[F] HPM. See "Hazardous Production Material."

[F] HPM ROOM. A room used in conjunction with or serving a Group H-5 occupancy, where HPM is stored or used and which is classified as a Group H-2, H-3 or H-4 occupancy.

[BS] HURRICANE-PRONE REGIONS. Areas vulnerable to hurricanes defined as:

1. The U. S. Atlantic Ocean and Gulf of Mexico coasts where the ultimate design wind speed, V_{ulr} for Risk Category II buildings is greater than 115 mph (51.4 m/s); and

- Hawaii, Puerto Rico, Guam, Virgin Islands and American Samoa.
- **[F] HYDROGEN FUEL GAS ROOM.** A room or space that is intended exclusively to house a gaseous hydrogen system.
- **[BS] ICE-SENSITIVE STRUCTURE.** A structure for which the effect of an atmospheric ice load governs the design of a structure or portion thereof. This includes, but is not limited to, lattice structures, guyed masts, overhead lines, light suspension and cable-stayed bridges, aerial cable systems (e.g., for ski lifts or logging operations), amusement rides, open catwalks and platforms, flagpoles and signs.
- IF, IF... THEN. [DSA-AC] The terms "if" and "if ... then" denote a specification that applies only when the conditions described are present.
- IGNITION-RESISTANT MATERIAL. [SFM] (See Chapter 7A, Section 702A for defined term.)
- **[F] IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).** The concentration of air-borne contaminants which poses a threat of death, immediate or delayed permanent adverse health effects, or effects that could prevent escape from such an environment. This contaminant concentration level is established by the National Institute of Occupational Safety and Health (NIOSH) based on both toxicity and flammability. It generally is expressed in parts per million by volume (ppmv/v) or milligrams per cubic meter (mg/m³). If adequate data do not exist for precise establishment of IDLH concentrations, an independent certified industrial hygienist, industrial toxicologist, appropriate regulatory agency or other source approved by the building official shall make such determination.
- **[BS] IMPACT LOAD.** The load resulting from moving machinery, elevators, craneways, vehicles and other similar forces and kinetic loads, pressure and possible surcharge from fixed or moving loads.
- INCIDENTAL STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS. [OSHPD 1, 2 & 4] Alterations, additions or repairs which would not reduce the story lateral shear force-resisting capacity by more than 5 percent or increase the story shear by more than 5 percent in any existing story or a combination thereof with equivalent effect (not exceeding 5 percent total). The calculation of lateral shear force-resisting capacity and story shear shall account for the cumulative effects of additions and alterations since original construction.
- **INCAPABLE OF SELF-PRESERVATION.** Persons who, because of age, physical limitations, mental limitations, chemical dependency or medical treatment, cannot respond as an individual to an emergency situation.
- **[F] INCOMPATIBLE MATERIALS.** Materials that, when mixed, have the potential to react in a manner that generates heat, fumes, gases or byproducts which are hazardous to life or property.
- **[F] INERT GAS.** A gas that is capable of reacting with other materials only under abnormal conditions such as high temperatures, pressures and similar extrinsic physical forces. Within the context of the code, inert gases do not exhibit either physical or health hazard properties as defined (other than acting as a simple asphyxiant) or hazard properties other than

- those of a compressed gas. Some of the more common inert gases include argon, helium, krypton, neon, nitrogen and xenon.
- INFANT. Any child who because of age only, is unable to walk and requires the aid of another person to evacuate the building. In no case shall the term "infant" mean a child 2 years of age or older.
- **[F] INITIATING DEVICE.** A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box or supervisory switch.
- **INLET.** A fitting or fixture through which circulation water enters the pool.
- INTAKE AND RELEASE AREAS. A temporary holding suite where detained and/or incarcerated individuals are received and processed into a facility or are released from the facility. The suite may contain holding cells, sobering and safety cells, medical examination space, interview rooms, property storage, and staff work areas.
- **INTENDED TO BE OCCUPIED AS A RESIDENCE.** This refers to a dwelling unit or sleeping unit that can or will be used all or part of the time as the occupant's place of abode.
- **INTERIOR EXIT RAMP.** An exit component that serves to meet one or more means of egress design requirements, such as required number of exits or exit access travel distance, and provides for a protected path of egress travel to the exit discharge or public way.
- **INTERIOR EXIT STAIRWAY.** An exit component that serves to meet one or more means of egress design requirements, such as required number of exits or exit access travel distance, and provides for a protected path of egress travel to the exit discharge or public way.
- **INTERIOR FINISH.** Interior finish includes interior wall and ceiling finish and interior floor finish.
- **INTERIOR FLOOR FINISH.** The exposed floor surfaces of buildings including coverings applied over a finished floor or stair, including risers.
- **INTERIOR FLOOR-WALL BASE.** Interior floor finish trim used to provide a functional or decorative border at the intersection of walls and floors.
- **INTERIOR SURFACES.** Surfaces other than weather exposed surfaces.
- **INTERIOR WALL AND CEILING FINISH.** The exposed interior surfaces of buildings, including but not limited to: fixed or movable walls and partitions; toilet room privacy partitions; columns; ceilings; and interior wainscoting, paneling or other finish applied structurally or for decoration, acoustical correction, surface insulation, structural fire resistance or similar purposes, but not including trim.
- **[BS] INTERLAYMENT.** A layer of felt or nonbituminous saturated felt not less than 18 inches (457 mm) wide, shingled between each course of a wood-shake roof covering.
- INTERNATIONAL SYMBOL OF ACCESSIBILITY. The symbol adopted by Rehabilitation International's 11th World Congress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities.

- **SIDEWALK.** A surfaced pedestrian way contiguous to a street used by the public. (As differentiated from the definition of "Walk".)
- SIGN. [DSA-AC] An element composed of displayed textual, verbal, symbolic, tactile, and/or pictorial information.
 - SIGNIFICANT LOSS OF FUNCTION. [DSA-SS, DSA-SS/CC & OSHPD 1, 2, & 4] Significant loss of function for equipment or components means the equipment or component cannot be restored to its original function by competent technicians after a design earthquake because the equipment or component require parts that are not normally stocked by the owner or not readily available.
 - SINGLE-ACCOMMODATION SANITARY FACILITY. [HCD 1-AC] A room that has not more than one of each type of sanitary fixture, is intended for use by only one person at a time, has no partition around the toilet, and has a door that can be locked on the inside by the room occupant.
 - [BS] SINGLE-PLY MEMBRANE. A roofing membrane that is field applied using one layer of membrane material (either homogeneous or composite) rather than multiple layers
 - **[F] SINGLE-STATION SMOKE ALARM.** An assembly incorporating the detector, the control equipment and the alarm-sounding device in one unit, operated from a power supply either in the unit or obtained at the point of installation.
 - **SINK.** A fixed bowl or basin with running water and drainpipe, as in a kitchen or laundry, for washing dishes, clothing, etc. (As differentiated from the definition of "Lavatory".)
 - **SITE.** A parcel of land bounded by a lot line or a designated portion of a public right-of-way.
 - **[BS] SITE CLASS.** A classification assigned to a site based on the types of soils present and their engineering properties as defined in Section 1613.3.2.
 - **[BS] SITE COEFFICIENTS.** The values of F_a and F_v indicated in Tables 1613.3.3(1) and 1613.3.3(2), respectively.
 - SITE DEVELOPMENT. [HCD 1-AC] "On-site" and "offsite" work, including, but not limited to, walks, sidewalks, ramps, curbs, curb ramps, parking facilities, stairs, planting areas, pools, promenades, exterior gathering or assembly areas and raised or depressed paved areas.
 - **SITE-FABRICATED STRETCH SYSTEM.** A system, fabricated on site and intended for acoustical, tackable or aesthetic purposes, that is composed of three elements:
 - 1. A frame (constructed of plastic, wood, metal or other material) used to hold fabric in place,
 - 2. A core material (infill, with the correct properties for the application), and
 - An outside layer, composed of a textile, fabric or vinyl, that is stretched taut and held in place by tension or mechanical fasteners via the frame.
 - **SKYLIGHT, UNIT.** A factory-assembled, glazed fenestration unit, containing one panel of glazing material that allows for natural lighting through an opening in the roof assembly while preserving the weather-resistant barrier of the roof.

- **SKYLIGHTS AND SLOPED GLAZING.** Glass or other transparent or translucent glazing material installed at a slope of 15 degrees (0.26 rad) or more from vertical. Glazing material in skylights, including unit skylights, tubular daylighting devices, solariums, sunrooms, roofs and sloped walls, are included in this definition.
- **SLEEPING ACCOMMODATIONS.** Rooms intended and designed for sleeping.
- **SLEEPING UNIT.** A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not sleeping units.
- **SLIP RESISTANT.** A rough finish that is not abrasive to the bare foot.
- **SLOPE.** [HCD 1-AC] The relative steepness of the land between two points and is calculated as follows:
- The horizontal distance and elevation change between the two points (e.g., an entrance and a passenger loading zone). The difference in elevation is divided by the distance and the resulting fraction is multiplied by 100 to obtain the percentage of slope.
- For example: if a principal entrance is 10 feet (3048 mm) from a passenger loading zone, and the principal entrance is raised 1 foot (305 mm) higher than the passenger loading zone, then the slope is 1/10 100 = 10 percent.
- **SMALL MANAGEMENT YARD.** An exterior exercise yard within a Group I-3 prison used for inmate exercise for a maximum of 2 hours per day, constructed in accordance with Section 408.1.2.3.
- **[F] SMOKE ALARM.** A single- or multiple-station alarm responsive to smoke. See "Multiple-station smoke alarm" and "Single-station smoke alarm."
- **SMOKE BARRIER.** A continuous membrane, either vertical or horizontal, such as a wall, floor or ceiling assembly, that is designed and constructed to restrict the movement of smoke.
- **SMOKE COMPARTMENT.** A space within a building enclosed by smoke barriers on all sides, including the top and bottom.
- **SMOKE DAMPER.** A listed device installed in ducts and air transfer openings designed to resist the passage of smoke. The device is installed to operate automatically, controlled by a smoke detection system, and where required, is capable of being positioned from a fire command center.
- **[F] SMOKE DETECTOR.** A listed device that senses visible or invisible particles of combustion.
- **SMOKE-DEVELOPED INDEX.** A comparative measure, expressed as a dimensionless number, derived from measurements of smoke obscuration versus time for a material tested in accordance with ASTM E84.
- **SMOKE-PROTECTED ASSEMBLY SEATING.** Seating served by means of egress that is not subject to smoke accumulation within or under a structure.
- **SMOKEPROOF ENCLOSURE.** An exit stairway or ramp designed and constructed so that the movement of the prod-

ucts of combustion produced by a fire occurring in any part of the building into the enclosure is limited.

- **SOFT CONTAINED PLAY STRUCTURE.** [DSA-AC] A play structure made up of one or more play components where the user enters a fully enclosed play environment that utilizes pliable materials, such as plastic, netting or fabric.
- **[F] SOLID.** A material that has a melting point, decomposes or sublimes at a temperature greater than 68°F (20°C).
- **SPACE.** A definable area, such as, a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.
- SPC 1, SPC 2, SPC 3, SPC 4, SPC 4D and SPC 5. [OSHPD 1] Building structural performance categories for Hospital Buildings defined in Table 2.5.3 of California Administrative Code (Part 1, Title 24 CCR), Chapter 6.
- **SPC BUILDING.** [OSHPD 1] Means a structure with an independent vertical and lateral force-resisting system (LFRS) and a distinct building structural performance category assigned by OSHPD.
- **SPECIAL AMUSEMENT BUILDING.** A special amusement building is any temporary or permanent building or portion thereof that is occupied for amusement, entertainment or educational purposes and that contains a device or system that conveys passengers or provides a walkway along, around or over a course in any direction so arranged that the means of egress path is not readily apparent due to visual or audio distractions or is intentionally confounded or is not readily available because of the nature of the attraction or mode of conveyance through the building or structure.
- **[BS] SPECIAL FLOOD HAZARD AREA.** The land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE or V1-30.
- **[BS] SPECIAL INSPECTION.** Inspection of construction requiring the expertise of an approved special inspector in order to ensure compliance with this code and the approved construction documents.
 - **Continuous special inspection.** Special inspection by the special inspector who is present continuously when and where the work to be inspected is being performed.
 - **Periodic special inspection.** Special inspection by the special inspector who is intermittently present where the work to be inspected has been or is being performed.
- **SPECIAL INSPECTOR.** A qualified person employed or retained by an approved agency and approved by the building official as having the competence necessary to inspect a particular type of construction requiring special inspection.
- [BS] SPECIAL STRUCTURAL WALL. See Section 1905.1.1.
- [BS] SPECIFIED COMPRESSIVE STRENGTH OF MASONRY, f'_m . Minimum compressive strength, expressed as force per unit of net cross-sectional area, required of the masonry used in construction by the approved construction documents, and upon which the project design is based.

- Whenever the quantity f'_m is under the radical sign, the square root of numerical value only is intended and the result has units of pounds per square inch (psi) (MPa).
- SPECIFIED PUBLIC TRANSPORTATION. [DSA-AC] Transportation by bus, rail, or any other conveyance (other than aircraft) provided by a private entity to the general public, with general or special service (including charter service) on a regular and continuing basis.
- **[BS] SPLICE.** The result of a factory and/or field method of joining or connecting two or more lengths of a fire-resistant joint system into a continuous entity.
- **SPORT ACTIVITY, AREA OF.** See "Area of sport activity."
- **SPRAYED FIRE-RESISTANT MATERIALS.** Cementitious or fibrous materials that are sprayed to provide fire-resistant protection of the substrates.
- **STAGE.** A space within a building utilized for entertainment or presentations, which includes overhead hanging curtains, drops, scenery or stage effects other than lighting and sound.
- **STAIR.** A change in elevation, consisting of one or more risers.
- STAIRS. A series of two or more steps.
- **STAIRWAY.** One or more flights of stairs, either exterior or interior, with the necessary landings and platforms connecting them, to form a continuous and uninterrupted passage from one level to another.
- STAIRWAY, EXIT ACCESS. See "Exit access stairway." STAIRWAY, EXTERIOR EXIT. See "Exterior exit stairway."
- **STAIRWAY, INTERIOR EXIT.** See "Interior exit stairway."
- STAIRWAY, SCISSOR. See "Scissor stairway."
- **STAIRWAY, SPIRAL.** A stairway having a closed circular form in its plan view with uniform section-shaped treads attached to and radiating from a minimum-diameter supporting column.
- **[F] STANDBY POWER SYSTEM.** A source of automatic electric power of a required capacity and duration to operate required building, hazardous materials or ventilation systems in the event of a failure of the primary power. Standby power systems are required for electrical loads where interruption of the primary power could create hazards or hamper rescue or fire-fighting operations.
- **[F] STANDPIPE SYSTEM, CLASSES OF.** Standpipe classes are as follows:
 - **Class I system.** A system providing $2^{1}/_{2}$ -inch (64 mm) hose connections to supply water for use by fire departments and those trained in handling heavy fire streams.
 - **Class II system.** A system providing $1^{1}/_{2}$ -inch (38 mm) hose stations to supply water for use primarily by the building occupants or by the fire department during initial response.

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 3 – USE AND OCCUPANCY CLASSIFICATION

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

Adopting agency		BSC-	-		нс		Ť	DSA				HPD					1				
	BSC	CG	SFM	1	2	1/AC	AC	SS		1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х	Х	Х		Х								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sections that are listed below																			Х		
Chapter / Section																					
302.1			Χ	Χ	Χ																
302.1.3																			Х		
303.1			Χ																		
303.2			Χ																		
303.7			Χ																		
303.8			Х																		
304.1			Х																		
305.1			Х																		
305.2			Х																		
305.2.1			Х																		
306.2			Х																		
Table 307.1(1)			Х																		
Table 307.1(2)			Х																		
307.1.1			Х																		
308.1			Х																		
308.3			Х	†	†																
308.4			Х		Ė																
308.4.1			Х																		
308.5			Х																		
308.5.6			Х																		
308.5.7			Х																		
308.5.8			Х																		
308.5.9			Х																		
308.6			Х																		
308.6.1			X																		
308.6.1.1			X																		
310.1			X																		
310.2			X																		
310.3			X	Х																	
310.4			X	Х																	
310.4.1			X		-																
310.5			X	Х				1													-
310.5.1			X	^				-													-
310.6			X																		
310.7			X					1			-										
313	-	-	X		 						-										
		-																			
314			Х																		

The state agency does not adopt sections identified with the following symbol \dagger

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

[F] TABLE 307.1(2)
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING A HEALTH HAZARD ^{a, c, f, h, i}

		STORAG	E⁵		USE-CLOSED S	YSTEMS ^b	USE-OPE	N SYSTEMS ^b
MATERIAL	Solid pounds ^{d, e}	Liquid gallons (pounds) ^{d, e}	Gas cubic feet at NTP (pounds) ^d	Solid pounds ^d	Liquid gallons (pounds) ^d	Gas cubic feet at NTP (pounds) ^d	Solid pounds ^d	Liquid gallons (pounds) ^d
Corrosives	5,000	500	Gaseous 810 ^e Liquefied (150)	5,000	500	Gaseous 810 ^e Liquefied (150)	1,000	100
Highly Toxic	10	(10)	Gaseous 20 ^g Liquefied (4) ^g	10	(10)	Gaseous 20 ^g Liquefied (4) ^g	3	(3)
Toxic	500	(500)	Gaseous 810 ^e Liquefied (150) ^e	500	(500)	Gaseous 810 ^e Liquefied (150) ^e	125	(125)

For SI: 1 cubic foot = 0.028 m^3 , 1 pound = 0.454 kg, 1 gallon = 3.785 L.

- a. For use of control areas, see Section 414.2.
- b. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
- c. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs or consumer products, and cosmetics containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable, shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.
- d. [SFM] In other than Group L occupancies, maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.
- e. Maximum allowable quantities shall be increased 100 percent where stored in approved storage cabinets, gas cabinets or exhausted enclosures as specified in the California Fire Code. Where Note d also applies, the increase for both notes shall be applied accumulatively.
- f. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 414.2.5, see Tables 414.2.5(1) and 414.2.5(2).
- g. Allowed only where stored in approved exhausted gas cabinets or exhausted enclosures as specified in the California Fire Code.
- h. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.
- i. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 5003.1.2 of the California Fire Code.

[F] 307.3.1 Occupancies containing explosives not classified as H-1. The following occupancies containing explosive materials shall be classified as follows:

- 1. Division 1.3 explosive materials that are used and maintained in a form where either confinement or configuration will not elevate the hazard from a mass fire to mass explosion hazard shall be allowed in H-2 occupancies.
- 2. Articles, including articles packaged for shipment, that are not regulated as a Division 1.4 explosive under Bureau of Alcohol, Tobacco, Firearms and Explosives regulations, or unpackaged articles used in process operations that do not propagate a detonation or deflagration between articles shall be allowed in H-3 occupancies.

[F] 307.4 High-hazard Group H-2. Buildings and structures containing materials that pose a deflagration hazard or a hazard from accelerated burning shall be classified as Group H-2. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA flammable or combustible liquids that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103.4

Combustible dusts where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3.

Cryogenic fluids, flammable.

Flammable gases.

Organic peroxides, Class I.

2016 CALIFORNIA BUILDING CODE

Oxidizers, Class 3, that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103 kPa).

Pyrophoric liquids, solids and gases, nondetonable.

Unstable (reactive) materials, Class 3, nondetonable.

Water-reactive materials, Class 3.

[F] 307.5 High-hazard Group H-3. Buildings and structures containing materials that readily support combustion or that pose a physical hazard shall be classified as Group H-3. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA flammable or combustible liquids that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103.4 kPa) or less.

Combustible fibers, other than densely packed baled cotton, where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3.

Consumer fireworks, 1.4G (Class C, Common)

Cryogenic fluids, oxidizing

Flammable solids

Organic peroxides, Class II and III

Oxidizers, Class 2

Oxidizers, Class 3, that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103 kPa) or less

Oxidizing gases

Unstable (reactive) materials, Class 2

Water-reactive materials, Class 2

[F] 307.6 High-hazard Group H-4. Buildings and structures containing materials that are health hazards shall be classified

99

as Group H-4. Such materials shall include, but not be limited to, the following:

Corrosives Highly toxic materials Toxic materials

[F] 307.7 High-hazard Group H-5. Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used and the aggregate quantity of materials is in excess of those listed in Tables 307.1(1) and 307.1(2) shall be classified as Group H-5. Such facilities and areas shall be designed and constructed in accordance with Section 415.11.

[F] 307.8 Multiple hazards. Buildings and structures containing a material or materials representing hazards that are classified in one or more of Groups H-1, H-2, H-3 and H-4 shall conform to the code requirements for each of the occupancies so classified.

SECTION 308 INSTITUTIONAL GROUP I

308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which care or supervision is provided to persons who are or are not capable of self-preservation without physical assistance or in which persons are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-2.1, I-3 or I-4. Restraint shall not be permitted in any building except in Group I-2 occupancies constructed for such use in accordance with Section 407.1.1 and Group I-3 occupancies constructed for such use in accordance with Section 408.1.2.

Where occupancies house both ambulatory and nonambulatory persons, the more restrictive requirements shall apply.

308.2 Definitions. The following terms are defined in Chapter 2:

24-HOUR BASIS.

CUSTODIAL CARE.

DETOXIFICATION FACILITIES.

FOSTER CARE FACILITIES.

HOSPITALS AND PSYCHIATRIC HOSPITALS.

INCAPABLE OF SELF-PRESERVATION.

MEDICAL CARE.

NURSING HOMES.

308.3 Institutional Group I-1. *Not used.* (See Group R-2.1 Section 310.1).

308.4 Institutional Group I-2. Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation *or classified as nonambulatory or bedridden*. This group shall include, but not be limited to, the following:

Foster care facilities Detoxification facilities Hospitals Nursing homes Psychiatric hospitals 308.4.1 Institutional Group I-2.1 Ambulatory health care facility. A healthcare facility that receives persons for outpatient medical care that may render the patient incapable of unassisted self-preservation and where each tenant space accommodates more than five such patients.

308.5 Institutional Group I-3. Institutional Group I-3 occupancy shall include buildings *or portions of buildings* and structures that are inhabited by *one or* more persons who are under restraint or security. A Group I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control, *which includes persons restrained*. This group shall include, but not be limited to, the following:

Correctional centers

Correctional hospitals

Correctional nursing facilities

Correctional mental health facilities

Correctional treatment centers

Courthouse holding facility

Detention centers

Detention treatment room

Jails

Juvenile Halls

Prerelease centers

Prisons

Reformatories

Secure interview rooms

Temporary holding facility

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.5.1 through 308.5.8 (see Section 408.1).

- **308.5.1 Condition 1.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas, and other spaces where access or occupancy is permitted, to the exterior via means of egress without restraint. A Condition 1 facility is permitted to be constructed as Group R.
- **308.5.2 Condition 2.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. Egress to the exterior is impeded by locked exits.
- **308.5.3 Condition 3.** This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual sleeping units and group activity spaces, where egress is impeded by remote-controlled release of means of egress from such a smoke compartment to another smoke compartment.
- **308.5.4 Condition 4.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.
- **308.5.5 Condition 5.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is

provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

308.5.6 Condition 6. This occupancy condition shall include buildings containing only one temporary holding facility with five or less persons under restraint or security where the building is protected throughout with a monitored automatic sprinkler system installed in accordance with Section 903.3.1.1 and where the temporary holding facility is protected throughout with an automatic fire alarm system with notification appliances. A Condition 6 building shall be is permitted to be classified as a Group B occupancy.

308.5.7 Condition 7. This occupancy condition shall include buildings containing only one temporary holding facility with nine or less persons under restraint or security where limited to the first or second story, provided the building complies with Section 408.1.2.6. A Condition 7 building shall be permitted to be classified as a Group B occupancy.

308.5.8 Condition 8. This occupancy condition shall include buildings containing not more than four secure interview rooms located within the same fire area where not more than six occupants under restraint are located in the same fire area. A Condition 8 building shall be is permitted to be classified as a Group B occupancy, provided the requirements in Section 408.1.2.7 are met.

308.5.9 Condition 9. This occupancy condition shall include buildings where the use of the building is for correctional medical care or correctional mental health care.

308.6 Institutional Group I-4, day care facilities. This group shall include buildings and structures occupied by more than *six clients* of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the *clients* cared for. This group shall include, but not be limited to, the following:

Adult day care Child day care

308.6.1 Classification as Group E. A child day care facility that provides care for more than *six* but no more than 100 children *under 2 years of age*, where the rooms in which the children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

308.6.1.1 Special provisions. See Section 452.1.4 for daycares located above or below the first story.

SECTION 309 MERCANTILE GROUP M

309.1 Mercantile Group M. Mercantile Group M occupancy includes, among others, the use of a building or structure or a portion thereof, for the display and sale of merchandise and involves stocks of goods, wares or merchandise incidental to

such purposes and accessible to the public. Mercantile occupancies shall include, but not be limited to, the following:

Department stores

Drug stores

Markets

Motor fuel-dispensing facilities

Retail or wholesale stores

Sales rooms

309.2 Quantity of hazardous materials. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored or displayed in a single control area of a Group M occupancy shall not exceed the quantities in Table 414.2.5(1).

SECTION 310 RESIDENTIAL GROUP R

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *California Residential Code*.

310.2 Definitions. The following terms are defined in Chapter 2:

AGED HOME OR INSTITUTION.

BEDRIDDEN PERSON.

BOARDING HOUSE.

CARE AND SUPERVISION.

CATASTROPHICALLY INJURED.

CHILD-CARE CENTER.

CHILD OR CHILDREN.

CHRONICALLY ILL.

CONGREGATE LIVING HEALTH FACILITY

(CLHF).

CONGREGATE RESIDENCE.

DAY CARE.

DAY-CARE HOME, FAMILY.

DAY-CARE HOME, LARGE FAMILY.

DAY-CARE HOME, SMALL FAMILY.

DORMITORY.

FULL-TIME CARE.

GROUP HOME.

GUEST ROOM.

INFANT.

LODGING HOUSE.

NONAMBULATORY PERSONS.

PERSONS WITH INTELLECTUAL DISABILITIES,

PROFOUNDLY OR SEVERELY.

RESIDENTIAL CARE FACILITY FOR THE

CHRONICALLY ILL (RCF/CI).

RESIDENTIAL CARE FACILITY FOR

THE ELDERLY (RCFE).

RESIDENTIAL FACILITY (RF).

TERMINALLY ILL.

TRANSIENT.

310.3 Residential Group R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants Congregate residents (transient) with more than 10 occupants

Hotels (transient)

Motels (transient)

[HCD 1] Efficiency dwelling units (transient)

310.4 Residential Group R-2. Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Boarding houses (nontransient) with more than 16 occupants Congregate residences (nontransient) with more

than 16 occupants

Convents

Dormitories

Fraternities and sororities

Hotels (nontransient)

Live/work units

Monasteries

Motels (nontransient)

Vacation timeshare properties

[HCD 1] Efficiency dwelling units (nontransient)

310.4.1 Residential Group R-2.1. Residential Group R-2.1 occupancies shall include buildings, structures or parts thereof housing clients, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services.

This occupancy may contain more than six nonambulatory and/or bedridden clients. (See Section 435 Special Provisions for Licensed 24-Hour Care Facilities in a Group R-2.1, R-3.1 or R-4 Occupancy). This group shall include, but not be limited to, the following:

Assisted living facilities such as:

Residential care facilities,

Residential care facilities for the elderly (RCFEs),

Adult residential facilities,

Congregate living health facilities,

Group homes,

Residential care facilities for the chronically ill,

Congregate living health facilities for the terminally ill.

Social rehabilitation facilities such as:

Halfway houses.

Community correctional centers,

Community correction reentry centers,

Community treatment programs,

Work furlough programs,

Alcoholism or drug abuse recovery or treatment facilities.

310.5 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, *R-2.1*, *R-3.1*, R-4 or I, including:

Buildings that do not contain more than two dwelling units Boarding houses (nontransient) with 16 or fewer occupants Boarding houses (transient) with 10 or fewer occupants Congregate residences (nontransient) with 16 or fewer occupants

Congregate residences (transient) with 10 or fewer occupants [HCD 1] Efficiency dwelling units

Adult care facilities that provide accommodations for six or fewer clients of any age for less than 24 hours. Licensing categories that may use this classification include Adult Day Programs.

Alcoholism or drug abuse recovery homes (ambulatory only)

Child care facilities that provide accommodations for six or fewer clients of any age for less than 24 hours.

Licensing categories that may use this classification include, but are not limited to:

Day-Care Center for Mildly Ill Children,

Infant Care Center,

School Age Child Day-Care Center.

Family Day-Care Homes that provide accommodations for 14 or fewer children, in the provider's own home for less than 24-hours.

Foster family homes (ambulatory only)

Adult care and child care facilities that are within a single family home are permitted to comply with the California Residential Code.

Lodging houses with five or fewer guest rooms

310.5.1 Residential Group R-3.1. This occupancy group may include facilities licensed by a governmental agency for a residentially based 24-hour care facility providing accommodations for six or fewer clients of any age. Clients may be classified as ambulatory, nonambulatory or bedridden. A Group R-3.1 occupancy shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in Section 435 Special Provisions For Licensed 24-Hour Care Facilities in a Group R-2.1, R-3.1 or R-4 Occupancy. This group may include:

Adult residential facilities

Congregate living health facilities

Foster family homes

Group homes

Intermediate care facilities for the developmentally disabled habilitative

Intermediate care facilities for the developmentally disabled nursing

Nurseries for the full-time care of children under the age of six, but not including "infants" as defined in Section 310

Residential care facilities for the elderly

Small family homes and residential care facilities for the chronically ill

Exception: Group Homes licensed by the Department of Social Services which provide nonmedical board, room and care for six or fewer ambulatory children or children two years of age or younger, and which do not have any nonambulatory clients shall not be subject to regulations found in Section 435.

Pursuant to Health and Safety Code Section 13143 with respect to these exempted facilities, no city, county or pub-

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS ON USE AND OCCUPANCY

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

Adamtan	1		ı		НС			DS		1		HPD	_	1							a: -
Adopting agency	BSC	BSC-CG	SFM	1		1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х	Х			Х								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sections that are listed below						X	X					X								X	
Chapter / Section																					
403			Х																		
403.1			Х																		
403.1.1			Χ																		
403.2.1			Χ																		
403.2.1.1			Χ																		
403.3			Χ																		
403.3.1			Χ																		
403.3.2			Χ																		
403.3.2.1			Х																		
403.3.3			Х																		
403.3.5			Х																		
403.4.7			Χ																		
403.4.7.1			Χ																		
403.4.8.1			Χ																		
403.5.3			Χ																		
403.5.4			Χ																		
403.6			Χ																		
403.7			Χ																		
404.5		1	Х																		
404.6			Х																		
404.11		1	Χ																		
406.3.1			Χ																		
406.3.2		1				Х															
406.3.6	 			Х	Х																
406.4.1	 					Х	Х														
406.6.2	 		Х																		
406.8.5			X																		
406.8.5.1			Х																		
406.8.5.2	 	 	X		 	1	1	1	<u> </u>				 								<u> </u>
406.9	\vdash	+	X			-	1	-													\vdash
406.9.1	\vdash	+	X			-	1	-													\vdash
406.9.2	 	+	X	-	 	 	1	1	 				 								-
406.9.3	 	 	X		 			-					 								\vdash
407.1	 	 	X		 			-					 								\vdash
407.1.1	\vdash	1	X		<u> </u>	1	1	-					<u> </u>					1			\vdash
407.2	 	 	X		<u> </u>	-	-	1					<u> </u>								
407.2.1	 	 	X		 			<u> </u>					 					-		-	\vdash
407.2.1	 	 	X		 			<u> </u>					 					-		-	\vdash
407.2.3	₩	 	X		<u> </u>	-	-	 					<u> </u>	-							—
407.2.5	₩	 	X		<u> </u>	-	1	1					<u> </u>								├─
	₩	 			<u> </u>	-	-	-					<u> </u>	-							ऻ—
407.2.6	↓	 	X		<u> </u>	ļ	ļ		1				<u> </u>								—
407.3	├		X		<u> </u>		ļ	 					<u> </u>								—
407.3.1	↓	 	X		<u> </u>	ļ	ļ		1				<u> </u>								—
407.3.1.1	ـــــ	 	X		ļ			<u> </u>					ļ								<u> </u>
407.3.2	<u> </u>		Х		<u> </u>		ļ						<u> </u>								<u> </u>
407.4			X																		

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS ON USE AND OCCUPANCY—continued

CHAPTER 4 - SPE				 	НС			DSA				HPD						1	1		
Adopting agency	BSC	BSC-CG	SFM	1	2	1/AC	AC		SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х				_	.,,,,	7.0	Х	X	X		Ť	X								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sections that are listed below						Х	х					х								Х	
Chapter / Section																					
407.4.1			Х																		
407.4.1.1			Х																		
407.4.1.2			Х																		
407.4.2			Х																		
407.4.3			Х																		
407.4.4			Х																		
407.4.4.2			Х																		
407.4.4.3			Х																		
407.4.4.3.1			Х																		
407.4.4.3.2	†	1	X																		
407.4.4.5			Х																		<u> </u>
407.4.4.5.1	 		Х																		
407.4.4.5.3	 		Х																		
407.4.4.6.1			Х																		
407.4.4.6.2			Х																		
407.5			Х																		
407.5.2			Х																		
407.6			Х																		
407.6.1			Х																		
407.8			Х																		
407.9			Х																		
407.10			Х																		
407.11			Х																		
407.11.1			Х																		
407.11.2			Х																		
407.11.3			Х																		
407.11.4			Х																		
408.1.1			Х																		
408.1.2			Х																		
408.1.2.1			Х																		
408.1.2.2			Х																		
408.1.2.3			Х																		
408.1.2.4			Х																		
408.1.2.5			Х																		
408.1.2.6			Х																		
408.1.2.7			Х																		
408.1.3			Х																		
408.2			Х																		
408.2.1			Х																		L
408.3.1.1			Х																		<u> </u>
408.3.6			Х																		<u> </u>
408.3.6.1	<u> </u>		Х																		<u> </u>
408.3.6.2			Х																		<u> </u>
408.3.6.3			Х																		<u> </u>
408.3.6.4			Х																		<u> </u>
408.3.6.5			Х																		<u> </u>
408.3.8.1			Х																		<u> </u>
408.3.9			Х		L	<u> </u>	<u> </u>			L	L	L	L	<u> </u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>	<u> </u>

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS ON USE AND OCCUPANCY—continued

Adopting agency	BSC	BSC-CG	SFM		НС	D		DSA			OSI	HPD		BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
		D30-00	31 W	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	ВЗСС	Drii	Adii	DWII		Š	5	SEC
Adopt entire chapter	Х							X	Х	X	X		X								
Adopt entire chapter as amended (amended sections listed below)			Х	x	x																
Adopt only those sections that are listed below						х	x					X								X	
Chapter / Section																					
408.3.10			Х																		
408.3.11			Х																		
408.3.12			Х																		
408.4			Х																		
408.4.3			Х																		
408.5.1			Х																		
408.6			Х																		
408.6.1			Х																		
408.8			Х																		<u> </u>
408.8.1			Х		<u> </u>																<u> </u>
408.9			X		<u> </u>																
408.9.1			X		<u> </u>		-														<u> </u>
408.12			X																		<u> </u>
408.13			X																		
408.14			Х																		
408.15			Х																		
408.15.1			Х																		
408.15.2			Х																		
408.15.3			Х																		
408.15.3.1			Х																		
408.15.3.2			Х																		
408.15.4			Х																		
408.15.5			Х																		
410.3.6			Х																		
412.3.8							Х														
414.1.1			Х																		
414.5			Х																		
414.5.4			Х																		
415.5.3			Х																		
415.5.4			Х																		
415.11.7			Χ																		
415.11.7.1			Χ																		
415.11.7.1.1			Х																		
415.11.7.1.2			Х																		
415.11.7.1.3			Х																		
415.11.7.1.4			Х																		
415.11.7.2			Х																		
415.11.9.3			Х																		
415.12			Х																		
415.12.1			Х																		
415.12.1.1			Х																		
415.12.1.2			Х																		
415.12.1.3			Х																		
415.12.1.4			Х																		

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS ON USE AND OCCUPANCY—continued

Adopting agency	D00	BSC-CG	OEM.		нс	D		DS	A		OSI	HPD		BSCC	DPH	400	DWR	050		<u> </u>	01.0
Adopting agency	BSC	BSC-CG	SFM	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWK	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х	X	Х		Х								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sections that are listed below						х	Х					Х								х	
Chapter / Section																					
415.12.1.5			Х																		
415.13			Х																		
415.13.1			Х																		
415.13.2			Х																		
415.13.3			Х																		
419.7						Х	Х														
419.9				Х	Χ	Х															
420.1			Х	Х	Χ																
420.4			Х																		
420.5			Х																		
420.6			Х																		
420.7				Х																	
420.8				Х		Х															
420.8.1				Х		Х															
420.9				Х																	
420.10			Х																		
421.6			Х																		
421.6.1			Х																		
421.6.2			Х																		
422.1												Χ									
435			Х																		
436			Х																		
439			Х																		
440			Х																		
441			Х																		
442			Χ																		
443			Х																		
444			Х																		
446			Х																		
449			Х																	Χ	
450			Х																		
452			Х																		
453			Х																		
455			Х																		

The state agency does not adopt sections identified with the following symbol †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

402.8.7 Service areas fronting on exit passageways. Mechanical rooms, electrical rooms, building service areas and service elevators are permitted to open directly into exit passageways, provided the exit passageway is separated from such rooms with not less than 1-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. The fire protection rating of openings in the fire barriers shall be not less than 1 hour.

402.8.8 Security grilles and doors. Horizontal sliding or vertical security grilles or doors that are a part of a required means of egress shall conform to the following:

- 1. Doors and grilles shall remain in the full open position during the period of occupancy by the general public.
- Doors or grilles shall not be brought to the closed position when there are 10 or more persons occupying spaces served by a single exit or 50 or more persons occupying spaces served by more than one exit.
- 3. The doors or grilles shall be openable from within without the use of any special knowledge or effort where the space is occupied.
- Where two or more exits are required, not more than one-half of the exits shall be permitted to include either a horizontal sliding or vertical rolling grille or door.

SECTION 403 HIGH-RISE BUILDINGS AND GROUP I-2 OCCUPANCIES HAVING OCCUPIED FLOORS LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS

403.1 Applicability. *New high-rise buildings and new Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access* shall comply with Sections 403.2 through 403.7.

Exception: The provisions of Sections 403.2 through 403.7 shall not apply to the following buildings and structures:

- 1. Airport traffic control towers in accordance with Section 412.3.
- Open parking garages in accordance with Section 406.5.
- 3. The portion of a building containing a Group A-5 occupancy in accordance with Section 303.6.
- 4. Special industrial occupancies in accordance with Section 503.1.1.
- 5. Buildings such as power plants, lookout towers, steeples, grain houses and similar structures with noncontinuous human occupancy, when so determined by the enforcing agency.

For existing high-rise buildings and for existing Group R occupancies, see California Fire Code Chapter 11 and California Existing Building Code.

For the purpose of this section, in determining the level from which the highest occupied floor is to be measured, the enforcing agency should exercise reasonable judgment, including consideration of overall accessibility to the building by fire department personnel and vehicular equipment. When a building is located on sloping terrain and there is building access on more than one level, the enforcing agency may select the level that provides the most logical and adequate fire department access.

403.1.1 Definitions. The following terms are defined in Chapter 2.

HIGH-RISE BUILDING.

HIGH-RISE BUILDING ACCESS.

NEW HIGH-RISE BUILDING.

403.2 Construction. The construction of high-rise buildings shall comply with the provisions of Sections 403.2.1 through 403.2.4.

403.2.1 Reduction in fire-resistance rating. The fire-resistance-rating reductions listed in Sections 403.2.1.1 and 403.2.1.2 shall be allowed in buildings that have sprinkler control valves equipped with supervisory initiating devices and water-flow initiating devices for each floor.

Exception: Buildings, or portions of buildings, classified as a Group H-1, H-2 or H-3 occupancy.

- **403.2.1.1 Type of construction.** The following reductions in the minimum fire-resistance rating of the building elements in Table 601 shall be permitted as follows:
 - 1. For buildings not greater than 420 feet (128 000 mm) in building height, the fire-resistance rating of the building elements in Type IA construction shall be permitted to be reduced to the minimum fire-resistance ratings for the building elements in Type IB.

Exception: The required fire-resistance rating of *the primary structural frame* shall not be permitted to be reduced.

2. In other than Group F-1, M and S-1 occupancies, the fire-resistance rating of the building elements in Type IB construction shall be permitted to be reduced to the fire-resistance ratings in Type IIA.

Exception: The required fire-resistance rating of the primary structural frame shall not be permitted to be reduced.

 The building height and building area limitations of a building containing building elements with reduced fire-resistance ratings shall be permitted to be the same as the building without such reductions. **403.2.1.2 Shaft enclosures.** For buildings not greater than 420 feet (128 000 mm) in building height, the required fire-resistance rating of the fire barriers enclosing vertical shafts, other than interior exit stairway and elevator hoistway enclosures, is permitted to be reduced to 1 hour where automatic sprinklers are installed within the shafts at the top and at alternate floor levels.

403.2.2 Seismic considerations. For seismic considerations, see Chapter 16.

403.2.3 Structural integrity of interior exit stairways and elevator hoistway enclosures. For high-rise buildings of Risk Category III or IV in accordance with Section 1604.5, and for all buildings that are more than 420 feet (128 000 mm) in building height, enclosures for interior exit stairways and elevator hoistway enclosures shall comply with Sections 403.2.3.1 through 403.2.3.4.

403.2.3.1 Wall assembly. The wall assemblies making up the enclosures for interior exit stairways and elevator hoistway enclosures shall meet or exceed Soft Body Impact Classification Level 2 as measured by the test method described in ASTM C1629/C1629M.

403.2.3.2 Wall assembly materials. The face of the wall assemblies making up the enclosures for interior exit stairways and elevator hoistway enclosures that are not exposed to the interior of the enclosures for interior exit stairways or elevator hoistway enclosure shall be constructed in accordance with one of the following methods:

- The wall assembly shall incorporate no fewer than two layers of impact-resistant construction board each of which meets or exceeds Hard Body Impact Classification Level 2 as measured by the test method described in ASTM C1629/ C1629M.
- The wall assembly shall incorporate no fewer than one layer of impact-resistant construction material that meets or exceeds Hard Body Impact Classification Level 3 as measured by the test method described in ASTM C1629/ C1629M.
- The wall assembly incorporates multiple layers of any material, tested in tandem, that meets or exceeds Hard Body Impact Classification Level 3 as measured by the test method described in ASTM C1629/C1629M.

403.2.3.3 Concrete and masonry walls. Concrete or masonry walls shall be deemed to satisfy the requirements of Sections 403.2.3.1 and 403.2.3.2.

403.2.3.4 Other wall assemblies. Any other wall assembly that provides impact resistance equivalent to that required by Sections 403.2.3.1 and 403.2.3.2 for Hard Body Impact Classification Level 3, as measured by the test method described in ASTM C1629/C1629M, shall be permitted.

403.2.4 Sprayed fire-resistant materials (SFRM). The bond strength of the SFRM installed throughout the building shall be in accordance with Table 403.2.4.

TABLE 403.2.4 MINIMUM BOND STRENGTH

HEIGHT OF BUILDING®	SFRM MINIMUM BOND STRENGTH
Up to 420 feet	430 psf
Greater than 420 feet	1,000 psf

For SI: 1 foot = 304.8 mm, 1 pound per square foot (psf) = 0.0479 kW/m^2 . a. Above the lowest level of fire department vehicle access.

[F] 403.3 Automatic sprinkler system. Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 403.3.3. A sprinkler water-flow alarm-initiating device and a control valve with a supervisory signal-initiating device shall be provided at the lateral connection to the riser for each floor.

Exception: An automatic sprinkler system shall not be required in open parking garages in accordance with Section 406.5.

[F] 403.3.1 Number of sprinkler system risers and system design. Each sprinkler system serving a floor in buildings that are more than 420 feet (128 000 mm) in building height shall be connected to a minimum of two sprinkler risers or combination standpipe system risers located in separate shafts. Each sprinkler system shall be hydraulically designed so that when one connection is shut down, the other connection shall be capable of supplying the sprinkler system design demand.

[F] 403.3.1.1 Riser location. Sprinkler risers shall be placed in interior exit stairways and ramps that are remotely located in accordance with Section 1015.2.

[F] 403.3.2 Water supply to required fire pumps. In buildings *having an occupied floor* that are more than *120* feet (*36 576 mm*) *above the lowest level of fire department vehicle access*, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through no fewer than one of the connections.

403.3.2.1 Fire pumps. Redundant fire pump systems shall be required for high-rise buildings having an occupied floor more than 200 feet above the lowest level of fire department vehicle access. Each fire pump system shall be capable of automatically supplying the required demand for the automatic sprinkler and standpipe systems.

[F] 403.3.3 Secondary water supply. An automatic secondary on-site water supply having a *usable* capacity of

equally distributed along the length of the tier. For purposes of calculating the interior area of the side, the height shall not exceed 7 feet (2134 mm). All portions of tiers shall be within 200 feet (60 960 mm) horizontally from such openings or other natural ventilation openings as defined in Section 406.5.2. These openings shall be permitted to be provided in courts with a minimum dimension of 20 feet (6096 mm) for the full width of the openings.

- **406.5.6 Fire separation distance.** Exterior walls and openings in exterior walls shall comply with Tables 601 and 602. The distance to an adjacent lot line shall be determined in accordance with Table 602 and Section 705.
- **406.5.7 Means of egress.** Where persons other than parking attendants are permitted, open parking garages shall meet the means of egress requirements of Chapter 10. Where no persons other than parking attendants are permitted, there shall be no fewer than two exit stairways. Each exit stairway shall be not less than 36 inches (914 mm) in width. Lifts shall be permitted to be installed for use of employees only, provided they are completely enclosed by noncombustible materials.
- **[F] 406.5.8 Standpipe system.** An open parking garage shall be equipped with a standpipe system as required by Section 905.3.
- **406.5.9** Enclosure of vertical openings. Enclosure shall not be required for vertical openings except as specified in Section 406.5.7.
- **406.5.10 Ventilation.** Ventilation, other than the percentage of openings specified in Section 406.5.2, shall not be required.
- **406.5.11 Prohibitions.** The following uses and alterations are not permitted:
 - 1. Vehicle repair work.
 - 2. Parking of buses, trucks and similar vehicles.
 - 3. Partial or complete closing of required openings in exterior walls by tarpaulins or any other means.
 - 4. Dispensing of fuel.
- **406.6 Enclosed parking garages.** Enclosed parking garages shall comply with Sections 406.6.1 through 406.6.3.
 - **406.6.1 Heights and areas.** Enclosed vehicle parking garages and portions thereof that do not meet the definition of open parking garages shall be limited to the allowable heights and areas specified in Sections 504 and 506 as modified by Section 507. Roof parking is permitted.
 - **406.6.2 Ventilation.** A mechanical ventilation system shall be provided in accordance with the *California Mechanical Code*.
 - **Exception:** Mechanical ventilation shall not be required for enclosed parking garages that serve Group R-3 one- or two-family dwellings.
 - [F] 406.6.3 Automatic sprinkler system. An enclosed parking garage shall be equipped with an automatic sprinkler system in accordance with Section 903.2.10.

- **406.7 Motor fuel-dispensing facilities.** Motor fuel-dispensing facilities shall comply with the *California Fire Code* and Sections 406.7.1 and 406.7.2.
 - **406.7.1 Vehicle fueling pad.** The vehicle shall be fueled on noncoated concrete or other approved paving material having a resistance not exceeding 1 megohm as determined by the methodology in EN 1081.
 - **406.7.2 Canopies.** Canopies under which fuels are dispensed shall have a clear, unobstructed height of not less than 13 feet 6 inches (4115 mm) to the lowest projecting element in the vehicle drive-through area. Canopies and their supports over pumps shall be of noncombustible materials, fire-retardant-treated wood complying with Chapter 23, wood of Type IV sizes or of construction providing 1-hour fire resistance. Combustible materials used in or on a canopy shall comply with one of the following:
 - 1. Shielded from the pumps by a noncombustible element of the canopy, or wood of Type IV sizes;
 - 2. Plastics covered by aluminum facing having a thickness of not less than 0.010 inch (0.30 mm) or corrosion-resistant steel having a base metal thickness of not less than 0.016 inch (0.41 mm). The plastic shall have a flame spread index of 25 or less and a smokedeveloped index of 450 or less when tested in the form intended for use in accordance with ASTM E84 or UL 723 and a self-ignition temperature of 650°F (343°C) or greater when tested in accordance with ASTM D1929; or
 - 3. Panels constructed of light-transmitting plastic materials shall be permitted to be installed in canopies erected over motor vehicle fuel-dispensing station fuel dispensers, provided the panels are located not less than 10 feet (3048 mm) from any building on the same lot and face yards or streets not less than 40 feet (12 192 mm) in width on the other sides. The aggregate areas of plastics shall be not greater than 1,000 square feet (93 m²). The maximum area of any individual panel shall be not greater than 100 square feet (9.3 m²).
 - **406.7.2.1** Canopies used to support gaseous hydrogen systems. Canopies that are used to shelter dispensing operations where flammable compressed gases are located on the roof of the canopy shall be in accordance with the following:
 - The canopy shall meet or exceed Type I construction requirements.
 - 2. Operations located under canopies shall be limited to refueling only.
 - 3. The canopy shall be constructed in a manner that prevents the accumulation of hydrogen gas.
- **406.8 Repair garages.** Repair garages shall be constructed in accordance with the *California Fire Code* and Sections 406.8.1 through 406.8.6. This occupancy shall not include motor fuel-dispensing facilities, as regulated in Section 406.7.

- **406.8.1 Mixed uses.** Mixed uses shall be allowed in the same building as a repair garage subject to the provisions of Section 508.1.
- **406.8.2 Ventilation.** Repair garages shall be mechanically ventilated in accordance with the *California Mechanical Code*. The ventilation system shall be controlled at the entrance to the garage.
- **406.8.3 Floor surface.** Repair garage floors shall be of concrete or similar noncombustible and nonabsorbent materials.

Exception: Slip-resistant, nonabsorbent, interior floor finishes having a critical radiant flux not more than 0.45 W/cm², as determined by NFPA 253, shall be permitted.

- **406.8.4 Heating equipment.** Heating equipment shall be installed in accordance with the *California Mechanical Code*.
- **[F] 406.8.5 Gas detection system.** Repair garages used for the repair of vehicles fueled by nonodorized gases including but not limited to hydrogen and nonodorized LNG, shall be provided with a gas detection system that complies with Section 916. The gas detection system shall be designed to detect leakage of nonodorized gaseous fuel. Where lubrication or chassis service pits are provided in garages used for repairing nonodorized LNG-fueled vehicles, gas sensors shall be provided in such pits.
 - **[F]** 406.8.5.1 System activation. Activation of the gas detection system shall result in all of the following:
 - 1. Initiation of local audible and visible alarms in approved locations.
 - 2. Deactivation of all heating systems located in the repair garage.
 - 3. Activation of the mechanical ventilation system, where the *ventilation* system is interlocked with gas detection.
 - **[F]** 406.8.5.2 Failure of the gas detection system. Failure of the gas detection system shall automatically deactivate the heating system, activate the mechanical ventilation system where the system is interlocked with the gas detection system, and cause a trouble signal to sound in an approved location.
- **[F] 406.8.6 Automatic sprinkler system.** A repair garage shall be equipped with an automatic sprinkler system in accordance with Section 903.2.9.1.

406.9 Electric vehicle. [SFM]

- **406.9.1** Charging. In any building or interior area used for charging electric vehicles, electrical equipment shall be installed in accordance with the California Electrical Code.
- **406.9.2 Ventilation.** Mechanical exhaust ventilation, when required by the California Electrical Code shall be provided at a rate as required by Article 625 or as required by Section 1203 of the California Building Code which-

ever is greater. The ventilation system shall include both the supply and exhaust equipment and shall be permanently installed and located to intake supply air from the outdoors, and vent the exhaust directly to, the outdoors without conducting the exhaust air through other spaces within the building.

Exception: Positive pressure ventilation systems shall only be allowed in buildings or areas that have been designed and approved for that application.

406.9.3 Electrical interface. The electrical supply circuit to electrically powered mechanical ventilation equipment shall be interlocked with the recharging equipment used to supply the vehicle(s) being charged, and shall remain energized during the entire charging cycle. Electric vehicle recharging equipment shall be marked or labeled in accordance with the California Electrical Code.

Exceptions:

- 1. Exhaust ventilation shall not be required in areas with an approved engineered ventilation system, which maintains a hydrogen gas concentration at less than 25 percent of the lower flammability limit.
- 2. Mechanical exhaust ventilation for hydrogen shall not be required where the charging equipment utilized is installed and listed for indoor charging of electric vehicles without ventilation.

SECTION 407 GROUP I-2

- **407.1 General.** Occupancies in Group I-2 *and I-2.1* shall comply with the provisions of Sections 407.1 through 407.10 and other applicable provisions of this code.
 - **407.1.1 Construction.** Occupancies in Group I-2 wherein mental health patients are restrained are permitted to be housed in one-story buildings of Type IIA, Type IIIA or Type VA construction provided the floor area does not exceed 5,200 square feet (483 m^2) between fire walls of two-hour fire-resistive construction with openings protected by fire assemblies having a $1^1/_2$ -hour fire protection rating.
- **407.2 Corridors continuity and separation.** Corridors in occupancies in Group I-2 *and I-2.1* shall be continuous to the exits and shall be separated from other areas in accordance with Section 407.3 except spaces conforming to Sections 407.2.1 through 407.2.4.
 - **407.2.1 Waiting and similar areas.** Waiting areas and similar spaces constructed as required for corridors shall be permitted to be open to a corridor, only where all of the following criteria are met:
 - 1. The spaces are not occupied as care recipient's sleeping rooms, treatment rooms, incidental uses *listed in Table 509*, or hazardous uses.

- an automatic fire sprinkler system is provided throughout the Group I-2 fire area.
- 2. Care suites containing sleeping rooms shall be permitted to be not greater than 10,000 square feet (929 m²) in area where an automatic fire sprinkler system is provided throughout the Group I-2 fire area and where an automatic smoke detection system is provided throughout the care suite and installed in accordance with Section 907.
- **407.4.4.5.2 Exit access.** Any sleeping room, or any care suite that contains sleeping rooms, of more than 1,000 square feet (93 m²) shall have no fewer than two exit access doors from the care suite located in accordance with Section 1007.
- **407.4.4.5.3 Travel distance.** The travel distance between any point in a care suite containing sleeping rooms and an exit access door from that care suite shall be not greater than 100 feet (30 480 mm).
- **407.4.4.6 Care suites not containing sleeping rooms.** Areas not containing sleeping rooms, but only treatment areas and the associated rooms, spaces or circulation space, shall be permitted to be grouped into care suites and shall conform to the limitations in Sections 407.4.4.6.1 and 407.4.4.6.2.
 - **407.4.4.6.1 Area.** Care suites of rooms, other than sleeping rooms, shall have an area not greater than 10,000 square feet (929 m^2) .
- **407.4.4.6.2** Exit access. Any room or care suite, other than sleeping rooms, with an area of more than 2,500 square feet (232 m²) shall have no fewer than two exit access doors from the room or care suite located in accordance with Section 1007.1.
- **407.5 Smoke barriers.** Smoke barriers shall be provided to subdivide every story used by persons receiving care, treatment or sleeping and to divide other stories with an occupant load of 50 or more persons, *regardless of occupancy or use*, into no fewer than two smoke compartments. Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m²) and the distance of travel from any point in a smoke compartment to a smoke barrier door shall be not greater than 200 feet (60 960 mm). The smoke barrier shall be in accordance with Sections 709 and 909.5.

Exceptions:

- 1. This requirement shall not apply to Group I-2.1 less than 10,000 ft² (929 m²).
- 2. An area in an adjoining occupancy shall be permitted to serve as a smoke compartment for a Group I-2.1 facility if the following criteria are met:
 - 2.1. The separating wall and both compartments meet the requirements of 407.5.
 - 2.2. The Group I-2.1 is less than 22,500 ft² (2100 m²).
 - 2.3. Access from the Group I-2.1 to the other occupancy is unrestricted.
- 3. This requirement shall not apply to the following:

- 3.1. Any story, not containing a Group I-2 or I-2.1 occupancy, that is located above a story containing a Group I-2 or I-2.1 occupancy.
- 3.2. Areas that do not contain a Group I-2 or I-2.1 occupancy, where such areas are separated from the Group I-2 or I-2.1 occupancy by a horizontal exit in accordance with Section 1025.2.
- 3.3. Any story, not containing a Group I-2 or I-2.1 occupancy, that is located more than one story below a story containing a Group I-2 or I-2.1 occupancy.
- 3.4. Any story housing only mechanical equipment where such story is located below a story containing a Group I-2 or I-2.1 occupancy and is separated from the story above by a horizontal assembly having not less than a 2 hour fire resistance-rating.
- **407.5.1 Refuge area.** Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments. The size of the refuge area shall provide the following:
 - 1. Not less than 30 net square feet (2.8 m²) for each care recipient confined to bed or stretcher.
 - 2. Not less than 6 square feet (0.56 m²) for each ambulatory care recipient not confined to bed or stretcher and for other occupants.

Areas or spaces permitted to be included in the calculation of refuge area are corridors, sleeping areas, treatment rooms, lounge or dining areas and other low-hazard areas.

- **407.5.2 Independent egress.** At least two means of egress shall be provided from each smoke compartment created by smoke barriers. Means of egress may pass through adjacent compartments provided it does not return through the smoke compartment from which means of egress originated.
- **407.5.3 Horizontal assemblies.** Horizontal assemblies supporting smoke barriers required by this section shall be designed to resist the movement of smoke. Elevator lobbies shall be in accordance with Section 3006.2.
- [F] 407.6 Automatic sprinkler system. Every facility as specified herein wherein more than six clients or patients are housed or cared for on the premises on a 24-hour perday-basis shall have installed and maintained in an operable condition in every building or portion thereof where clients or patients are housed, an automatic sprinkler system of a type approved by the state fire marshal. The provisions of this subsection shall apply to every person, firm or corporation establishing, maintaining or operating a hospital, children's home, children's nursery or institution, or a home or institution for the care of aged or persons with dementia or other cognitive impairments, or any institution for persons with mental illness or persons with developmental disabilities and any nursing or convalescent home, and

to any state-owned or state-occupied building used for any of the types of facilities specified herein.

Exceptions:

- 1. This section shall not apply to homes or institutions for the 24-hour-per-day care of ambulatory children if all of the following conditions are satisfied:
 - 1.1. The buildings or portions thereof in which children are housed are not more than two stories in height and are constructed and maintained in accordance with regulations adopted by the state fire marshal.
 - 1.2. The buildings or portions thereof housing more than six such children shall have installed and maintained in an operable condition therein, a fire alarm system of a type approved by the state fire marshal. Such system shall be activated by detectors responding to invisible particles of combustion other than heat, except that detectors used in closets, usable under-floor areas, storage rooms, bathrooms, attached garages, attics, plenums, laundry rooms and rooms of similar use, may be heat-responsive devices.
 - 1.3. The building or portions thereof do not house persons with mental illness or children with developmental disabilities.
- 2. This section shall not apply to any one-story building or structure of an institution or home for the care of the aged providing 24-hour-per-day care if such building or structure is used or intended to be used for the housing of no more than six ambulatory aged persons. Such buildings or institutions shall have installed and maintained in an operable condition herein a fire alarm system of a type approved by the state fire marshal. Such system shall be activated by detectors responding to either visible or invisible particles of combustion other than heat, except that detectors used in closets, usable under-floor areas, storage rooms, bathrooms, attached garages, attics, plenums, laundry rooms and rooms of similar use, may be heat-responsive devices.
- 3. This section shall not apply to occupancies or any alterations thereto conforming to the construction provisions of this exception which were under construction or in existence on March 4, 1972. "Under construction" as used in this exception shall mean that actual work had been performed on the construction site and shall not be construed to mean that the hospital, home, nursery, institution, sanitarium or any portion thereof, was or is in the planning stage. The provisions of this exception shall apply to those buildings or structures having bearing walls and structural flame protected in accordance with the provisions of Column Type 1A of Table 601.
- 4. In detention facilities where inmates are not restrained.

The provisions of this section shall not apply to any facility used to house six or less persons on the premises.

407.6.1 When a new addition is to be made to an unsprinklered building or structure as permitted by this subsection,

such new addition shall be sprinklered as required by this section and shall be separated from the existing building or structures by not less than a two-hour fire-resistive fire barrier.

When a sprinkler system is added to an existing unsprinklered building or structure, the sprinklered area(s) shall be separated from the remainder of the building by not less than a one-hour fire-resistive fire barrier. The provisions of this section do not apply to any facility used to house six or less persons on the premises.

- **[F] 407.7 Fire alarm system.** A fire alarm system shall be provided in accordance with Section 907.2.6.
- **[F] 407.8 Automatic fire detection.** Corridors in Group I-2, Condition 1 occupancies and spaces permitted to be open to the corridors by Section 407.2 shall be equipped with an automatic fire detection system.

Group I-2, Condition 2 occupancies shall be equipped with smoke detection as required in Section 407.2.

Exceptions:

- Corridor smoke detection is not required where sleeping rooms are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each sleeping room and an audible and visual alarm at the care provider's station attending each unit.
- Corridor smoke detection is not required where sleeping room doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.
- **407.9 Secured yards.** Grounds are permitted to be fenced and gates therein are permitted to be equipped with locks, provided that safe dispersal areas having 30 net square feet (2.8 m²) for bed and stretcher care recipients and 6 net square feet (0.56 m²) for ambulatory care recipients and other occupants are located between the building and the fence. Such provided safe dispersal areas shall be located not less than 50 feet (15 240 mm) from the building they serve. Each safe dispersal area shall have a minimum of two exits. The aggregate clear width of exits from a safe dispersal area shall be determined on the basis of not less than one exit unit of 22 inches (559 mm) for each 500 persons to be accommodated, and no exit shall be less than 44 inches (1118 mm) in width. Gates shall not be installed across corridors or passageways leading to such dispersal areas unless they comply with egress requirements. Keys to gate locks shall be provided in accordance with the California Fire Code.
- **407.10 Electrical systems.** In Group I-2 *or I-2.1* occupancies, the essential electrical system for electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of Chapter 27 and NFPA 99.

407.11 Special Hazards.

- **407.11.1** Storage and handling of flammable, combustible liquids and hazardous materials shall be in accordance with the California Fire Code.
- 407.11.2 All exterior openings in a boiler room or room containing central heating equipment, if located below openings in another story, or if less than 10 feet (3048)

mm) from other doors or windows of the same building, shall be protected by a fire assembly having a three-fourths-hour fire protection rating.

407.11.3 Safety padding. See Sections 308.1 and 408.14.

407.11.4 Floor surfaces. Rooms occupied by patients whose personal liberties are restrained shall have noncombustible floor surfaces see Sections 308.1 and 804.4.3.

SECTION 408 GROUP I-3

408.1 General. Occupancies in Group I-3 shall comply with the provisions of Sections 408.1 through 408.11 and other applicable provisions of this code (see Section 308.5).

408.1.1 Definition. The following terms are defined in Chapter 2:

CELL. CELL COMPLEX. CELL TIERS. CENTRAL CONTROL BUILDING. COURTROOM DOCK. COURTHOUSE HOLDING FACILITY. DAY ROOM. **DETENTION ELEVATOR. DETENTION TREATMENT ROOM.** DORMITORY. HOLDING FACILITY. HOUSING UNIT. RESTRAINT. SALLYPORT. SMALL MANAGEMENT YARD. SECURE INTERVIEW ROOMS. TEMPORARY HOLDING CELL, ROOM OR AREA. TEMPORARY HOLDING FACILITY.

408.1.2 Construction. Group I-3 Occupancies shall be housed in buildings of Type IA or Type IB.

Exception: Such occupancies may be housed in one-story buildings of Type IIA, Type IIIA or Type VA construction provided the floor area does not exceed 5,200 square feet (483 m^2) between fire walls of two-hour fire-resistive construction with openings protected by fire assemblies having 1- and $1^1/_2$ -hour fire-protection rating.

- **408.1.2.1** Nonbearing walls and partitions interior. Nonbearing cell or dormitory walls within cell complexes shall be of noncombustible construction.
- 408.1.2.2 Intervening spaces. Common rooms and spaces within Group I-3 occupancies can be considered an intervening space in accordance with Section 1014.2, and not considered a corridor, when they meet any of the following:
 - 1. Within prisons and local detention facilities of Type I construction, the exit access within a housing unit may be a non-rated corridor provided the required exit occupant load from any dayroom does not exceed 64 persons.
 - 2. Within prison, jails, and courthouses, temporary holding areas of noncombustible construction and an occupant load less than 100.

- 3. Within prisons and local detention facilities, correctional medical or mental health housing suites, of noncombustible construction and an occupant load less than 100.
- 4. Within prisons and local detention facilities: detention program areas of noncombustible construction and an occupant load less than 100.
- 408.1.2.3 Courthouse holding facilities. Group 1-3 courthouse holding facilities shall be considered a separate and distinct building from the remaining courthouse building for the purpose of determining the type of construction where all of the following conditions are met:
 - 1. 2-hour fire barriers in accordance with Section 707 and 2-hour horizontal assemblies in accordance with Section 711 are provided to separate the courthouse holding facility from all other portions of the courthouse building.
 - 2. Any of the structure used to support courthouse holding facilities meets the requirements for the Group I-3 portion of the building.
 - 3. Each courthouse holding facility located above the first story is less than 1,000 square feet in area, and is designed to hold 10 or less in-custody defendants.
 - 4. Courthouse holding facilities located above the first story containing an internal stairway discharging to the main courthouse holding facility at the first story or basement.
 - 5. Additional exits from the courthouse holding facility located above the first story shall be permitted to exit through the courtrooms.
 - 6. The main courthouse holding facility located on the first story or basement has at least one exit directly to the exterior and additional means of egress shall be permitted to pass through a 1-hour corridor or lobby in the courthouse building.
- 408.1.2.4 Horizontal building separation for combined Group I-3/Group B occupancy. A Group B Administration building one story in height shall be permitted to be located above a Group I-3 (or Group I-3/I-2) housing/treatment building that is one story above grade and shall be classified as a separate and distinct building for the purpose of determining the type of construction, and shall be considered a separate fire area, where all of the following conditions are met:
 - 1. A 3-hour floor-ceiling assembly below the administration building is constructed as a horizontal assembly in accordance with Section 711.
 - 2. Interior shafts for stairs, elevators and mechanical systems complete the 3-hour separation between the Group B and Group I-3 (or Group I-3/I-2).
 - 3. The Group I-3 occupancy (or Group I-3/I-2 occupancies, correctional medical and mental health uses) below is minimum Type I-B construction with 2-hour fire resistive rated exterior walls.
 - 4. No unprotected openings are allowed in lower roofs within 10 feet of unprotected windows in the upper floor.

- 5. The Group B building above is of noncombustible construction and equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.
- 6. The Group B occupancy building above has all required means of egress capable of discharging directly to the exterior to a safe dispersal area.
- **408.1.2.5 Temporary holding area.** In buildings protected with automatic sprinklers, corridor serving temporary holding rooms shall be one hour fire resistance rated when the temporary holding occupant load is greater than 20.
- 408.1.2.6 Temporary holding facilities. Temporary holding facilities with nine or fewer persons under restraint may be classified as Group B when located in a buildings complying with all of the following conditions:
 - The building shall be protected throughout with a monitored automatic sprinkler system installed in accordance with Section 903.3.1.1.
 - 2. The building shall protected with a automatic fire alarm system with notification appliances throughout the holding facility in accordance with Section 907.2.
 - 3. The building shall be constructed of Type I, IIA, IIIA or VA construction.
- **408.1.2.7 Secure interview rooms.** Secure Interview Rooms used for law enforcement shall be permitted to locked, and shall not be classified as Group I-3 occupancies where all of the following conditions are met:
 - A monitored automatic sprinkler system shall be provided throughout buildings and portions thereof including secure interview rooms. The automatic sprinkler system shall comply with Section 903.3.1.1.
 - 2. Secure interview rooms shall be located in noncombustible construction.
 - 3. Secure interview rooms have glazed or barred openings with direct, continuous observation from law enforcement personnel who have a means to open the secure interview room.
 - 4. Not more than 6 occupants in secure interview rooms shall be located in the same fire area.
 - An automatic smoke detection system shall be installed within secure interview rooms and mechanical and electrical rooms.
- 408.1.3 Security door assemblies in corridors, smoke barriers, and smoke partitions. Security door assemblies shall be constructed in accordance with NFPA 252 or UL 10C, and where a smoke rating is required UL 1784, are not required to be tested or labeled.
- **408.2** Other occupancies. Buildings or portions of buildings in Group I-3 occupancies where security operations necessitate the locking of required means of egress shall be permitted to be classified as a different occupancy. Occupancies classified as other than Group I-3 shall meet the applicable requirements of this code for that occupancy provided provisions are made for the release of occupants at all times.

Means of egress from detention and correctional occupancies that traverse other use areas shall, as a minimum, conform to requirements for detention and correctional occupancies.

Exceptions:

- It is permissible to exit through a horizontal exit into other contiguous occupancies that do not conform to detention and correctional occupancy egress provisions but that do comply with requirements set forth in the appropriate occupancy, as long as the occupancy is not a Group H use.
- 2. Regardless of the provisions of Section 508, laundry areas and kitchens including associated dining areas, where commercial/institutional equipment is used shall be separated from the remainder of the building by construction capable of resisting the passage of smoke.
- 3. For the purpose of occupancy separation only courtroom docks that are directly accessory to courtrooms need not be separated from a courtroom.
- 408.2.1 Correctional medical and mental health uses. Where a Group I-3 occupancy occurs in building or portions of buildings, the following Subsections of Sections of 407 shall apply: 407.2.1; 407.2.2; 407.2.3; 407.3.1; 407.3.1.1; 407.4; 407.10.
- **408.3 Means of egress.** Except as modified or as provided for in this section, the means of egress provisions of Chapter 10 shall apply.
 - **408.3.1 Door width.** Doors to resident sleeping units shall have a clear width of not less than 28 inches (711 mm).
 - **408.3.1.1** Cell doors shall open outwardly or slide laterally.
 - **408.3.2 Sliding doors.** Where doors in a means of egress are of the horizontal-sliding type, the force to slide the door to its fully open position shall be not greater than 50 pounds (220 N) with a perpendicular force against the door of 50 pounds (220 N).
 - **408.3.3 Guard tower doors.** A hatch or trap door not less than 16 square feet (610 m²) in area through the floor and having dimensions of not less than 2 feet (610 mm) in any direction shall be permitted to be used as a portion of the means of egress from guard towers.
 - **408.3.4 Spiral stairways.** Spiral stairways that conform to the requirements of Section 1009.12 are permitted for access to and between staff locations.
 - **408.3.5 Ship ladders.** Ship ladders shall be permitted for egress from control rooms or elevated facility observation rooms in accordance with Section 1009.14.
 - **408.3.6** Exit discharge. Exits are permitted to discharge into a fenced or walled courtyard. Enclosed yards or courts shall be of a size to accommodate all occupants, be located not less than 50 feet (15 240 mm) from the building and have an area of not less than 15 square feet (1.4 m²) per person.

408.3.6 Exit discharge.

408.3.6.1 Exits are permitted to discharge into a fenced or walled courtyard. Enclosed yards or courts shall be of a size to accommodate all occupants, a minimum of 50 feet (15 240 mm) from the building with a net area of 3 square feet (0.28 m²) per person. A gate shall be

provided from the safe dispersal area to allow for the necessary relocation of occupants.

- 408.3.6.2 Exterior fenced enclosures and fenced enclosures utilized for recreational or activity purposes, used for exit termination for more than 20 persons, and which do not provide a safe dispersal area, shall have not less than two exits.
- **408.3.6.3** Fenced enclosure utilized for recreational or activity purposes only, for more than 49 people, and which do not provide a safe dispersal area, shall be provided with not less than two exits.
- **408.3.6.4** Fenced enclosures located on roofs of buildings one or more stories in height shall be provided with not less than two exits regardless of occupant load.
- 408.3.6.5 Fenced enclosures utilized for central control buildings not normally occupied and not accessed by inmates or the general public are permitted to have only one exit from the fenced enclosure. These fenced enclosures shall only be occupied during emergency response conditions by not more than 29 prison staff occupants. Access to the fenced area shall be controlled remotely or at the gate with a key.
- **408.3.7 Sallyports.** A sallyport shall be permitted in a means of egress where there are provisions for continuous and unobstructed passage through the sallyport during an emergency egress condition.
- **408.3.8 Interior exit stairway and ramp construction.** One interior exit stairway or ramp in each building shall be permitted to have glazing installed in doors and interior walls at each landing level providing access to the interior exit stairway or ramp, provided that the following conditions are met:
 - The interior exit stairway or ramp shall not serve more than four floor levels.
 - 2. Exit doors shall be not less than ³/₄-hour fire door assemblies complying with Section 716.5
 - 3. The total area of glazing at each floor level shall not exceed 5,000 square inches (3.2 m²) and individual panels of glazing shall not exceed 1,296 square inches (0.84 m²).
 - 4. The glazing shall be protected on both sides by an automatic sprinkler system. The sprinkler system shall be designed to wet completely the entire surface of any glazing affected by fire when actuated.
 - 5. The glazing shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) the glass before the sprinkler system operates.
 - 6. Obstructions, such as curtain rods, drapery traverse rods, curtains, drapes or similar materials shall not be installed between the automatic sprinklers and the glazing.
 - 408.3.8.1 Where the number and arrangement of exits complies with the requirements of Chapter 10, other stairways which occur within the secure area of the detention facility and are not used for required exiting

but are used primarily for the movement of inmates and security staff need not extend to the exterior.

- **408.3.9 Dead-end balconies.** Exit balconies serving cell tiers shall not extend more than 50 feet (15 240 mm) beyond an exit stairway.
- **408.3.10 Travel distance.** The travel distance may be increased to 300 feet for portions of Group I-3 occupancies open only to staff or where inmates are escorted at all times by staff.
- **408.3.11** Number of exits required. In temporary holding areas of noncombustible construction, a second means of egress is required when the occupant load is greater than 20.
- 408.3.12 Custody station. Spaces for custody stations, communications and related clerical areas shall be permitted to be open to, or located within the corridor, provided the required construction along the perimeter of the corridor is maintained. Construction of custody stations or portions of custody stations, within the envelope of the corridor, is not required to be fire-resistance rated. These provisions shall also apply to an enclosed custody station within the corridor.
- **408.4 Locks.** Egress doors are permitted to be locked in accordance with the applicable use condition. Doors from a refuge area to the outside are permitted to be locked with a key in lieu of locking methods described in Section 408.4.1. The keys to unlock the exterior doors shall be available at all times and the locks shall be operable from both sides of the door. *Security hardware may be used on any fire-rated door.*
 - **408.4.1 Remote release.** Remote release of locks on doors in a means of egress shall be provided with reliable means of operation, remote from the resident living areas, to release locks on all required doors. In Occupancy Conditions 3 or 4, the arrangement, accessibility and security of the release mechanisms required for egress shall be such that with the minimum available staff at any time, the lock mechanisms are capable of being released within 2 minutes.
 - **Exception:** Provisions for remote locking and unlocking of occupied rooms in Occupancy Condition 4 are not required provided that not more than 10 locks are necessary to be unlocked in order to move occupants from one smoke compartment to a refuge area within 3 minutes. The opening of necessary locks shall be accomplished with not more than two separate keys.
 - **[F] 408.4.2 Power-operated doors and locks.** Power-operated sliding doors or power-operated locks for swinging doors shall be operable by a manual release mechanism at the door. Emergency power shall be provided for the doors and locks in accordance with Section 2702.

Exceptions:

- 1. Emergency power is not required in facilities with 10 or fewer locks complying with the exception to Section 408.4.1.
- 2. Emergency power is not required where remote mechanical operating releases are provided.

- **408.4.3 Redundant operation.** Mechanically operated sliding doors or mechanically operated locks shall be provided with a mechanically operated release mechanism at each door *and* shall be provided with a remote release control.
- **408.4.4 Relock capability.** Doors remotely unlocked under emergency conditions shall not automatically relock when closed unless specific action is taken at the remote location to enable doors to relock.
- **408.5 Protection of vertical openings.** Any vertical opening shall be protected by a shaft enclosure in accordance with Section 713, or shall be in accordance with Section 408.5.1.
 - **408.5.1 Floor openings.** The open space in front of a cell tier and connected chases, not exceeding two tiers in height, shall not be considered a vertical shaft and need not meet the fire-resistive shaft enclosure requirements of Section 713.
 - **408.5.2 Shaft openings in communicating floor levels.** Where a floor opening is permitted between communicating floor levels of a housing unit in accordance with Section 408.5.1, plumbing chases serving vertically staked individual cells contained with the housing unit shall be permitted without a shaft enclosure.
- **408.6 Smoke barrier.** Occupancies in Group I-3 shall have smoke barriers complying with Sections 408.8 and 709 to divide every story occupied by residents for sleeping, or any other story having an occupant load of 50 or more persons, into no fewer than two smoke compartments.

Exception: Spaces having a direct exit to one of the following, provided that the locking arrangement of the doors involved complies with the requirements for doors at the smoke barrier for the use condition involved:

- 1. A public way.
- 2. A building separated from the resident housing area by a 2-hour fire-resistance-rated assembly or 50 feet (15 240 mm) of open space.
- 3. A secured yard or court having a holding space 50 feet (15 240 mm) from the housing area that provides 6 square feet (0.56 m²) or more of refuge area per occupant, including residents, staff and visitors.
- 4. Holding facility.
- **408.6.1** Smoke compartments. The number of residents in any smoke compartment shall be not more than 200. The distance of travel to a door in a smoke barrier from any room door required as exit access shall be not greater than 150 feet (45 720 mm). The distance of travel to a door in a smoke barrier from any point in a room shall be not greater than 200 feet (60 960 mm).

Exception: The travel distance may be increased by 50 feet from areas open only to the staff.

- **408.6.2 Refuge area.** Not less than 6 net square feet (0.56 m²) per occupant shall be provided on each side of each smoke barrier for the total number of occupants in adjoining smoke compartments. This space shall be readily available wherever the occupants are moved across the smoke barrier in a fire emergency.
- **408.6.3 Independent egress.** A means of egress shall be provided from each smoke compartment created by smoke

barriers without having to return through the smoke compartment from which means of egress originates.

408.7 Security glazing. In occupancies in Group I-3, windows and doors in 1-hour fire barriers constructed in accordance with Section 707, fire partitions constructed in accordance with Section 708 and smoke barriers constructed in accordance with Section 709 shall be permitted to have security glazing installed provided that the following conditions are met.

- 1. Individual panels of glazing shall not exceed 1,296 square inches (0.84 m²).
- The glazing shall be protected on both sides by an automatic sprinkler system. The sprinkler system shall be designed to, when actuated, wet completely the entire surface of any glazing affected by fire.
- 3. The glazing shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) the glass before the sprinkler system operates.
- Obstructions, such as curtain rods, drapery traverse rods, curtains, drapes or similar materials shall not be installed between the automatic sprinklers and the glazing.

408.8 Subdivision of areas. *Each cell complex* shall be separated from *other cell complexes or other spaces by a smoketight partition.*

- **408.8.1** Smoke-tight doors. Doors in openings in partitions required to be smoke tight by Section 408.8 shall be substantial doors, of construction that will resist the passage of smoke. Latches and door closures are not required on cell doors.
- **408.9 Windowless buildings.** For the purposes of this section, a windowless building or portion of a building is one with nonopenable windows, windows not readily breakable or without windows. Windowless buildings shall be provided with an engineered smoke control system to provide a tenable environment for exiting from the smoke compartment in the area of fire origin in accordance with Section 909 for each windowless smoke compartment.
 - 408.9.1 Smoke venting. The housing portions of windowless buildings containing use conditions 3, 4 or 5 shall be provided with an engineered smoke control system in accordance with Section 909, windows or doors, smoke vents, or equivalent means to provide a tenable environment for exiting from the smoke compartment in the area of fire origin. A tenable environment for egress shall be as defined in NFPA 92. If windows, smoke vents or doors are used to meet this section, at least two windows, smoke vents or doors to the exterior must be provided at or above the highest occupied level in each smoke compartment, and the windows or doors must be operable or readily breakable and arranged to manually vent smoke.

Exceptions:

- 1. Windowless buildings or portions of a building that meet all of the following requirements:
 - 1.1. Are Type IA or IB construction.
 - 1.2. Are protected with sprinklers throughout in accordance with Section 903.3.1.1.

- 1.3. Include a fire alarm system with smoke detection in accordance with NFPA 72 in the dayroom and/or corridor serving as exit access from the cells, reporting to a 24 hour central control at the institution.
- 1.4. Include at least one exit from each housing unit direct to the exterior where smoke will not accumulate or to the exterior through a 1-hour-rated corridor serving only that unit.
- 1.5. The building is divided into at least two smoke compartments per Section 408.6.1.
- 1.6. As approved by the enforcing agency, an egress analysis shows that inmates can be evacuated within 6 minutes from the smoke compartment of origin 24 hours per day or when inmates are present, or the facility is provided with gang or electric locks.
- 2. No venting or smoke control is required when an engineering analysis shows an acceptable safe egress time compared to the onset of untenable conditions within a windowless building or portion of a windowless building and approved by the enforcing agency.
- 3. Courtroom holding areas and temporary central holding areas in courthouses that they meet all of the following requirements:
 - 3.1. Holding occurs for a duration less than 12 hours.
 - 3.2 The holding areas include no electrical outlets available to the detainees.
 - 3.3. The entire building includes sprinklers throughout in accordance with Section 903.3.1.1.
 - 3.4. The building includes a fire alarm system with smoke detection in accordance with NFPA 72 in the common rooms of holding areas and in the cells of central holding. The fire alarm system shall activate an alert signal on the floor of alarm containing the holding areas, to alert staff.
 - 3.5. As approved by the enforcing agency, an egress analysis shows that detainees can be evacuated within 5 minutes from the holding area of origin, or the facility is provided with gang or electric locks.
- 4. Courtroom holding areas with less than 20 persons in custody.
- 5. Windowless buildings or portions of a building that meet all of the following requirements:
 - 5.1. Are Type IA or IB construction.
 - 5.2. Are protected with sprinklers throughout in accordance with Section 903.3.1.1.
 - 5.3. Include a fire alarm system with smoke detection in accordance with NFPA 72 in the dayrooms and corridors serving as exit access from the cells, reporting to a 24-hour central control at the institution.
 - 5.4. Include at least one direct exit from each housing unit through a smoke partition to another smoke compartment. Each housing unit must be its own smoke compartment and can exit

- through a maximum of one adjacent compartment before reaching a corridor or the exterior.
- 5.5. As approved by the enforcing agency, an egress analysis shows that inmates can be evacuated within 6 minutes from the smoke compartment of origin 24 hours per day or when inmates are present, or the facility is provided with gang or electric locks.
- 5.6. Each housing unit includes a pressurization method smoke control system that complies with Section 909.
- **[F] 408.10 Fire alarm system.** A fire alarm system shall be provided in accordance with Section 907.2.6.3.
- **[F] 408.11 Automatic sprinkler system.** Group I-3 occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.6.
- 408.12 Emergency and standby power systems. Special electrical systems, exit illumination, power installations and alternate on-site electrical supplies shall be provided for every building or portion of a building housing 10 or more inmates in a detention or correctional facility in accordance with the provisions of the California Electrical Code. There shall be a source of emergency power in all detention facilities capable of providing minimal lighting in all housing units, activity areas, corridors, stairs and central control points, and to maintain fire and life safety, security, communications and alarm systems.
- **408.13 Windows.** In security areas within cell complexes sprinklered throughout, the area of glazing in one-hour corridor walls and smoke barrier walls shall not be restricted, provided:
 - 1. All openings are protected by fixed glazing listed and labeled for a fire-protection of at least ³/₄ hour; or
 - 2. Fixed security glazing set in noncombustible frames. Shall comply with the minimum requirements of one of the following test standards: ASTM F1233-98, Class III glass, or; California Department of Corrections, CDC 860-94d, or H.P. White Laboratory, Inc., HPW-TP-0500.02, Forced Entry Level III.
 - 3. In lieu of the sizes set forth in CBC, the size and area of glazed assemblies shall conform to the following: Windows required to have a three-fourths-hour fire-resistive rating or windows protected by fixed security glazing, as delineated in Items 1 and 2 above, may have an area not greater than 84 square feet (7.8 m²) with neither width nor height exceeding 12 feet (3658 mm).
- 408.14 Safety padding. Padding material used on walls, floors and ceilings in Group I and R-2.1 occupancies shall be of an approved type tested in accordance with the procedures established by State Fire Marshal Standard 12-8-100, Room Fire Test for Wall and Ceiling Materials, California Code of Regulations, Title 24, Part 12.

408.15 Small management yards.

408.15.1 General. The provisions of Sections 408.15.1 through 408.15.5 shall apply to small management yards. Small management yards may be used by a maximum of two occupants at any one time for a maximum of 2 hours per day.

408.15.2 Construction. Small management yards shall be constructed in accordance with all of the following:

- 1. Constructed of Type IB noncombustible materials.
- 2. Fence material shall be noncombustible.
- 3. Have a maximum area of 150 square feet (14 m^2).
- Yard area covering shall not exceed 75 square feet (7 m²) or a maximum of 50 percent of the fenced enclosure.
- 5. Electrical lighting or devices of any type shall not be permitted within the yard.

Exception: Low voltage devices dedicated for the operation of toilets.

408.15.3 Fire protection system provisions.

408.15.3.1 Automatic sprinkler systems. An automatic sprinkler system shall be provided in accordance with Section 903.3.1.1.

Exception: Small management yards where a distance of 10 feet (3048 mm) is maintained from all buildings or structures and 4 feet (1220 mm) is maintained from containment fencing.

408.15.3.2 Fire alarm systems. An approved fire alarm system shall be provided in accordance with Section 907.

Exception: Small management yards where a distance of 10 feet (3048 mm) is maintained from all buildings or structures and 4 feet (1220 mm) is maintained from containment fencing.

408.15.4 Means of egress. Except as modified or as provided for in this section, the provisions of Section 408.3 and Chapter 10 shall apply. Small management yards shall comply with all of the following:

- 1. Staff-controlled manual released locks shall be pro-
- 2. Staff escorting inmates to and from small management yards shall be equipped with radios and personal alarms to notify central control in case of a fire.
- 3. The safe dispersal area as defined by Section 1027.5 shall not be reduced due to placement of these yards.
- 4. An exit, remote from the main entrance is required in the containment fencing.

408.15.5 Special provisions. Inmate exercise clothing and toilet paper tissue shall be the only combustible materials permitted in small management yards.

SECTION 409 MOTION PICTURE PROJECTION ROOMS

409.1 General. The provisions of Sections 409.1 through 409.5 shall apply to rooms in which ribbon-type cellulose acetate or other safety film is utilized in conjunction with electric arc, xenon or other light-source projection equipment that develops hazardous gases, dust or radiation. Where cellulose nitrate film is utilized or stored, such rooms shall comply with NFPA 40.

409.1.1 Projection room required. Every motion picture machine projecting film as mentioned within the scope of this section shall be enclosed in a projection room. Appurtenant electrical equipment, such as rheostats, transform-

ers and generators, shall be within the projection room or in an adjacent room of equivalent construction.

409.2 Construction of projection rooms. Every projection room shall be of permanent construction consistent with the construction requirements for the type of building in which the projection room is located. Openings are not required to be protected.

The room shall have a floor area of not less than 80 square feet (7.44 m²) for a single machine and not less than 40 square feet (3.7 m²) for each additional machine. Each motion picture projector, floodlight, spotlight or similar piece of equipment shall have a clear working space of not less than 30 inches by 30 inches (762 mm by 762 mm) on each side and at the rear thereof, but only one such space shall be required between two adjacent projectors. The projection room and the rooms appurtenant thereto shall have a ceiling height of not less than 7 feet 6 inches (2286 mm). The aggregate of openings for projection equipment shall not exceed 25 percent of the area of the wall between the projection room and the auditorium. Openings shall be provided with glass or other approved material, so as to close completely the opening.

409.3 Projection room and equipment ventilation. Ventilation shall be provided in accordance with the *California Mechanical Code*.

409.3.1 Supply air. Each projection room shall be provided with adequate air supply inlets so arranged as to provide well-distributed air throughout the room. Air inlet ducts shall provide an amount of air equivalent to the amount of air being exhausted by projection equipment. Air is permitted to be taken from the outside; from adjacent spaces within the building, provided the volume and infiltration rate is sufficient; or from the building air-conditioning system, provided it is so arranged as to provide sufficient air when other systems are not in operation.

409.3.2 Exhaust air. Projection rooms are permitted to be exhausted through the lamp exhaust system. The lamp exhaust system shall be positively interconnected with the lamp so that the lamp will not operate unless there is the required airflow. Exhaust air ducts shall terminate at the exterior of the building in such a location that the exhaust air cannot be readily recirculated into any air supply system. The projection room ventilation system is permitted to also serve appurtenant rooms, such as the generator and rewind rooms.

409.3.3 Projection machines. Each projection machine shall be provided with an exhaust duct that will draw air from each lamp and exhaust it directly to the outside of the building. The lamp exhaust is permitted to serve to exhaust air from the projection room to provide room air circulation. Such ducts shall be of rigid materials, except for a flexible connector approved for the purpose. The projection lamp or projection room exhaust system, or both, is permitted to be combined but shall not be interconnected with any other exhaust or return system, or both, within the building.

409.4 Lighting control. Provisions shall be made for control of the auditorium lighting and the means of egress lighting systems of theaters from inside the projection room and from not less than one other convenient point in the building.

409.5 Miscellaneous equipment. Each projection room shall be provided with rewind and film storage facilities.

SECTION 410 STAGES, PLATFORMS AND TECHNICAL PRODUCTION AREAS

410.1 Applicability. The provisions of Sections 410.1 through 410.8 shall apply to all parts of buildings and structures that contain stages or platforms and similar appurtenances as herein defined.

410.2 Definitions. The following terms are defined in Chapter 2:

PLATFORM.

PROCENIUM WALL.

STAGE.

TECHNICAL PRODUCTION AREA.

410.3 Stages. Stage construction shall comply with Sections 410.3.1 through 410.3.8.

410.3.1 Stage construction. Stages shall be constructed of materials as required for floors for the type of construction of the building in which such stages are located.

Exception: Stages need not be constructed of the same materials as required for the type of construction provided the construction complies with one of the following:

- 1. Stages of Type IIB or IV construction with a nominal 2-inch (51 mm) wood deck, provided that the stage is separated from other areas in accordance with Section 410.3.4.
- 2. In buildings of Type IIA, IIIA and VA construction, a fire-resistance-rated floor is not required, provided the space below the stage is equipped with an automatic sprinkler system or fire-extinguishing system in accordance with Section 903 or 904.
- 3. In all types of construction, the finished floor shall be constructed of wood or approved non-combustible materials. Openings through stage floors shall be equipped with tight-fitting, solid wood trap doors with approved safety locks.
- **410.3.1.1 Stage height and area.** Stage areas shall be measured to include the entire performance area and adjacent backstage and support areas not separated from the pqerformance area by fire-resistance-rated construction. Stage height shall be measured from the lowest point on the stage floor to the highest point of the roof or floor deck above the stage.
- 410.3.2 Technical production areas: galleries, gridirons and catwalks. Beams designed only for the attachment of portable or fixed theater equipment, gridirons, galleries and catwalks shall be constructed of approved materials consistent with the requirements for the type of construction of the building; and a fire-resistance rating shall not be required. These areas shall not be considered to be floors, stories, mezzanines or levels in applying this code.

Exception: Floors of fly galleries and catwalks shall be constructed of any approved material.

- **410.3.3** Exterior stage doors. Where protection of openings is required, exterior exit doors shall be protected with fire door assemblies that comply with Section 716. Exterior openings that are located on the stage for means of egress or loading and unloading purposes, and that are likely to be open during occupancy of the theater, shall be constructed with vestibules to prevent air drafts into the auditorium.
- **410.3.4 Proscenium wall.** Where the stage height is greater than 50 feet (15 240 mm), all portions of the stage shall be completely separated from the seating area by a proscenium wall with not less than a 2-hour fire-resistance rating extending continuously from the foundation to the roof.
- **410.3.5 Proscenium curtain.** Where a proscenium wall is required to have a fire-resistance rating, the stage opening shall be provided with a fire curtain complying with NFPA 80, horizontal sliding doors complying with Section 716.5.2 having a fire protection rating of at least 1 hour, or an approved water curtain complying with Section 903.3.1.1 or, in facilities not utilizing the provisions of smoke-protected assembly seating in accordance with Section 1029.6.2, a smoke control system complying with Section 909 or natural ventilation designed to maintain the smoke level not less than 6 feet (1829 mm) above the floor of the means of egress.
- **410.3.6 Scenery.** Combustible materials used in sets and scenery *shall be flame resistant in accordance with the provisions set forth in CCR, Title 19, Division 1, Chapter 8,* in accordance with Section 806 and the *California Fire Code.* Foam plastics and materials containing foam plastics shall comply with Section 2603 and the *California Fire Code.*
- **410.3.7 Stage ventilation.** Emergency ventilation shall be provided for stages larger than 1,000 square feet (93 m²) in floor area, or with a stage height greater than 50 feet (15 240 mm). Such ventilation shall comply with Section 410.3.7.1 or 410.3.7.2.
 - **410.3.7.1 Roof vents.** Two or more vents constructed to open automatically by approved heat-activated devices and with an aggregate clear opening area of not less than 5 percent of the area of the stage shall be located near the center and above the highest part of the stage area. Supplemental means shall be provided for manual operation of the ventilator. Curbs shall be provided as required for skylights in Section 2610.2. Vents shall be labeled.
 - [F] 410.3.7.2 Smoke control. Smoke control in accordance with Section 909 shall be provided to maintain the smoke layer interface not less than 6 feet (1829 mm) above the highest level of the assembly seating or above the top of the proscenium opening where a proscenium wall is provided in compliance with Section 410.3.4.
- **410.4 Platform construction.** Permanent platforms shall be constructed of materials as required for the type of construction of the building in which the permanent platform is located. Permanent platforms are permitted to be constructed of fire-retardant-treated wood for Types I, II and IV construction where the platforms are not more than 30 inches (762).

mm) above the main floor, and not more than one-third of the room floor area and not more than 3,000 square feet (279 m²) in area. Where the space beneath the permanent platform is used for storage or any purpose other than equipment, wiring or plumbing, the floor assembly shall be not less than 1-hour fire-resistance-rated construction. Where the space beneath the permanent platform is used only for equipment, wiring or plumbing, the underside of the permanent platform need not be protected.

- **410.4.1 Temporary platforms.** Platforms installed for a period of not more than 30 days are permitted to be constructed of any materials permitted by the code. The space between the floor and the platform above shall only be used for plumbing and electrical wiring to platform equipment.
- **410.5 Dressing and appurtenant rooms.** Dressing and appurtenant rooms shall comply with Sections 410.5.1 and 410.5.2.
 - **410.5.1 Separation from stage.** The stage shall be separated from dressing rooms, scene docks, property rooms, workshops, storerooms and compartments appurtenant to the stage and other parts of the building by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. The fire-resistance rating shall be not less than 2 hours for stage heights greater than 50 feet (15 240 mm) and not less than 1 hour for stage heights of 50 feet (15 240 mm) or less.
 - **410.5.2 Separation from each other.** Dressing rooms, scene docks, property rooms, workshops, storerooms and compartments appurtenant to the stage shall be separated from each other by not less than 1-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.
- **410.6 Means of egress.** Except as modified or as provided for in this section, the provisions of Chapter 10 shall apply.
 - **410.6.1 Arrangement.** Where two or more exits or exit access doorways from the stage are required in accordance with Section 1006.2, no fewer than one exit or exit access doorway shall be provided on each side of a stage.
 - **410.6.2 Stairway and ramp enclosure.** Exit access stairways and ramps serving a stage or platform are not required to be enclosed. Exit access stairways and ramps serving technical production areas are not required to be enclosed.
 - **410.6.3 Technical production areas.** Technical production areas shall be provided with means of egress and means of escape in accordance with Sections 410.6.3.1 through 410.6.3.5.
 - **410.6.3.1 Number of means of egress.** No fewer than one means of egress shall be provided from technical production areas.
 - **410.6.3.2** Exit access travel distance. The exit access travel distance shall be not greater than 300 feet (91 440 mm) for buildings without a sprinkler system and 400 feet (121 900 mm) for buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

410.6.3.3 Two means of egress. Where two means of egress are required, the common path of travel shall be not greater than 100 feet (30 480 mm).

Exception: A means of escape to a roof in place of a second means of egress is permitted.

410.6.3.4 Path of egress travel. The following exit access components are permitted where serving technical production areas:

- 1. Stairways.
- 2. Ramps.
- 3. Spiral stairways.
- 4. Catwalks.
- 5. Alternating tread devices.
- 6. Permanent ladders.
- **410.6.3.5** Width. The path of egress travel within and from technical support areas shall be not less than 22 inches (559 mm).
- **[F] 410.7 Automatic sprinkler system.** Stages shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1. Sprinklers shall be installed under the roof and gridiron and under all catwalks and galleries over the stage. Sprinklers shall be installed in dressing rooms, performer lounges, shops and storerooms accessory to such stages.

Exceptions:

- 1. Sprinklers are not required under stage areas less than 4 feet (1219 mm) in clear height that are utilized exclusively for storage of tables and chairs, provided the concealed space is separated from the adjacent spaces by Type X gypsum board not less than ⁵/₈-inch (15.9 mm) in thickness.
- 2. Sprinklers are not required for stages 1,000 square feet (93 m²) or less in area and 50 feet (15 240 mm) or less in height where curtains, scenery or other combustible hangings are not retractable vertically. Combustible hangings shall be limited to a single main curtain, borders, legs and a single backdrop.
- Sprinklers are not required within portable orchestra enclosures on stages.
- **[F] 410.8 Standpipes.** Standpipe systems shall be provided in accordance with Section 905.

SECTION 411 SPECIAL AMUSEMENT BUILDINGS

411.1 General. Special amusement buildings having an occupant load of 50 or more shall comply with the requirements for the appropriate Group A occupancy and Sections 411.1 through 411.8. Amusement buildings having an occupant load of less than 50 shall comply with the requirements for a Group B occupancy and Sections 411.1 through 411.8.

Exception: Amusement buildings or portions thereof that are without walls or a roof and constructed to prevent the accumulation of smoke need not comply with this section.

For flammable decorative materials, see the *California Fire Code*.

transport route. The signal shall be relayed to an approved central, proprietary or remote station service or constantly attended on-site location and shall initiate a local audible alarm

- **[F] 415.5.3 Supervision.** Emergency alarm systems *required by Section 415.5.1 or 415.5.2* shall be *electrically* supervised *and monitored* by an approved central, proprietary or remote station service or shall initiate an audible and visual signal at a constantly attended on-site location.
 - **[F] 415.5.4 Emergency alarm systems.** Emergency alarm systems *required by Section 415.5.1 or 415.5.2* shall be provided with emergency *or standby* power in accordance with Section 2702.2.8 and 2702.2.14.
- **[F] 415.6 Fire separation distance.** Group H occupancies shall be located on property in accordance with the other provisions of this chapter. In Groups H-2 and H-3, not less than 25 percent of the perimeter wall of the occupancy shall be an exterior wall.

Exceptions:

- 1. Liquid use, dispensing and mixing rooms having a floor area of not more than 500 square feet (46.5 m²) need not be located on the outer perimeter of the building where they are in accordance with the *California Fire Code* and NFPA 30.
- 2. Liquid storage rooms having a floor area of not more than 1,000 square feet (93 m²) need not be located on the outer perimeter where they are in accordance with the *California Fire Code* and NFPA 30.
- Spray paint booths that comply with the *California Fire Code* need not be located on the outer perimeter.
- **[F] 415.6.1 Group H occupancy minimum fire separation distance.** Regardless of any other provisions, buildings containing Group H occupancies shall be set back to the minimum fire separation distance as set forth in Sections 415.6.1.1 through 415.6.1.4. Distances shall be measured from the walls enclosing the occupancy to lot lines, including those on a public way. Distances to assumed lot lines established for the purpose of determining exterior wall and opening protection are not to be used to establish the minimum fire separation distance for buildings on sites where explosives are manufactured or used when separation is provided in accordance with the quantity distance tables specified for explosive materials in the *California Fire Code*.
 - **[F] 415.6.1.1 Group H-1.** Group H-1 occupancies shall be set back not less than 75 feet (22 860 mm) and not less than required by the *California Fire Code*.
 - **Exception:** Fireworks manufacturing buildings separated in accordance with NFPA 1124.
 - **[F] 415.6.1.2 Group H-2.** Group H-2 occupancies shall be set back not less than 30 feet (9144 mm) where the area of the occupancy is greater than 1,000 square feet (93 m²) and it is not required to be located in a detached building.

- [F] 415.6.1.3 Groups H-2 and H-3. Group H-2 and H-3 occupancies shall be set back not less than 50 feet (15 240 mm) where a detached building is required (see Table 415.6.2).
- **[F] 415.6.1.4 Explosive materials.** Group H-2 and H-3 occupancies containing materials with explosive characteristics shall be separated as required by the *California Fire Code*. Where separations are not specified, the distances required shall be determined by a technical report issued in accordance with Section 414.1.3.
- [F] 415.6.2 Detached buildings for Group H-1, H-2 or H-3 occupancy. The storage or use of hazardous materials in excess of those amounts listed in Table 415.6.2 shall be in accordance with the applicable provisions of Sections 415.7 and 415.8.
 - **[F] 415.6.2.1 Wall and opening protection.** Where a detached building is required by Table 415.6.2, there are no requirements for wall and opening protection based on fire separation distance.
- [F] 415.7 Special provisions for Group H-1 occupancies. Group H-1 occupancies shall be in detached buildings used for no other purpose. Roofs shall be of lightweight construction with suitable thermal insulation to prevent sensitive material from reaching its decomposition temperature. Group H-1 occupancies containing materials that are in themselves both physical and health hazards in quantities exceeding the maximum allowable quantities per control area in Table 307.1(2) shall comply with requirements for both Group H-1 and H-4 occupancies.
 - [F] 415.7.1 Floors in storage rooms. Floors in storage areas for organic peroxides, pyrophoric materials and unstable (reactive) materials shall be of liquid-tight, noncombustible construction.
- [F] 415.8 Special provisions for Group H-2 and H-3 occupancies. Group H-2 and H-3 occupancies containing quantities of hazardous materials in excess of those set forth in Table 415.6.2 shall be in detached buildings used for manufacturing, processing, dispensing, use or storage of hazardous materials. Materials listed for Group H-1 occupancies in Section 307.3 are permitted to be located within Group H-2 or H-3 detached buildings provided the amount of materials per control area do not exceed the maximum allowed quantity specified in Table 307.1(1).
 - **[F] 415.8.1 Multiple hazards.** Group H-2 or H-3 occupancies containing materials that are in themselves both physical and health hazards in quantities exceeding the maximum allowable quantities per control area in Table 307.1(2) shall comply with requirements for Group H-2, H-3 or H-4 occupancies as applicable.
 - **[F] 415.8.2 Separation of incompatible materials.** Hazardous materials other than those listed in Table 415.6.2 shall be allowed in manufacturing, processing, dispensing, use or storage areas when separated from incompatible materials in accordance with the provisions of the *California Fire Code*.

[F] TABLE 415.6.2 DETACHED BUILDING REQUIRED

A DETACHED BUIL	LDING IS REQUIRED WHEN THE Q	UANTITY OF MATERIAL EXCEEDS THAT	LISTED HEREIN
Material	Class	Solids and Liquids (tons) ^{a, b}	Gases (cubic feet) ^{a, b}
Explosives	Division 1.1 Division 1.2 Division 1.3 Division 1.4 Division 1.4 Division 1.5 Division 1.6	Maximum Allowable Quantity Maximum Allowable Quantity Maximum Allowable Quantity Maximum Allowable Quantity I Maximum Allowable Quantity Maximum Allowable Quantity	Not Applicable
Oxidizers	Class 4	Maximum Allowable Quantity	Maximum Allowable Quantity
Unstable (reactives) detonable	Class 3 or 4	Maximum Allowable Quantity	Maximum Allowable Quantity
Oxidizer, liquids and solids	Class 3 Class 2	1,200 2,000	Not Applicable Not Applicable
Organic peroxides	Detonable Class I Class II Class III	Maximum Allowable Quantity Maximum Allowable Quantity 25 50	Not Applicable Not Applicable Not Applicable Not Applicable
Unstable (reactives) nondetonable	Class 3 Class 2	1 25	2,000 10,000
Water reactives	Class 3 Class 2	1 25	Not Applicable Not Applicable
Pyrophoric gases	Not Applicable	Not Applicable	2,000

For SI: 1 ton = 906 kg, $1 \text{ cubic foot} = 0.02832 \text{ m}^3$, 1 pound = 0.454 kg.

[F] 415.8.3 Water reactives. Group H-2 and H-3 occupancies containing water-reactive materials shall be resistant to water penetration. Piping for conveying liquids shall not be over or through areas containing water reactives, unless isolated by approved liquid-tight construction.

Exception: Fire protection piping shall be permitted over or through areas containing water reactives without isolating it with liquid-tight construction.

[F] 415.8.4 Floors in storage rooms. Floors in storage areas for organic peroxides, oxidizers, pyrophoric materials, unstable (reactive) materials and water-reactive solids and liquids shall be of liquid-tight, noncombustible construction.

[F] 415.8.5 Waterproof room. Rooms or areas used for the storage of water-reactive solids and liquids shall be constructed in a manner that resists the penetration of water through the use of waterproof materials. Piping carrying water for other than approved automatic sprinkler systems shall not be within such rooms or areas.

[F] 415.9 Group H-2. Occupancies in Group H-2 shall be constructed in accordance with Sections 415.9.1 through 415.9.3 and the *California Fire Code*.

[F] 415.9.1 Flammable and combustible liquids. The storage, handling, processing and transporting of flammable and combustible liquids in Group H-2 and H-3 occupancies shall be in accordance with Sections 415.9.1.1 through 415.9.1.9, the *California Mechanical Code* and the *California Fire Code*.

[F] 415.9.1.1 Mixed occupancies. Where the storage tank area is located in a building of two or more occupancies and the quantity of liquid exceeds the maximum allowable quantity for one control area, the use shall be completely separated from adjacent occupancies in accordance with the requirements of Section 508.4.

[F] 415.9.1.1.1 Height exception. Where storage tanks are located within a building no more than one story above grade plane, the height limitation of Section 504 shall not apply for Group H.

a. For materials that are detonable, the distance to other buildings or lot lines shall be in accordance with Chapter 56 of the *California Fire Code* based on trinitrotoluene (TNT) equivalence of the material. For materials classified as explosives, see Chapter 56 of the *California Fire Code*.

b. "Maximum Allowable Quantity" means the maximum allowable quantity per control area set forth in Table 307.1(1).

c. Limited to Division 1.4 materials and articles, including articles packaged for shipment, that are not regulated as an explosive under Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF) regulations or unpackaged articles used in process operations that do not propagate a detonation or deflagration between articles, provided the net explosive weight of individual articles does not exceed 1 pound.

- 4. Rooms used for the storage of Class I flammable liquids shall not be located in a basement.
- **[F] 415.11.5.3 Floors.** Except for surfacing, floors of HPM rooms and liquid storage rooms shall be of noncombustible liquid-tight construction. Raised grating over floors shall be of noncombustible materials.
- **[F] 415.11.5.4 Location.** Where HPM rooms, liquid storage rooms and gas rooms are provided, they shall have no fewer than one exterior wall and such wall shall be not less than 30 feet (9144 mm) from lot lines, including lot lines adjacent to public ways.
- **[F] 415.11.5.5 Explosion control.** Explosion control shall be provided where required by Section 414.5.1.
- [F] 415.11.5.6 Exits. Where two exits are required from HPM rooms, liquid storage rooms and gas rooms, one shall be directly to the outside of the building.
- **[F] 415.11.5.7 Doors.** Doors in a fire barrier wall, including doors to corridors, shall be self-closing fire door assemblies having a fire protection rating of not less than $\frac{3}{4}$ hour.
- **[F] 415.11.5.8 Ventilation.** Mechanical exhaust ventilation shall be provided in liquid storage rooms, HPM rooms and gas rooms at the rate of not less than 1 cubic foot per minute per square foot (0.044 L/s/m²) of floor area or six air changes per hour.

Exhaust ventilation for gas rooms shall be designed to operate at a negative pressure in relation to the surrounding areas and direct the exhaust ventilation to an exhaust system.

[F] 415.11.5.9 Emergency alarm system. An approved emergency alarm system shall be provided for HPM rooms, liquid storage rooms and gas rooms.

Emergency alarm-initiating devices shall be installed outside of each interior exit door of such rooms.

Activation of an emergency alarm-initiating device shall sound a local alarm and transmit a signal to the emergency control station.

An approved emergency telephone system, local alarm manual pull stations or other approved alarm-initiating devices are allowed to be used as emergency alarm-initiating devices.

- **[F] 415.11.6 Piping and tubing.** Hazardous production materials piping and tubing shall comply with this section and ASME B31.3.
 - **[F]** 415.11.6.1 HPM having a health-hazard ranking of 3 or 4. Systems supplying HPM liquids or gases having a health-hazard ranking of 3 or 4 shall be welded throughout, except for connections, to the systems that are within a ventilated enclosure if the material is a gas, or an approved method of drainage or containment is provided for the connections if the material is a liquid.

- **[F] 415.11.6.2 Location in service corridors.** Hazardous production materials supply piping or tubing in service corridors shall be exposed to view.
- [F] 415.11.6.3 Excess flow control. Where HPM gases or liquids are carried in pressurized piping above 15 pounds per square inch gauge (psig) (103.4 kPa), excess flow control shall be provided. Where the piping originates from within a liquid storage room, HPM room or gas room, the excess flow control shall be located within the liquid storage room, HPM room or gas room. Where the piping originates from a bulk source, the excess flow control shall be located as close to the bulk source as practical.
- **[F] 415.11.6.4 Installations in corridors and above other occupancies.** The installation of HPM piping and tubing within the space defined by the walls of corridors and the floor or roof above, or in concealed spaces above other occupancies, shall be in accordance with Sections 415.11.6.1 through 415.11.6.3 and the following conditions:
 - 1. Automatic sprinklers shall be installed within the space unless the space is less than 6 inches (152 mm) in the least dimension.
 - 2. Ventilation not less than six air changes per hour shall be provided. The space shall not be used to convey air from any other area.
 - 3. Where the piping or tubing is used to transport HPM liquids, a receptor shall be installed below such piping or tubing. The receptor shall be designed to collect any discharge or leakage and drain it to an approved location. The 1-hour enclosure shall not be used as part of the receptor.
 - 4. HPM supply piping and tubing and nonmetallic waste lines shall be separated from the corridor and from occupancies other than Group H-5 by fire barriers or by an approved method or assembly that has a fire-resistance rating of not less than 1 hour. Access openings into the enclosure shall be protected by approved fire-protection-rated assemblies.
 - 5. Readily accessible manual or automatic remotely activated fail-safe emergency shutoff valves shall be installed on piping and tubing other than waste lines at the following locations:
 - 5.1. At branch connections into the fabrication area.
 - 5.2. At entries into corridors.

Exception: Transverse crossings of the corridors by supply piping that is enclosed within a ferrous pipe or tube for the width of the corridor need not comply with Items 1 through 5.

[F] 415.11.6.5 Identification. Piping, tubing and HPM waste lines shall be identified in accordance with ANSI A13.1 to indicate the material being transported.

[F] 415.11.7 *Gas* **detection systems.** A gas detection system complying with Section 916 shall be provided for HPM gases where the physiological warning threshold level of the gas is at a higher level than the accepted permissible exposure limit (PEL) for the gas and for flammable gases in accordance with Sections 415.11.7.1 through 415.11.7.2.

[F] 415.11.7.1 Where required. A gas detection system shall be provided in the areas identified in Sections 415.11.7.1.1 through 415.11.7.1.4.

[F] 415.11.7.1.1 Fabrication areas. A *gas detection system* shall be provided in fabrication areas where *HPM* gas is used in the fabrication area.

[F] 415.11.7.1.2 HPM rooms. A *gas detection system* shall be provided in HPM rooms where *HPM* gas is used in the room.

[F] 415.11.7.1.3 Gas cabinets, exhausted enclosures and gas rooms. A gas detection system shall be provided in gas cabinets and exhausted enclosures for HPM gas. A gas detection system shall be provided in gas rooms where HPM gases are not located in gas cabinets or exhausted enclosures.

[F] 415.11.7.1.4 Corridors. Where *HPM* gases are transported in piping placed within the space defined by the walls of a corridor and the floor or roof above the corridor, a *gas detection system* shall be provided where piping is located and in the corridor.

Exception: A gas detection system is not required for occasional transverse crossings of the corridors by supply piping that is enclosed in a ferrous pipe or tube for the width of the corridor

[F] 415.11.7.2 Gas detection system operation. The gas detection system shall be capable of monitoring the room, area or equipment in which the HPM gas is located at or below all the following gas concentrations:

- Immediately dangerous to life and health (IDLH) values where the monitoring point is within an exhausted enclosure, ventilated enclosure or gas cabinet.
- Permissible exposure limit (PEL) levels where the monitoring point is in an area outside an exhausted enclosure, ventilated enclosure or gas cabinet.
- For flammable gases, the monitoring detection threshold level shall be vapor concentrations in excess of 25 percent of the lower flammable limit (LFL) where the monitoring is within or outside an exhausted enclosure, ventilated enclosure or gas cabinet.
- 4. Except as noted in this section, monitoring for highly toxic and toxic gases shall also comply with Chapter 60 of the *California Fire Code*.

[F] 415.11.7.2.1 Alarms. The gas detection system shall initiate a local alarm and transmit a signal to the emergency control station when a short-term hazard condition is detected. The alarm shall be both visual and audible and shall provide warning both inside and outside the area where the gas is detected. The audible alarm shall be distinct from all other alarms

[F] 415.11.7.2.2 Shutoff of gas supply. The gas detection system shall automatically close the shutoff valve at the source on gas supply piping and tubing related to the system being monitored for which gas is detected when a short-term hazard condition is detected. Automatic closure of shutoff valves shall comply with the following:

- 1. Where the gas detection sampling point initiating the gas detection system alarm is within a gas cabinet or exhausted enclosure, the shutoff valve in the gas cabinet or exhausted enclosure for the specific gas detected shall automatically close.
- 2. Where the gas detection sampling point initiating the gas detection system alarm is within a room and compressed gas containers are not in gas cabinets or an exhausted enclosure, the shutoff valves on all gas lines for the specific gas detected shall automatically close.
- 3. Where the gas detection sampling point initiating the gas detection system alarm is within a piping distribution manifold enclosure, the shutoff valve supplying the manifold for the compressed gas container of the specific gas detected shall automatically close.

Exception: Where the gas detection sampling point initiating the gas detection system alarm is at the use location or within a gas valve enclosure of a branch line downstream of a piping distribution manifold, the shutoff valve for the branch line located in the piping distribution manifold enclosure shall automatically close.

[F] 415.11.8 Manual fire alarm system. An approved manual fire alarm system shall be provided throughout buildings containing Group H-5. Activation of the alarm system shall initiate a local alarm and transmit a signal to the emergency control station. The fire alarm system shall be designed and installed in accordance with Section 907.

[F] 415.11.9 Emergency control station. An emergency control station shall be provided in accordance with Sections 415.11.9.1 through 415.11.9.3.

[F] 415.11.9.1 Location. The emergency control station shall be located on the premises at an approved location outside the fabrication area.

[F] 415.11.9.2 Staffing. Trained personnel shall continuously staff the emergency control station.

[F] 415.11.9.3 Signals. The *emergency control station* shall receive signals from emergency equipment and alarm and detection systems. Such emergency equipment and alarm and detection systems shall include, but not be limited to, the following where such equipment or systems are required to be provided either in this chapter or elsewhere in this code:

- Automatic sprinkler system alarm and monitoring systems.
- 2. Manual fire alarm systems.
- 3. Emergency alarm systems.
- 4. Gas detection systems.

П

- 5. Smoke detection systems.
- 6. Emergency power system.
- 7. Automatic detection and alarm systems for pyrophoric liquids and Class 3 water-reactive liquids required in Section 2705.2.3.4 of the *California Fire Code*.
- 8. Exhaust ventilation flow alarm devices for pyrophoric liquids and Class 3 water-reactive liquids cabinet exhaust ventilation systems required in Section 2705.2.3.4 of the *California Fire Code*.

[F] 415.11.10 Emergency power system. An emergency power system shall be provided in Group H-5 occupancies in accordance with Section 2702. The emergency power system shall supply power automatically to the electrical systems specified in Section 415.11.10.1 when the normal electrical supply system is interrupted.

[F] 415.11.10.1 Required electrical systems. Emergency power shall be provided for electrically operated equipment and connected control circuits for the following systems:

- 1. HPM exhaust ventilation systems.
- 2. HPM gas cabinet ventilation systems.
- 3. HPM exhausted enclosure ventilation systems.
- 4. HPM gas room ventilation systems.
- 5. HPM gas detection systems.
- 6. Emergency alarm systems.
- 7. Manual and automatic fire alarm systems.
- 8. Automatic sprinkler system monitoring and alarm systems.
- 9. Automatic alarm and detection systems for pyrophoric liquids and Class 3 water-reactive liquids required in Section 2705.2.3.4 of the *California Fire Code*.
- 10. Flow alarm switches for pyrophoric liquids and Class 3 water-reactive liquids cabinet exhaust ventilation systems required in Section 2705.2.3.4 of the *California Fire Code*.
- 11. Electrically operated systems required elsewhere in this code or in the *California Fire*

Code applicable to the use, storage or handling of HPM.

[F] 415.11.10.2 Exhaust ventilation systems. Exhaust ventilation systems are allowed to be designed to operate at not less than one-half the normal fan speed on the emergency power system where it is demonstrated that the level of exhaust will maintain a safe atmosphere.

[F] 415.11.11 Automatic sprinkler system protection in exhaust ducts for HPM. An approved automatic sprinkler system shall be provided in exhaust ducts conveying gases, vapors, fumes, mists or dusts generated from HPM in accordance with Sections 415.11.11.1 through 415.10.11.3 and the *California Mechanical Code*.

[F] 415.11.11.1 Metallic and noncombustible non-metallic exhaust ducts. An approved automatic sprinkler system shall be provided in metallic and noncombustible nonmetallic exhaust ducts where all of the following conditions apply:

- 1. Where the largest cross-sectional diameter is equal to or greater than 10 inches (254 mm).
- 2. The ducts are within the building.
- 3. The ducts are conveying flammable gases, vapors or fumes.

[F] 415.11.11.2 Combustible nonmetallic exhaust ducts. Automatic sprinkler system protection shall be provided in combustible nonmetallic exhaust ducts where the largest cross-sectional diameter of the duct is equal to or greater than 10 inches (254 mm).

Exception: Ducts need not be provided with automatic sprinkler protection as follows:

- 1. Ducts listed or approved for applications without automatic sprinkler system protection.
- 2. Ducts not more than 12 feet (3658 mm) in length installed below ceiling level.

[F] 415.11.11.3 Automatic sprinkler locations. Sprinkler systems shall be installed at 12-foot (3658 mm) intervals in horizontal ducts and at changes in direction. In vertical ducts, sprinklers shall be installed at the top and at alternate floor levels.

415.12 Group H occupancies located above the 10th story.

415.12.1 Fire – smoke barrier. Any story containing a Group H occupancy above the 10th story shall be subdivided by a fire-smoke barrier constructed as a fire barrier having a fire resistance rating of not less than 2 hours and shall also comply with the smoke barrier requirements of Section 710. The 2-hour fire-smoke barrier shall be in accordance with Sections 415.11.1.1 through 415.11.1.5.

415.12.1.1 The 2-hour fire-smoke barrier shall be continuous from exterior wall to exterior wall.

- 415.12.1.2 The fire-smoke barrier shall divide the story so that the square footage on each side of the 2-hour fire-smoke barrier is not less than 30 percent of the total floor area.
- 415.12.1.3 A minimum of one door opening shall be provided in the 2-hour fire-smoke barrier for emergency access.
- **415.12.1.4** Each side of the 2-hour fire-smoke barrier shall be designed as a separate smoke zone designed in accordance with Section 909.6.
- 415.12.1.5 The area on each side of the 2-hour firesmoke barrier shall be served by a minimum of one exit enclosure in accordance with Section 1022.
- 415.13 Elevators and elevator lobbies above the 10th story. Any story containing a Group H occupancy above the 10th story shall be provided with elevators and elevator lobbies in accordance with Sections 415.13.1 through 415.13.3.
 - **415.13.1** An elevator that serves every story of the building shall be provided on each side of the 2-hour firesmoke barrier.
 - **415.13.2** An elevator lobby shall be provided on each side of the 2-hour fire-smoke barrier at each floor in accordance with Section 708.14.1. Exceptions to 708.14.1 shall not apply.
 - **415.13.3** The elevator and its associated elevator lobbies and elevator machine rooms shall be pressurized in accordance with Section 909.6.

SECTION 416 APPLICATION OF FLAMMABLE FINISHES

- **[F] 416.1 General.** The provisions of this section shall apply to the construction, installation and use of buildings and structures, or parts thereof, for the application of flammable finishes. Such construction and equipment shall comply with the *California Fire Code*.
- **[F] 416.2 Spray rooms.** Spray rooms shall be enclosed with not less than 1-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. Floors shall be water-proofed and drained in an approved manner.
 - **[F] 416.2.1 Surfaces.** The interior surfaces of spray rooms shall be smooth and shall be so constructed to permit the free passage of exhaust air from all parts of the interior and to facilitate washing and cleaning, and shall be so designed to confine residues within the room. Aluminum shall not be used.
 - **[F] 416.2.2 Ventilation.** Mechanical ventilation and interlocks with the spraying operation shall be in accordance with the *California Mechanical Code*.
- **[F] 416.3 Spraying spaces.** Spraying spaces shall be ventilated with an exhaust system to prevent the accumulation of flammable mist or vapors in accordance with the *California Mechanical Code*. Where such spaces are not separately

- enclosed, noncombustible spray curtains shall be provided to restrict the spread of flammable vapors.
 - **[F] 416.3.1 Surfaces.** The interior surfaces of spraying spaces shall be smooth and continuous without edges; shall be so constructed to permit the free passage of exhaust air from all parts of the interior and to facilitate washing and cleaning; and shall be so designed to confine residues within the spraying space. Aluminum shall not be used.
- **[F] 416.4 Spray booths.** Spray booths shall be designed, constructed and operated in accordance with the *California Fire Code*
- **[F] 416.5 Fire protection.** An automatic sprinkler system or fire-extinguishing system shall be provided in all spray, dip and immersing spaces and storage rooms and shall be installed in accordance with Chapter 9.

SECTION 417 DRYING ROOMS

- **[F] 417.1 General.** A drying room or dry kiln installed within a building shall be constructed entirely of approved noncombustible materials or assemblies of such materials regulated by the approved rules or as required in the general and specific sections of this chapter for special occupancies and where applicable to the general requirements of the *California Mechanical Code*.
- **[F] 417.2 Piping clearance.** Overhead heating pipes shall have a clearance of not less than 2 inches (51 mm) from combustible contents in the dryer.
- **[F] 417.3 Insulation.** Where the operating temperature of the dryer is 175°F (79°C) or more, metal enclosures shall be insulated from adjacent combustible materials by not less than 12 inches (305 mm) of airspace, or the metal walls shall be lined with ¹/₄-inch (6.35 mm) insulating mill board or other approved equivalent insulation.
- **[F] 417.4 Fire protection.** Drying rooms designed for high-hazard materials and processes, including special occupancies as provided for in Chapter 4, shall be protected by an approved automatic fire-extinguishing system complying with the provisions of Chapter 9.

SECTION 418 ORGANIC COATINGS

- **[F] 418.1 Building features.** Manufacturing of organic coatings shall be done only in buildings that do not have pits or basements.
- **[F] 418.2 Location.** Organic coating manufacturing operations and operations incidental to or connected therewith shall not be located in buildings having other occupancies.
- [F] 418.3 Process mills. Mills operating with close clearances and that process flammable and heat-sensitive materials, such as nitrocellulose, shall be located in a detached building or noncombustible structure.

- **[F] 418.4 Tank storage.** Storage areas for flammable and combustible liquid tanks inside of structures shall be located at or above grade and shall be separated from the processing area by not less than 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.
- **[F] 418.5 Nitrocellulose storage.** Nitrocellulose storage shall be located on a detached pad or in a separate structure or a room enclosed with not less than 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both
- **[F] 418.6 Finished products.** Storage rooms for finished products that are flammable or combustible liquids shall be separated from the processing area by not less than 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

SECTION 419 LIVE/WORK UNITS

419.1 General. A live/work unit shall comply with Sections 419.1 through 419.9.

Exception: Dwelling or sleeping units that include an office that is less than 10 percent of the area of the dwelling unit are permitted to be classified as dwelling units with accessory occupancies in accordance with Section 508.2.

- **419.1.1 Limitations.** The following shall apply to all live/work areas:
 - 1. The live/work unit is permitted to be not greater than 3,000 square feet (279 m²) in area;
 - 2. The nonresidential area is permitted to be not more than 50 percent of the area of each live/work unit;
 - 3. The nonresidential area function shall be limited to the first or main floor only of the live/work unit; and
 - 4. Not more than five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.
- **419.2 Occupancies.** Live/work units shall be classified as a Group R-2 occupancy. Separation requirements found in Sections 420 and 508 shall not apply within the live/work unit where the live/work unit is in compliance with Section 419. Nonresidential uses which would otherwise be classified as either a Group H or S occupancy shall not be permitted in a live/work unit.

Exception: Storage shall be permitted in the live/work unit provided the aggregate area of storage in the nonresidential portion of the live/work unit shall be limited to 10 percent of the space dedicated to nonresidential activities.

- **419.3 Means of egress.** Except as modified by this section, the means of egress components for a live/work unit shall be designed in accordance with Chapter 10 for the function served.
 - **419.3.1 Egress capacity.** The egress capacity for each element of the live/work unit shall be based on the occupant load for the function served in accordance with Table 1004.1.2.
 - **419.3.2 Spiral stairways.** Spiral stairways that conform to the requirements of Section 1011.10 shall be permitted.
- **419.4 Vertical openings.** Floor openings between floor levels of a live/work unit are permitted without enclosure.
- **[F] 419.5 Fire protection.** The live/work unit shall be provided with a monitored fire alarm system where required by Section 907.2.9 and an automatic sprinkler system in accordance with Section 903.2.8.
- **419.6 Structural.** Floors within a live/work unit shall be designed for the live loads in Table 1607.1, based on the function within the space.
- **419.7 Accessibility.** Accessibility shall be designed in accordance with *Chapter 11A and/or 11B*, *when applicable* for the function served.
- **419.8 Ventilation.** The applicable ventilation requirements of the *California Mechanical Code* shall apply to each area within the live/work unit for the function within that space.
- **419.9 Plumbing facilities.** The nonresidential area of the live/work unit shall be provided with minimum plumbing facilities as specified by the California Plumbing Code, based on the function of the nonresidential area. Where the nonresidential area of the live/work unit is required to be accessible, the plumbing fixtures specified by the California Plumbing Code shall be accessible.

SECTION 420 GROUPS R-1, R-2, *R-2.1*, R-3, *R-3.1* AND R-4

- **420.1 General.** Occupancies in Groups R-1, R-2, *R*-2.1, R-3, *R-3.1* and R-4 shall comply with the provisions of Sections 420.1 through 420.6 and other applicable provisions of this code
- **420.2 Separation walls.** Walls separating dwelling units in the same building, walls separating sleeping units in the same building and walls separating dwelling or sleeping units from other occupancies contiguous to them in the same building shall be constructed as fire partitions in accordance with Section 708.
- **420.3 Horizontal separation.** Floor assemblies separating dwelling units in the same buildings, floor assemblies separating sleeping units in the same building and floor assemblies separating dwelling or sleeping units from other occupancies contiguous to them in the same building shall be constructed as horizontal assemblies in accordance with Section 711.

420.4 Smoke barriers in Group *R-2.1***.** Smoke barriers shall be provided in Group *R-2.1* to subdivide every story used by persons receiving care, treatment or sleeping and to provide other stories with an occupant load of 50 or more persons, into no fewer than two smoke compartments. Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m²) and the distance of travel from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be in accordance with Section 709.

420.4.1 Refuge area. Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments. The size of the refuge area shall provide the following:

- 1. Not less than 15 net square feet (1.4 m²) for each care recipient.
- 2. Not less than 6 net square feet (0.56 m²) for other occupants.

Areas or spaces permitted to be included in the calculation of the refuge area are corridors, lounge or dining areas and other low-hazard areas.

[F] 420.5 Automatic sprinkler system. Group R occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.8. Group *R-2.1* occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.6. Quickresponse or residential automatic sprinklers shall be installed in accordance with Section 903.3.2.

[F] 420.6 Fire alarm systems and smoke alarms. Fire alarm systems and smoke alarms shall be provided in Group R-1, R-2, *R-2.1* and R-4 occupancies in accordance with Sections 907.2.6, 907.2.8, 907.2.9 and 907.2.10, respectively. Single-or multiple- station smoke alarms shall be provided in Groups R-2, *R-2.1*, R-3 and R-4 in accordance with Section 907.2.11.

420.7 (HCD 1) Construction waste management. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with the California Green Building Standards Code (CAL-Green), Chapter 4, Division 4.4.

420.8 Special provisions for residential hotels. (HCD 1 & HCD 1-AC)

420.8.1 Locking mail receptacles. A locking mail receptacle for each residential unit shall be provided in all residential hotels pursuant to the requirements specified in Heath and Safety Code Section 17958.3.

420.9 (HCD 1) Electric vehicle (EV) charging for new construction. Newly constructed Group R-2 and R-3 buildings shall be provided with an infrastructure to facilitate future

installation and use of electric vehicle (EV) chargers in accordance with the California Green Building Standards Code (CALGreen), Chapter 4, Division 4.1.

420.10 Licensed 24-hour care facilities in a Group R-2.1, R-3.1 or R-4 occupancy. See Section 435 for Special Provisions for licensed 24-hour care facilities in a Group R-2.1, R-3.1, or R-4 occupancy.

SECTION 421 HYDROGEN FUEL GAS ROOMS

[F] 421.1 General. Where required by the *California Fire Code*, hydrogen fuel gas rooms shall be designed and constructed in accordance with Sections 421.1 through 421.8.

[F] 421.2 Definitions. The following terms are defined in Chapter 2:

GASEOUS HYDROGEN SYSTEM. HYDROGEN FUEL GAS ROOM.

[F] 421.3 Location. Hydrogen fuel gas rooms shall not be located below grade.

[F] 421.4 Design and construction. Hydrogen fuel gas rooms not classified as Group H shall be separated from other areas of the building in accordance with Section 509.1.

[F] 421.4.1 Pressure control. Hydrogen fuel gas rooms shall be provided with a ventilation system designed to maintain the room at a negative pressure in relation to surrounding rooms and spaces.

[F] 421.4.2 Windows. Operable windows in interior walls shall not be permitted. Fixed windows shall be permitted where in accordance with Section 716.

[F] 421.5 Exhaust ventilation. Hydrogen fuel gas rooms shall be provided with mechanical exhaust ventilation in accordance with the applicable provisions of Section 502.16.1 of the *California Mechanical Code*.

[F] 421.6 Gas detection system. Hydrogen fuel gas rooms shall be provided with *a gas detection system that complies* with *Section 916 and* Sections 421.6.1 through 421.6.2.

[F] 421.6.1 System activation. Activation of the gas detection *alarm* shall result in *both* of the following:

- 1. Initiation of distinct audible and *visible* alarm signals both inside and outside of the hydrogen fuel gas room.
- 2. *Automatic activation* of the mechanical exhaust ventilation system.

[F] 421.6.2 Failure of the gas detection system. Failure of the gas detection system shall automatically activate the mechanical exhaust ventilation system, stop hydrogen generation, and cause a trouble signal to sound at an approved location.

[F] 421.7 Explosion control. Explosion control shall be provided where required by Section 414.5.1.

[F] 421.8 Standby power. Mechanical ventilation and gas detection systems shall be provided with a standby power system in accordance with Section 2702.

SECTION 422 AMBULATORY CARE FACILITIES

- **422.1 General.** Occupancies classified as ambulatory care facilities shall comply with the provisions of Sections 422.1 through 422.5 and other applicable provisions of this code. [For OSHPD 3] For clinics licensed by California Department of Public Health also refer to Section 1226.2.
- **422.2 Separation.** Ambulatory care facilities where the potential for four or more care recipients are to be incapable of self-preservation at any time, whether rendered incapable by staff or staff accepted responsibility for a care recipient already incapable, shall be separated from adjacent spaces, corridors or tenants with a fire partition installed in accordance with Section 708.
- **422.3** Smoke compartments. Where the aggregate area of one or more ambulatory care facilities is greater than 10,000 square feet (929 m²) on one story, the story shall be provided with a smoke barrier to subdivide the story into no fewer than two smoke compartments. The area of any one such smoke compartment shall be not greater than 22,500 square feet (2092 m²). The distance of travel from any point in a smoke compartment to a smoke barrier door shall be not greater than 200 feet (60 960 mm). The smoke barrier shall be installed in accordance with Section 709 with the exception that smoke barriers shall be continuous from outside wall to an outside wall, a floor to a floor, or from a smoke barrier to a smoke barrier or a combination thereof.
 - **422.3.1 Means of egress.** Where ambulatory care facilities require smoke compartmentation in accordance with Section 422.3, the fire safety evacuation plans provided in accordance with Section 1001.4 shall identify the building components necessary to support a defend-in-place emergency response in accordance with Sections 404 and 408 of the *California Fire Code*.
 - **422.3.2 Refuge area.** Not less than 30 net square feet (2.8 m²) for each nonambulatory care recipient shall be provided within the aggregate area of corridors, care recipient rooms, treatment rooms, lounge or dining areas and other low-hazard areas within each smoke compartment. Each occupant of an ambulatory care facility shall be provided with access to a refuge area without passing through or utilizing adjacent tenant spaces.
 - **422.3.3 Independent egress.** A means of egress shall be provided from each smoke compartment created by smoke barriers without having to return through the smoke compartment from which means of egress originated.
- **[F] 422.4 Automatic sprinkler systems.** Automatic sprinkler systems shall be provided for ambulatory care facilities in accordance with Section 903.2.2.
- **[F] 422.5 Fire alarm systems.** A fire alarm system shall be provided for ambulatory care facilities in accordance with Section 907.2.2.

SECTION 423 STORM SHELTERS

- **423.1 General.** In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with ICC 500.
 - **423.1.1 Scope.** This section applies to the construction of storm shelters constructed as separate detached buildings or constructed as safe rooms within buildings for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. Such structures shall be designated to be hurricane shelters, tornado shelters, or combined hurricane and tornado shelters.
- **423.2 Definitions**. The following terms are defined in Chapter 2:

STORM SHELTER.

Community storm shelter.

Residential storm shelter.

423.3 Critical emergency operations. In areas where the shelter design wind speed for tornados in accordance with Figure 304.2(1) of ICC 500 is 250 MPH, 911 call stations, emergency operation centers and fire, rescue, ambulance and police stations shall have a storm shelter constructed in accordance with ICC 500.

Exception: Buildings meeting the requirements for shelter design in ICC 500.

423.4 Group E occupancies. In areas where the shelter design wind speed for tornados is 250 MPH in accordance with Figure 304.2(1) of ICC 500, all Group E occupancies with an aggregate occupant load of 50 or more shall have a storm shelter constructed in accordance with ICC 500. The shelter shall be capable of housing the total occupant load of the Group E occupancy.

Exceptions:

- 1. Group E day care facilities.
- Group E occupancies accessory to places of religious worship.
- 3. Buildings meeting the requirements for shelter design in ICC 500.

SECTION 424 CHILDREN'S PLAY STRUCTURES

- **424.1 Children's play structures.** Children's play structures installed inside all occupancies covered by this code that exceed 10 feet (3048 mm) in height and 150 square feet (14 m²) in area shall comply with Sections 424.2 through 424.5.
- **424.2 Materials.** Children's play structures shall be constructed of noncombustible materials or of combustible materials that comply with the following:
 - 1. Fire-retardant-treated wood complying with Section 2303.2.

155

- 2. Light-transmitting plastics complying with Section 2606.
- 3. Foam plastics (including the pipe foam used in soft-contained play equipment structures) having a maximum heat-release rate not greater than 100 kilowatts when tested in accordance with UL 1975 or when tested in accordance with NFPA 289, using the 20 kW ignition source.
- 4. Aluminum composite material (ACM) meeting the requirements of Class A interior finish in accordance with Chapter 8 when tested as an assembly in the maximum thickness intended for use.
- 5. Textiles and films complying with the fire propagation performance criteria contained in Test Method 1 or Test Method 2, as appropriate, of NFPA 701.
- 6. Plastic materials used to construct rigid components of soft-contained play equipment structures (such as tubes, windows, panels, junction boxes, pipes, slides and decks) exhibiting a peak rate of heat release not exceeding 400 kW/ m² when tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m² in the horizontal orientation at a thickness of 6 mm.
- 7. Ball pool balls, used in soft-contained play equipment structures, having a maximum heat-release rate not greater than 100 kilowatts when tested in accordance with UL 1975 or when tested in accordance with NFPA 289, using the 20 kW ignition source. The minimum specimen test size shall be 36 inches by 36 inches (914 mm by 914 mm) by an average of 21 inches (533 mm) deep, and the balls shall be held in a box constructed of galvanized steel poultry netting wire mesh.
- 8. Foam plastics shall be covered by a fabric, coating or film meeting the fire propagation performance criteria contained in Test Method 1 or Test Method 2, as appropriate, of NFPA 701.
- The floor covering placed under the children's play structure shall exhibit a Class I interior floor finish classification, as described in Section 804, when tested in accordance with NFPA 253.
- **[F] 424.3 Fire protection.** Children's play structures shall be provided with the same level of approved fire suppression and detection devices required for other structures in the same occupancy.
- **424.4 Separation.** Children's play structures shall have a horizontal separation from building walls, partitions and from elements of the means of egress of not less than 5 feet (1524 mm). Children's playground structures shall have a horizontal separation from other children's play structures of not less than 20 feet (6090 mm).
- **424.5 Area limits.** Children's play structures shall be not greater than 300 square feet (28 m²) in area, unless a special investigation, acceptable to the building official, has demonstrated adequate fire safety.

SECTION 425 HYPERBARIC FACILITIES

425.1 Hyperbaric facilities. Hyperbaric facilities shall meet the requirements contained in Chapter 14 of NFPA 99.

SECTION [F] 426 COMBUSTIBLE DUSTS, GRAIN PROCESSING AND STORAGE

426.1 Combustible dusts, grain processing and storage. The provisions of Sections 426.1.1 through 426.1.7 shall apply to buildings in which materials that produce combustible dusts are stored or handled. Buildings that store or handle combustible dusts shall comply with the applicable provisions of NFPA 61, NFPA 85, NFPA 120, NFPA 484, NFPA 654, NFPA 655 and NFPA 664 and the *California Fire Code*.

[F] 426.1.1 Type of construction and height exceptions. Buildings shall be constructed in compliance with the height, number of stories and area limitations specified in Sections 504 and 506; except that where erected of Type I or II construction, the heights and areas of grain elevators and similar structures shall be unlimited, and where of Type IV construction, the maximum building height shall be 65 feet (19 812 mm) and except further that, in isolated areas, the maximum building height of Type IV structures shall be increased to 85 feet (25 908 mm).

- **[F] 426.1.2 Grinding rooms.** Every room or space occupied for grinding or other operations that produce combustible dusts in such a manner that the room or space is classified as a Group H-2 occupancy shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. The fire-resistance rating of the enclosure shall be not less than 2 hours where the area is not more than 3,000 square feet (279 m²), and not less than 4 hours where the area is greater than 3,000 square feet (279 m²).
- **[F] 426.1.3 Conveyors.** Conveyors, chutes, piping and similar equipment passing through the enclosures of rooms or spaces shall be constructed dirt tight and vapor tight, and be of approved noncombustible materials complying with Chapter 30.
- **[F] 426.1.4 Explosion control.** Explosion control shall be provided as specified in the *California Fire Code*, or spaces shall be equipped with the equivalent mechanical ventilation complying with the *California Mechanical Code*.
- **[F] 426.1.5 Grain elevators.** Grain elevators, malt houses and buildings for similar occupancies shall not be located within 30 feet (9144 mm) of interior lot lines or structures on the same lot, except where erected along a railroad right-of-way.

SECTION 437 Reserved

SECTION 438 Reserved

SECTION 439 ROAD TUNNELS, BRIDGES, AND OTHER LIMITED-ACCESS HIGHWAYS [SFM]

439.1 General. Road tunnels, bridges, and other limited-access highways that are state owned shall comply with NFPA 502.

SECTION 440 HORSE RACING STABLES [SFM]

440.1 For automatic sprinkler and fire alarm system requirements applying to each building, barn or structure which is used by an association regulated by the California Horse Racing Board for the stabling of horses or human habitation, and the stable area grounds, including any additional location where any excess horses are stabled see Title 4, Division 4, Article 17, Section 1927.

SECTION 441 PET KENNELS AND PET BOARDING FACILITIES [SFM]

- **441.1** These regulations shall apply to every building or fire area in which a pet boarding facility operates, as defined in Health and Safety Code Section 12238, or a pet dealer, as defined in Health and Safety Code Section 122125, maintains a kennel.
- **441.2** Automatic sprinkler system. An approved automatic sprinkler system complying with California Fire Code Section 903 shall be installed.

Exception: Where a fire alarm system that is connected to a central reporting station that alerts the local fire department in case of fire.

SECTION 442 COMBUSTION ENGINES AND GAS TURBINES [SFM]

442.1 General. The installation of combustion engines and gas turbines shall be in accordance with NFPA-37 and this chapter.

442.2 Separation.

- **442.2.1 Construction.** Every room in which is installed a combustion engine or gas turbine shall be separated from the remainder of the building by not less than a one-hour fire barrier.
- 442.2.2 Exterior openings. When doors, windows or louvered openings are located below openings in another

story or less than 10 feet (3048 mm) from doors, windows or louvered openings of the same building, they shall be protected by a fire assembly having a ³/₄-hour rating. Such fire assemblies shall be fixed, automatic or self-closing

- 442.2.2.1 Interior openings. In other than buildings housing Group I and R-2.1 occupancies, interior openings shall be allowed in buildings protected by an automatic fire sprinkler system throughout.
- **442.2.3 Location.** Combustion engines and gas turbines used for emergency power shall not be located in a room or area used for any other purpose other than equipment and controls related to the generation and distribution of emergency power.
- **442.2.4 Special hazards.** The handling and use of flammable or combustible liquids shall comply with the California Fire Code.

SECTION 443 FIXED GUIDEWAY TRANSIT AND PASSENGER RAIL SYSTEMS [SFM]

443.1 General.

443.1.1 Scope. The provisions of this section and NFPA 130 shall apply to buildings or structures defined as stations for fixed guideway transit and passenger rail systems and shall supersede other similar requirements in other sections of this code.

Note: See Chapter 35 for California Amendments to NFPA 130.

443.2 Special provisions.

- **443.2.1** Automatic sprinkler system. See Section 903.2.17.1.
- **443.2.2 Station guideway deluge system.** See Section 903.2.17.2.
- 443.2.3 Standpipe systems. See Section 905.3.11.
- 443.2.4 Fire Alarm and Communication Systems. See Section 907.2.26.
- 443.2.5 Emergency ventilation control. Emergency ventilation systems shall comply with this section and NFPA 130.
 - 443.2.5.1 Emergency ventilation systems shall be supervised and/or controlled in all operating modes locally (motor control center and/or fan unit) and remotely at both the Operations Control Center and the station Fire Command Center.
 - 443.2.5.2 Fan running shall be provided by sensing devices for each fan for operation in both the supply and exhaust directions.
 - 443.2.5.3 Trouble status signals shall be annunciated in the local control room. A summarized trouble signal shall be annunciated at Operations Control Center and Fire Command Center.

161

SECTION 444 EXPLOSIVES [SFM]

[Section 444 has been repealed and replaced by the adoption of California Fire Code Chapter 56.]

SECTION 445 RESERVED

SECTION 446 WINERY CAVES [SFM]

446.1 Scope. The use of subterranean space for winery facilities in natural or manmade caves shall be in accordance with this section.

446.2 Definitions.

- **446.3 General.** For definitions of ASSEMBLY, FIRE APPLI-ANCE and NONCOMBUSTIBLE, see Chapter 2.
- **446.4 Limited application.** For the purpose of Section 446, certain terms are defined as follows:
 - TYPE 1 WINERY CAVES are natural or manmade caves used solely for storage and/or processing of wine at a winery facility. Type 1 winery caves are not accessible to the public.
 - **TYPE 2 WINERY CAVES** are natural or manmade caves used for the storage and/or processing of wine at a winery facility. Type 2 winery caves are accessible to the public on guided tours only.
 - TYPE 3 WINERY CAVES are natural or manmade caves used for the storage and/or processing of wine at a winery facility. Type 3 winery caves are accessible to the public on guided tours and contain assembly use areas.
- **446.5 Permits.** For permits to operate Type 2 and 3 winery caves, see Section 105.
- **446.6 Fire apparatus access roads.** Fire apparatus access roads shall be constructed and maintained in accordance with the California Fire Code, Section 503.

446.7 Construction requirements.

- 446.7.1 Allowable area. The area of winery caves shall not be limited if constructed entirely of noncombustible materials. Winery caves constructed with combustible materials shall be limited in area so that no point is more than 150 feet (45 720 mm) from an exit.
- **446.7.2 Interior construction.** The walls and ceilings of winery caves shall not contain hidden or concealed spaces.

446.8 General requirements.

- **446.8.1 Public tours.** Tours for the public shall be continuously guided by staff knowledgeable in the location of exits and the use of emergency notification devices.
- **446.8.2 Standby personnel.** Per the California Fire Code, Section 2404.20, when, in the opinion of the fire chief, it is essential for public safety, the owner, agent or lessee shall

employ one or more qualified persons, as required and approved by the chief, to be on duty at such place. Such individuals shall be in uniform or otherwise easily identifiable

Standby personnel shall be subject to the fire chief's orders at all times when so employed and shall remain on duty during the times such places are open to the public or when such activity is being conducted.

Before the start of any activity requiring standby personnel, such individuals shall:

- 1. Inspect the required fire appliances to ensure they are in the proper place and in good working order.
- 2. Inspect all exits to verify accessibility and proper operation.

While on duty, such individuals shall not be required or permitted to perform any duties other than those specified by the fire chief.

446.8.3 Open-flame devices. The use of candles and other open-flame devices shall be in accordance with California Fire Code Section 308.1.7.

446.9 Portable fire extinguishers and other fire appliances. Portable fire extinguishers shall be located to be readily accessible. Its type, location and spacing throughout the facility shall be in accordance with the provisions of Title 19, Chapter 3 and California Fire Code Section 906.1. Other fire appliances shall be maintained at the site as required by the fire chief.

446.10 Fire alarm systems. An approved manual fire alarm system conforming with the provisions of the California Fire Code, Section 907.2.1 shall be provided in all Type 3 winery caves.

446.11 Exits.

- **446.11.1 Distribution.** Exits shall be located remotely from each other and arranged to minimize any possibility that more than one may be blocked off by any one fire or other emergency condition.
- **446.11.2 Number.** Winery caves shall be provided with a minimum of two exits.

Assembly areas of Type 3 winery caves shall be provided with exits as required by the California Building Code for Group A Occupancies.

446.12 Exit illumination.

- **446.12.1 General.** Exits shall be illuminated to a minimum intensity of not less than 1 foot-candle (10.76 lx) at floor level whenever the winery cave is occupied. Fixtures providing exit illumination shall be supplied from a dedicated circuit or source of power used only for exit illumination.
- 446.12.2 Separate sources of power. The power supply for exit illumination may be provided by the premises' wiring system. In the event of its failure, illumination shall be automatically provided from an emergency system in Types 2 and 3 winery caves. Emergency systems shall be

TABLE 504.4 $^{\rm a,\,b,\,\it n}$ ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

OCCUPANCY			T	YPE OF CO	NSTRUCTION	ON					
CLASSIFICATION	SEE FOOTNOTES	TYI	PEI	TYF	PEII	TYF	PE III	TYPE IV	TYI	PE V	1
		Α	В	Α	В	Α	В	HT	Α	В	Ī
	NS	UL	5	3	2	3	2	3	2	1	
A-1	S (without area increase)	UL	6	4	3	4	3	4	3	2	
	S (with area increase)	UL	5	3	2	3	2	3	2	1	
	NS	UL	11	3	2	3	2	3	2	1	
A-2	S (without area increase)	UL	12	4	3	4	3	4	3	2	
	S (with area increase)	UL	11	3	2	3	2	3	2	1	
	NS	UL	11	3	2	3	2	3	2	1	
A-3	S (without area increase)	UL	12	4	3	4	3	4	3	2	
	S (with area increase)	UL	11	3	2	3	2	3	2	1	
	NS	UL	11	3	2	3	2	3	2	1	
A-4	S (without area increase)	UL	12	4	3	4	3	4	3	2	Ī
	S (with area increase)	UL	11	3	2	3	2	3	2	1	Ī
A-5	NS	UL	UL	UL	UL	UL	UL	UL	UL	UL	1
A- J	S	UL	UL	UL	UL	UL	UL	UL	UL	UL	1
В	NS	UL	11	5	3	5	3	5	3	2	Ī
ь	S	UL	12	6	4	6	4	6	4	3	
	NS	UL	5	3	2	3	2	3	1	1	1
E	S (without area increase)	UL	6	4	3	4	3	4	2	2	1
	S (with area increase)	UL	5	3	2	3	2	3	1	1	1
E 1	NS	UL	11	4	2	3	2	4	2	1	1
F-1	S	UL	12	5	3	4	3	5	3	2	1
E 2	NS	UL	11	5	3	4	3	5	3	2	1
F-2	S	UL	12	6	4	5	4	6	4	3	1
TT 1	NS ^{c, d}	1	1	1	1	1	1	1	1	NID	1
H-1	S	1	1	1	1	1	1	1	1	NP	
11.0	NS ^{c, d}	20	2	2	1	2	1	2	1	1	1
H-2	S	20	3	2	1	2	1	2	1	1	
11.0	NS ^{c, d}	20	-	4	_		_	4	2	1	1
H-3	S	20	6	4	2	4	2	4	2	1	
	NS ^{c, d}	20	7	5	3	5	3	5	3	2	1
H-4	S (without area increase)	20	8	6	4	6	4	6	4	3	1
	S (with area increase)	20	7	5	3	5	3	5	3	2	1
	NS ^{c, d}	4	4			2	2	2	2		1
H-5	S	4	4	3	3	3	3	3	3	2	
	NS ^{d, f}	UL	4	2							1
I-2/I-2.1 j, i	S (without area increase)	UL	5	3	1	1	NP	1	1	NP	
	S (with area increase)	UL	4	2							
	NS ^{d, e}	NP	NP	NP	NP	NP	NP	NP	NP	NP	1
I-3	S (without area increase)	UL	3	NP	NP	NP	NP	NP	NP	NP	1
	S (with area increase)	UL	2	NP	NP	NP	NP	NP	NP	NP	1
	NS ^{d, g}	UL	5	3	2	3	2	3	1	1	1
I-4	S (without area increase)	UL	6	4	3	4	3	4	2	2	1
	S (with area increase)	UL	5	3	2	3	2	3	1	1	1
	NS	NP	NP	NP	NP	NP	NP	NP	NP	NP	-
L	S	20	6	5	3	5	3	5	3	2	1
	NS	UL	11	4	2	4	2	4	3	1	1
M	S		12	5	3	5	3	5	4		$\frac{1}{2}$
)	UL	12	3	3	3)	3	4	2	I

(continued)

TABLE 504.4a, b, n—continued ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

			7	TYPE OF CO	ONSTRUCT	ION				
OCCUPANCY		TY	PE I	TYF	PEII	TYF	PE III	TYPE IV	TYF	PE V
CLASSIFICATION	SEE FOOTNOTES	Α	В	Α	В	Α	В	нт	TYF A 3 3 4 3 4 3 4 4 4 3 4 4 3 4 4	В
	NS ^d	UL	11	4	4	4	4	4	3	2
$R-1^h$	S13R	4	4	4	4	4	4	4	3	2
K-1"	S (without area increase)	UL	12	5	5	5	5	5	4	3
	S (with area increase)	UL	11	4	4	4	4	4	3	2
	NS ^d	UL	11	4	4	4	4	4	3	2
$R-2^h$	S13R	4	4	4	4	4	4	4	3	2
K-2	S (without area increase)	UL	12	5	5	5	5	5	4	3
	S (with area increase)	UL	11	4	4	4	4	4	40	2
	NS^d	UL	6^l	3^k	NP	3^k	NP	NP	3^k	NP
$R-2.1^{h}$	S13R	UL	4^l	3^k	NP	3^k	NP	NP	3^k	NP
	S	UL	6^l	3^k	NP	3^k	NP	NP	3^k	NP
	NS ^d	UL	11						3	3
R-3, <i>R-3</i> . <i>I</i> ^h	S13D	4	4	4	4	4	4	4	3	3
K-3, K-3.1	S13R	4	4						4	4
	S	UL	12	5	5	5	5	5	4	4
	NS ^d	UL	11^l							
$R-4^h$	S13D	4	4^l	4^k	4^m	4^k	4^m	4^m	2^k	2^m
N-4	S13R	4	4^l	1 4	4	4	4	4	3	2
	S	UL	11^l							
S-1	NS	UL	11	4	2	3	2	4	3	1
3-1	S	UL	12	5	3	4	3	5	4	2
$S-2^i$	NS	UL	11	5	3	4	3	4	4	2
3-2	S	UL	12	6	4	5	4	5	5	3
U	NS	UL	5	4	2	3	2	4	2	1
U	S	UL	6	5	3	4	3	5	3	2

Note: UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

- a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.
- b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- ${\it d. The NS value is only for use in evaluation of existing building height in accordance with the {\it California Existing Building Code}.}$
- e. New Group I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6.
- f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the California Fire Code.
- g. For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.
- i. See Sections 407.1.1 and 408.1.2 for specific exceptions to construction type, allowable building areas and allowable heights.
 - j. Restraint shall not be permitted in any building except in Group I-3 occupancies constructed for such use (see Section 408.1.2).
 - k. Nonambulatory persons shall be limited to the first 2 stories.
 - l. Nonambulatory persons shall be limited to the first 5 stories.
 - m. Nonambulatory elderly clients are not permitted in buildings of these types of construction. See Sections 435.3.3 and 435.3.4.
 - n. In other than Group A, E, H, I, L, and R occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, the S increases for height and stories in Tables 504.3 and 504.4 are permitted in addition to the S area increase in accordance with Table 506.2.
 - o. For Group R-2 buildings of Type VA construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, S area increase is permitted in addition to the height and story increase provided the height shall not exceed 60 feet and 4 stories.

- **507.7 Group A-3 buildings of Type III and IV construction.** The area of a Group A-3 building of Type III or IV construction, with no more than one story above grade plane and used as a place of religious worship, community hall, dance hall, exhibition hall, gymnasium, lecture hall, indoor swimming pool or tennis court, shall not be limited provided all of the following criteria are met:
 - The building shall not have a stage other than a platform.
 - The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
 - 3. The assembly floor shall be located at or within 21 inches (533 mm) of street or grade level and all exits are provided with ramps complying with Section 1012 to the street or grade level.
 - 4. The building shall be surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.
- **507.8** Group H-2, H-3 and H-4 occupancies. Group H-2, H-3 and H-4 occupancies shall be permitted in unlimited area buildings containing Group F or S occupancies in accordance with Sections 507.4 and 507.5 and the provisions of Sections 507.8.1 through 507.8.4.
 - **507.8.1 Allowable area.** The aggregate floor area of Group H occupancies located in an unlimited area building shall not exceed 10 percent of the area of the building or the area limitations for the Group H occupancies as specified in Section 506 based on the perimeter of each Group H floor area that fronts on a public way or open space.
 - **507.8.1.1 Located within the building.** The aggregate floor area of Group H occupancies not located at the perimeter of the building shall not exceed 25 percent of the area limitations for the Group H occupancies as specified in Section 506.
 - **507.8.1.1.1 Liquid use, dispensing and mixing rooms.** Liquid use, dispensing and mixing rooms having a floor area of not more than 500 square feet (46.5 m^2) need not be located on the outer perimeter of the building where they are in accordance with the *California Fire Code* and NFPA 30.
 - **507.8.1.1.2** Liquid storage rooms. Liquid storage rooms having a floor area of not more than 1,000 square feet (93 m²) need not be located on the outer perimeter where they are in accordance with the *California Fire Code* and NFPA 30.
 - **507.8.1.1.3 Spray paint booths.** Spray paint booths that comply with the *California Fire Code* need not be located on the outer perimeter.
 - **507.8.2 Located on building perimeter.** Except as provided for in Section 507.8.1.1, Group H occupancies shall be located on the perimeter of the building. In Group H-2 and H-3 occupancies, not less than 25 percent of the perimeter of such occupancies shall be an exterior wall.
 - **507.8.3 Occupancy separations.** Group H occupancies shall be separated from the remainder of the unlimited area

building and from each other in accordance with Table 508.4.

507.8.4 Height limitations. For two-story, unlimited area buildings, Group H occupancies shall not be located more than one story above grade plane unless permitted based on the allowable height and number of stories and feet as specified in Section 504 based on the type of construction of the unlimited area building.

507.9 Unlimited mixed occupancy buildings with Group H-5. The area of a Group B, F, H-5, M or S building no more than two stories above grade plane shall not be limited where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width, provided all of the following criteria are met:

- 1. Buildings containing Group H-5 occupancy shall be of Type I or II construction.
- 2. Each area used for Group H-5 occupancy shall be separated from other occupancies as required in Sections 415.11 and 508.4.
- 3. Each area used for Group H-5 occupancy shall not exceed the maximum allowable area permitted for such occupancies in Section 503.1 including modifications of Section 506.

Exception: Where the Group H-5 occupancy exceeds the maximum allowable area, the Group H-5 shall be subdivided into areas that are separated by 2-hour fire barriers.

- **507.10 Aircraft paint hangar.** The area of a Group H-2 aircraft paint hangar no more than one story above grade plane shall not be limited where such aircraft paint hangar complies with the provisions of Section 412.6 and is surrounded and adjoined by public ways or yards not less in width than one and one-half times the building height.
- **507.11 Group E buildings.** The area of a Group E building no more than one story above grade plane, of Type IIA, IIIA or IV construction, shall not be limited provided all of the following criteria are met:
 - 1. Each classroom shall have not less than two means of egress, with one of the means of egress being a direct exit to the outside of the building complying with Section 1022.
 - 2. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
 - 3. The building is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.
- **507.12 Motion picture theaters.** In buildings of Type II construction, the area of a motion picture theater located on the first story above grade plane shall not be limited where the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.
- **507.13** Covered and open mall buildings and anchor buildings. The area of covered and open mall buildings and

anchor buildings not exceeding three stories in height that comply with Section 402 shall not be limited.

SECTION 508 MIXED USE AND OCCUPANCY

508.1 General. Each portion of a building shall be individually classified in accordance with Section 302.1. Where a building contains more than one occupancy group, the building or portion thereof shall comply with the applicable provisions of Section 508.2, 508.3 or 508.4, or a combination of these sections.

Exceptions:

- 1. Occupancies separated in accordance with Section 510.
- 2. Where required by Table 415.5.2, areas of Group H-1, H-2 and H-3 occupancies shall be located in a detached building or structure.
- 3. Uses within live/work units, complying with Section 419, are not considered separate occupancies.
- **508.2** Accessory occupancies. Accessory occupancies are those occupancies that are ancillary to the main occupancy of the building or portion thereof. Accessory occupancies shall comply with the provisions of Sections 508.2.1 through 508.2.4.
 - **508.2.1 Occupancy classification.** Accessory occupancies shall be individually classified in accordance with Section 302.1. The requirements of this code shall apply to each portion of the building based on the occupancy classification of that space.
 - **508.2.2 Allowable building height.** The allowable height and number of stories of the building containing accessory occupancies shall be in accordance with Section 504 for the main occupancy of the building.
 - **508.2.3** Allowable building area. The allowable area of the building shall be based on the applicable provisions of Section 506 for the main occupancy of the building. Aggregate accessory occupancies shall not occupy more than 10 percent of the floor area of the story in which they are located and shall not exceed the tabular values for nonsprinklered buildings in Table 506.2 for each such accessory occupancy.
 - **508.2.4 Separation of occupancies.** No separation is required between accessory occupancies and the main occupancy.

Exceptions:

- 1. Group H-2, H-3, H-4, H-5 *and L* occupancies shall be separated from all other occupancies in accordance with Section 508.4.
- 2. Group I-1, R-1, R-2, *R-2.1* and R-3 dwelling units and sleeping units shall be separated from other dwelling or sleeping units and from accessory occupancies contiguous to them in accordance with the requirements of Section 420.
- 3. No separation is required between Group B, E, R-2 sleeping units and S-2 occupancies accessory

- to Group I-2, I-2.1. Group I-2 and I-2.1 shall be separated from all other occupancies in accordance with Section 508.4.
- 4. No separation is required between Group A, B, E, R-2 sleeping units and S-2 occupancies accessory to Group I-3 of Type I Construction. Group I-3 and vehicle sallyports shall be separated from all other occupancies in accordance with Section 508.4.
- **508.3 Nonseparated occupancies.** Buildings or portions of buildings that comply with the provisions of this section shall be considered as nonseparated occupancies.
 - **508.3.1 Occupancy classification.** Nonseparated occupancies shall be individually classified in accordance with Section 302.1. The requirements of this code shall apply to each portion of the building based on the occupancy classification of that space. In addition, the most restrictive provisions of Chapter 9 which apply to the nonseparated occupancies shall apply to the total nonseparated occupancy area. Where nonseparated occupancies occur in a high-rise building, the most restrictive requirements of Section 403 which apply to the nonseparated occupancies shall apply throughout the high-rise building.
 - **508.3.2 Allowable building area and height.** The allowable building area and height of the building or portion thereof shall be based on the most restrictive allowances for the occupancy groups under consideration for the type of construction of the building in accordance with Section 503.1.
 - **508.3.3 Separation.** No separation is required between nonseparated occupancies.

Exceptions:

- 1. Group H-2, H-3, H-4, H-5, *I-2*, *I-2.1* and *L* occupancies shall be separated from all other occupancies in accordance with Section 508.4.
- 2. Group I-1, R-1, R-2, *R*-2.*I* and R-3 dwelling units and sleeping units shall be separated from other dwelling or sleeping units and from other occupancies contiguous to them in accordance with the requirements of Section 420.
- 3. No separation is required between Group B, E, R-2 sleeping units and S-2 occupancies accessory to Group I-3 of Type I Construction. Group I-3 and vehicle sallyports shall be separated from all other occupancies in accordance with Section 508.4.
- **508.4 Separated occupancies.** Buildings or portions of buildings that comply with the provisions of this section shall be considered as separated occupancies.
 - **508.4.1 Occupancy classification.** Separated occupancies shall be individually classified in accordance with Section 302.1. Each separated space shall comply with this code based on the occupancy classification of that portion of the building.
 - **508.4.2 Allowable building area.** In each story, the building area shall be such that the sum of the ratios of the actual building area of each separated occupancy divided by the allowable building area of each separated occupancy shall not exceed 1.

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 6 – TYPES OF CONSTRUCTION

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

Adapting agangu	BSC	BSC-	SFM		нс	D		DSA	4		OSI	HPD		BSCC	DDU	ACD	DWR	CEC	C A	SL	SLC
Adopting agency	ВЗС	CG	SFIN	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	ВЗСС	DPH	AGN	DWA	CEC	CA	3L	SLC
Adopt entire chapter	Х							Х	Х	X	Х		Х								
Adopt entire chapter as amended (amended sections listed below)			х	x	х																
Adopt only those sections that are listed below																					
Chapter / Section																					
Table 601			Х																		
602.1			Х																		
Table 602			Х																		
603.1.3				Χ	Χ																

CHAPTER 6

TYPES OF CONSTRUCTION

SECTION 601 GENERAL

601.1 Scope. The provisions of this chapter shall control the classification of buildings as to type of construction.

SECTION 602 CONSTRUCTION CLASSIFICATION

602.1 General. Buildings and structures erected or to be erected, altered or extended in height or area shall be classified in one of the five construction types defined in Sections 602.2 through 602.5. The building elements shall have a fire-resistance rating not less than that specified in Table 601 and exterior walls shall have a fire-resistance rating not less than that specified in Table 602. Where required to have a fire-resistance rating by Table 601, building elements shall comply with the applicable provisions of Section 703.2. The protection of openings, ducts and air transfer openings in building elements shall not be required unless required by other provisions of this code.

Exception: Noncombustible structural members supporting solar photovoltaic panels are not required to meet the fire resistance rating for the following:

- 1. Photovoltaic panel supported by a structure and having no use underneath. Signs may be provided, as determined by the enforcing agency prohibiting any use underneath including storage.
- 2. Solar photovoltaic (PV) panels supported by noncombustible framing that have sufficient uniformly distributed and unobstructed openings throughout the top of the array (horizontal plane) to allow heat and gases to escape, as determined by the enforcing agency.

- 3. Solar photovoltaic panels supported by a structure over parking stalls where the panels constitute the roof and all the following conditions are met (see Figure 5-1):
 - 3.1. The area within the perimeter of the solar photovoltaic array has maximum rectangular dimension of 40 feet by 150 feet.
 - 3.2. The distance between solar photovoltaic array structures is a minimum of 10 feet clear.
 - 3.3. The driveway aisle separating solar photovoltaic array structures has a minimum width of 25 feet clear.
 - 3.4. Solar photovoltaic array structure is used only for parking purposes with no storage.
 - 3.5. Completely open on all sides (other than necessary structural supports) with no interior partitions.
- **602.1.1 Minimum requirements.** A building or portion thereof shall not be required to conform to the details of a type of construction higher than that type which meets the minimum requirements based on occupancy even though certain features of such a building actually conform to a higher type of construction.
- **602.2 Types I and II.** Types I and II construction are those types of construction in which the building elements listed in Table 601 are of noncombustible materials, except as permitted in Section 603 and elsewhere in this code.
- **602.3 Type III.** Type III construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies of a 2-hour rating or less.

TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

	TYI	PE I	TYF	PEII	TYP	PE III	TYPE IV	TYF	PE V
BUILDING ELEMENT	Α	В	Α	В	Α	В	HT	Ad	В
Primary structural frame ^f (see Section 202)	3ª	2ª	1	0	1	0	HT	1	0
Bearing walls Exterior ^{e, f} Interior	3 3ª	2 2ª	1 1	0	2	2 0	2 1/HT	1	0
Nonbearing walls and partitions Exterior				Se	ee Table (602			
Nonbearing walls and partitions Interior ^d	0	0	0	0	0	0	See Section 602.4.6	0	0
Floor construction and associated secondary members (see Section 202)	2	2	1	0	1	0	НТ	1	0
Roof construction and associated secondary members (see Section 202)	1 ¹ / ₂ ^b	1 ^{b,c}	1 ^{b,c}	0°	1 ^{b,c}	0	НТ	1 ^{b,c}	0

For SI: 1 foot = 304.8 mm.

- a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
- b. 1. Except in Group A, E, F-1, H, I, L, M, R-1, R-2, R-2.1 and S-1 occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, fire protection of primary structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
- b. 2. For Group A, E, I, L, R-1, R-2, and R-2.1 occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, fire protection of members other than the primary structural frame shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
- b. 3. One-story portions of Group A and E assembly occupancies the roof-framing system of Type II A or Type III A construction may be of unprotected construction when such roof-framing system is open to the assembly area and does not contain concealed spaces.
- c. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.
- d. Not less than the fire-resistance rating required by other sections of this code.
- e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).
- f. Not less than the fire-resistance rating as referenced in Section 704.10.

TABLE 602
FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE^{a, d, g}

FIRE SEPARATION	TYPE OF CONSTRUCTION	OCCUPANCY	OCCUPANCY	OCCUPANCY
DISTANCE = X (feet)		GROUP H°, <i>L</i>	GROUP F-1, M, S-1 ^f	GROUP A, B, E, F-2, I, R ^h , S-2, U ^h
X < 5 ^b	All	3	2	1
5 ≤ X < 10	IA	3	2	1
	Others	2	1	1
10 ≤ X < 30	IA, IB	2	1	1°
	IIB, VB	1	0	0
	Others	1	1	1°
X ≥ 30	All	0	0	0

For SI: 1 foot = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
- b. See Section 706.1.1 for party walls.
- c. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- e. For special requirements for Group H occupancies, see Section 415.6.
- f. For special requirements for Group S aircraft hangars, see Section 412.4.1.
- g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.
- h. For a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523) or greater.
- i. Group R-3 and Group U occupancies when used as accessory to Group R-3 occupancies, shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet or more; or when equipped throughout with an automatic residential fire sprinkler system installed in accordance with Section 903.3 the fire-resistance rating shall not be required where the fire separation distance is 3 feet or more.

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 7 – FIRE AND SMOKE PROTECTION FEATURES

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

Adopting agency	BSC	BSC-	SFM		HCI)		DS	4		OSI	HPD		BSCC	חמם	ACD	DWP	CEC	~	e.	61.0
Adopting agency	BSC	CG	SFIN	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWK	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х	X	X		X								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sections that are listed below																					
Chapter / Section																					
702.1			Χ																		
703.4				Х	Х																
705.5			Х																		
Table 705.8			Х																		
705.8.5			Х																		
705.12			Х																		
Table 706.4			Х																		
Table 707.3.10			Х																		
708.1			Χ																		
708.3			Х																		
708.4			Χ																		
709.5			Χ																		
710.2			Х																		
710.8			Х																		
712.1.3			Х																		
712.1.9			Χ																		
716.5.3			Χ																		
716.5.5			Х																		
716.5.7.1			Χ																		
716.5.9.3			Х																		
717.5.2			Χ																		
717.5.4			Х																		
717.5.4.1			Х																		
717.5.5			Х																		
717.6.1			Х																		
718.3.3			Х																		
718.4.3			Х																		
721.2				Χ	Χ																
721.2.1				Х	Х																

The state agency does not adopt sections identified with the following symbol †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 7

FIRE AND SMOKE PROTECTION FEATURES

SECTION 701 GENERAL

701.1 Scope. The provisions of this chapter shall govern the materials, systems and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings.

701.2 Multiple use fire assemblies. Fire assemblies that serve multiple purposes in a building shall comply with all

of the requirements that are applicable for each of the individual fire assemblies.

SECTION 702 DEFINITIONS

702.1 Definitions. The following terms are defined in Chapter 2:

ANNULAR SPACE.
BUILDING ELEMENT.

CEILING RADIATION DAMPER.

COMBINATION FIRE/SMOKE DAMPER.

CORRIDOR DAMPER.

DAMPER.

DRAFTSTOP

F RATING.

FIRE BARRIER.

FIRE DAMPER.

FIRE DOOR.

FIRE DOOR ASSEMBLY.

FIRE PARTITION.

FIRE PROTECTION RATING.

FIRE-RATED GLAZING.

FIRE RESISTANCE.

FIRE-RESISTANCE RATING.

FIRE-RESISTANT JOINT SYSTEM.

FIRE SEPARATION DISTANCE.

FIRE-SMOKE BARRIER.

FIRE WALL.

FIRE WINDOW ASSEMBLY.

FIREBLOCKING.

FLOOR FIRE DOOR ASSEMBLY.

HORIZONTAL ASSEMBLY.

JOINT.

L RATING.

MEMBRANE PENETRATION.

MEMBRANE-PENETRATION FIRESTOP.

MEMBRANE-PENETRATION FIRESTOP SYSTEM.

MINERAL FIBER.

MINERAL WOOL.

PENETRATION FIRESTOP.

SELF-CLOSING.

SHAFT.

SHAFT ENCLOSURE.

SMOKE BARRIER.

SMOKE COMPARTMENT.

SMOKE DAMPER.

SPLICE.

T RATING.

THROUGH PENETRATION.

THROUGH-PENETRATION FIRESTOP SYSTEM.

SECTION 703 FIRE-RESISTANCE RATINGS AND FIRE TESTS

703.1 Scope. Materials prescribed herein for fire resistance shall conform to the requirements of this chapter.

703.2 Fire-resistance ratings. The fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E119 or UL 263 or in accordance with Section 703.3. The fire-resistance rating of penetrations and fire-resistant joint systems shall be determined in accordance Sections 714 and 715, respectively.

703.2.1 Nonsymmetrical wall construction. Interior walls and partitions of nonsymmetrical construction shall be tested with both faces exposed to the furnace, and the assigned fire-resistance rating shall be the shortest duration obtained from the two tests conducted in compliance with ASTM E119 or UL 263. Where evidence is furnished to show that the wall was tested with the least fire-resistant side exposed to the furnace, subject to acceptance of the building official, the wall need not be subjected to tests from the opposite side (see Section 705.5 for exterior walls).

703.2.2 Combustible components. Combustible aggregates are permitted in gypsum and Portland cement concrete mixtures for fire-resistance-rated construction. Any component material or admixture is permitted in assemblies if the resulting tested assembly meets the fire-resistance test requirements of this code.

703.2.3 Restrained classification. Fire-resistance-rated assemblies tested under ASTM E119 or UL 263 shall not be considered to be restrained unless evidence satisfactory to the building official is furnished by the registered design professional showing that the construction qualifies for a restrained classification in accordance with ASTM E119 or UL 263. Restrained construction shall be identified on the construction documents.

703.2.4 Supplemental features. Where materials, systems or devices that have not been tested as part of a fire-resistance-rated assembly are incorporated into the building element, component or assembly, sufficient data shall be made available to the building official to show that the required fire-resistance rating is not reduced.

703.2.5 Exterior bearing walls. In determining the fire-resistance rating of exterior bearing walls, compliance with the ASTM E119 or UL 263 criteria for unexposed surface temperature rise and ignition of cotton waste due to passage of flame or gases is required only for a period of time corresponding to the required fire-resistance rating of an exterior nonbearing wall with the same fire separation distance, and in a building of the same group. Where the fire-resistance rating determined in accordance with this exception exceeds the fire-resistance rating determined in accordance with ASTM E119 or UL 263, the fire exposure time period, water pressure and application duration criteria for the hose stream test of ASTM E119 or UL 263 shall be based on the fire-resistance rating determined in accordance with this section.

703.3 Methods for determining fire resistance. The application of any of the methods listed in this section shall be based on the fire exposure and acceptance criteria specified in

705.8.1 Allowable area of openings. The maximum area of unprotected and protected openings permitted in an exterior wall in any story of a building shall not exceed the percentages specified in Table 705.8.

Exceptions:

- 1. In other than Group H occupancies, unlimited unprotected openings are permitted in the first story above grade plane either:
 - 1.1. Where the wall faces a street and has a fire separation distance of more than 15 feet (4572 mm); or

- 1.2. Where the wall faces an unoccupied space. The unoccupied space shall be on the same lot or dedicated for public use, shall not be less than 30 feet (9144 mm) in width and shall have access from a street by a posted fire lane in accordance with the *California Fire Code*.
- 2. Buildings whose exterior bearing walls, exterior nonbearing walls and exterior primary structural frame are not required to be fire-resistance rated

TABLE 705.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION

FIRE SEPARATION DISTANCE (feet)	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA ^a
	Unprotected, Nonsprinklered (UP, NS)	Not Permitted ^k
0 to less than 3 ^{b, c, k}	Unprotected, Sprinklered (UP, S) ⁱ	Not Permitted ^k
	Protected (P)	Not Permitted ^k
	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
3 to less than 5 ^{d, e}	Unprotected, Sprinklered (UP, S) ⁱ	15%
	Protected (P)	15%
	Unprotected, Nonsprinklered (UP, NS)	10% ^h
5 to less than $10^{e, f, j}$	Unprotected, Sprinklered (UP, S) ⁱ	25%
	Protected (P)	25%
	Unprotected, Nonsprinklered (UP, NS)	15% ^h
10 to less than 15 ^{e, f, g, j}	Unprotected, Sprinklered (UP, S) ⁱ	45%
	Protected (P)	45%
	Unprotected, Nonsprinklered (UP, NS)	25%
15 to less than 20 ^{f, g, j}	Unprotected, Sprinklered (UP, S) ⁱ	75%
	Protected (P)	75%
	Unprotected, Nonsprinklered (UP, NS)	45%
20 to less than 25 ^{f, g, j}	Unprotected, Sprinklered (UP, S) ⁱ	No Limit
	Protected (P)	No Limit
	Unprotected, Nonsprinklered (UP, NS)	70%
25 to less than 30 ^{f, g, j}	Unprotected, Sprinklered (UP, S)i	No Limit
	Protected (P)	No Limit
	Unprotected, Nonsprinklered (UP, NS)	No Limit
30 or greater	Unprotected, Sprinklered (UP, S) ⁱ	No Limit
	Protected (P)	No Limit

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

- P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.
- a. Values indicated are the percentage of the area of the exterior wall, per story.
- b. For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.
- c. For openings in a fire wall for buildings on the same lot, see Section 706.8.
- d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.
- e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.
- f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater.
- g. The area of openings in an open parking structure with a fire separation distance of 10 feet or greater shall not be limited.
- h. Includes buildings accessory to Group R-3.
- i. Not applicable to Group H-1, H-2 and H-3 occupancies.
- j. The area of openings in a building containing only a Group U occupancy private garage or carport with a fire separation distance of 5 feet (1523 mm) or greater shall not be limited.
- k. For openings between S-2 parking garage and Group R-2 building, see Section 705.3, Exception 2.

shall be permitted to have unlimited unprotected openings.

705.8.2 Protected openings. Where openings are required to be protected, fire doors and fire shutters shall comply with Section 716.5 and fire window assemblies shall comply with Section 716.6.

Exception: Opening protectives are not required where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the exterior openings are protected by a water curtain using automatic sprinklers approved for that use.

705.8.3 Unprotected openings. Where unprotected openings are permitted, windows and doors shall be constructed of any approved materials. Glazing shall conform to the requirements of Chapters 24 and 26.

705.8.4 Mixed openings. Where both unprotected and protected openings are located in the exterior wall in any story of a building, the total area of openings shall be determined in accordance with the following:

$$(A_p/a_p) + (A_u/a_u) \le 1$$
 (Equation 7-2)

where:

 A_p = Actual area of protected openings, or the equivalent area of protected openings, A_p (see Section 705.7).

 a_n = Allowable area of protected openings.

 A_{ij} = Actual area of unprotected openings.

 a_u = Allowable area of unprotected openings.

705.8.5 Vertical separation of openings. Openings in exterior walls in adjacent stories shall be separated vertically to protect against fire spread on the exterior of the buildings where the openings are within 5 feet (1524 mm) of each other horizontally and the opening in the lower story is not a protected opening with a fire protection rating of not less than ³/₄ hour. Such openings shall be separated vertically not less than 3 feet (914 mm) by spandrel girders, exterior walls or other similar assemblies that have a fireresistance rating of not less than 1 hour, rated for exposure to fire from both sides, or by flame barriers that extend horizontally not less than 30 inches (762 mm) beyond the exterior wall. Flame barriers shall have a fire-resistance rating of not less than 1 hour. The unexposed surface temperature limitations specified in ASTM E119 or UL 263 shall not apply to the flame barriers or vertical separation unless otherwise required by the provisions of this code.

Exceptions:

- 1. This section shall not apply to buildings that are three stories or less above grade plane.
- 2. This section shall not apply to buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. Open parking garages.

705.8.6 Vertical exposure. For buildings on the same lot, opening protectives having a fire protection rating of not less than ${}^{3}/_{4}$ hour shall be provided in every opening that is less than 15 feet (4572 mm) vertically above the roof of an adjacent building or structure based on assuming an imag-

inary line between them. The opening protectives are required where the fire separation distance between the imaginary line and the adjacent building or structure is less than 15 feet (4572 mm).

Exceptions:

- 1. Opening protectives are not required where the roof assembly of the adjacent building or structure has a fire-resistance rating of not less than 1 hour for a minimum distance of 10 feet (3048 mm) from the exterior wall facing the imaginary line and the entire length and span of the supporting elements for the fire-resistance-rated roof assembly has a fire-resistance rating of not less than 1 hour.
- Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with Section 705.8.6.

705.9 Joints. Joints made in or between exterior walls required by this section to have a fire-resistance rating shall comply with Section 715.

Exception: Joints in exterior walls that are permitted to have unprotected openings.

705.9.1 Voids. The void created at the intersection of a floor/ceiling assembly and an exterior curtain wall assembly shall be protected in accordance with Section 715.4.

705.10 Ducts and air transfer openings. Penetrations by air ducts and air transfer openings in fire-resistance-rated exterior walls required to have protected openings shall comply with Section 717.

Exception: Foundation vents installed in accordance with this code are permitted.

705.11 Parapets. Parapets shall be provided on exterior walls of buildings.

Exceptions: A parapet need not be provided on an exterior wall where any of the following conditions exist:

- The wall is not required to be fire-resistance rated in accordance with Table 602 because of fire separation distance.
- 2. The building has an area of not more than 1,000 square feet (93 m²) on any floor.
- 3. Walls that terminate at roofs of not less than 2-hour fire-resistance-rated construction or where the roof, including the deck or slab and supporting construction, is constructed entirely of noncombustible materials.
- 4. One-hour fire-resistance-rated exterior walls that terminate at the underside of the roof sheathing, deck or slab, provided:
 - 4.1. Where the roof/ceiling framing elements are parallel to the walls, such framing and elements supporting such framing shall not be of less than 1-hour fire-resistance-rated construction for a width of 4 feet (1220 mm) for Groups R and U and 10 feet (3048 mm) for other occupancies, measured from the interior side of the wall.

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 7A – MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

Adopting agonov	BCC	BSC-CG	CEM		НС	D		DS	4		OSI	IPD		BSCC	DDL	ACD	DWD	CEC	C A	e.	SLC
Adopting agency	ВЗС	BSC-CG	SFIN	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	ВЗСС	חים	AGN	אשט	5	Ğ	5	SLC
Adopt entire chapter			Х																		
Adopt entire chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below																					
Chapter / Section																					

CHAPTER 7A [SFM]

MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

SECTION 701A SCOPE, PURPOSE AND APPLICATION

701A.1 Scope. This chapter applies to building materials, systems and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area as defined in Section 702A.

701A.2 Purpose. The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.

701A.3 Application. New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date shall comply with the provisions of this chapter.

Exceptions:

- 1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.
- 2. Buildings of an accessory character classified as Group U occupancy of any size located least 50 feet from an applicable building.
- 3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C Group U Agricultural Buildings), when located at least 50 feet from an applicable building.
- 4. Additions to and remodels of buildings originally constructed prior to the applicable application date.

For the purposes of this section and Section 710A, applicable building includes all buildings that have residential, commercial, educational, institutional, or similar occupancy type use.

701A.3.1 Application date and where required. New buildings for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone or Wildland Interface Fire Area shall comply with all sections of this chapter, including all of the following areas:

- 1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:
 - 1.1. Moderate Fire Hazard Severity Zones
 - 1.2. High Fire Hazard Severity Zones
 - 1.3. Very-High Fire Hazard Severity Zones
- 2. Land designated as Very-High Fire Hazard Severity Zone by cities and other local agencies.
- 3. Land designated as Wildland Interface Fire Area by cities and other local agencies.

Exceptions:

- 1. New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.
- 2. New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Interface Fire Area designated by cities and other local agencies for which an application for a building permit is submitted on or after December 1, 2005 but prior to July 1, 2008, shall only

comply with the following sections of this chapter:

- 2.1. Section 705A Roofing
- 2.2. Section 706A Attic Ventilation

701A.3.2 Application to accessory buildings and miscellaneous structures. New accessory buildings and miscellaneous structures specified in Section 710A shall comply only with the requirements of that section.

701A.4 Inspection and certification. Building permit applications and final completion approvals for buildings within the scope and application of this chapter shall comply with the following:

- 1. Building permit issuance. The local building official shall, prior to construction, provide the owner or applicant a certification that the building as proposed to be built complies with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this chapter. Issuance of a building permit by the local building official for the proposed building shall be considered as complying with this section.
- 2. Building permit final. The local building official shall, upon completion of construction, provide the owner or applicant with a copy of the final inspection report that demonstrates the building was constructed in compliance with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this chapter. Issuance of a certificate of occupancy by the local building official for the proposed building shall be considered as complying with this section.

701A.5 Vegetation management compliance. Prior to building permit final approval, the property shall be in compliance with the vegetation management requirements prescribed in California Fire Code Section 4906, including California Public Resources Code 4291 or California Government Code Section 51182. Acceptable methods of compliance inspection and documentation shall be determined by the enforcing agency and shall be permitted to include any of the following:

- 1. Local, state or federal fire authority or designee authorized to enforce vegetation management requirements
- 2. Enforcing agency
- 3. Third party inspection and certification authorized to enforce vegetation management requirements
- 4. Property owner certification authorized by the enforcing agency

SECTION 702A DEFINITIONS

For the purposes of this chapter, certain terms are defined below:

CDF DIRECTOR means the Director of the California Department of Forestry and Fire Protection.

EXTERIOR COVERING. The exposed siding or cladding material applied to the exterior side of an exterior wall, roof eave soffit, floor projection or exposed underfloor framing.

FIRE PROTECTION PLAN is a document prepared for a specific project or development proposed for a Wildland Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

The Fire Protection Plan shall be in accordance with this chapter and the California Fire Code, Chapter 49. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted. Only locally adopted ordinances that have been filed with the California Building Standards Commission or the Department of Housing and Community Development in accordance with Section 1.1.8 shall apply.

FIRE HAZARD SEVERITY ZONES are geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189. See California Fire Code Chapter 49.

The California Code of Regulations, Title 14, Section 1280, entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

HEAVY TIMBER. A type of construction classification specified in Section 602. For use in this chapter, heavy timber shall be sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Heavy timber walls or floors shall be sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.

IGNITION-RESISTANT MATERIAL. A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildland-urban interface conflagrations under worst-case weather and fuel conditions with wildfire exposure of burning embers and small flames, as prescribed in Section 703A and SFM Standard 12-7A-5, Ignition-Resistant Material.

LOCAL AGENCY VERY HIGH FIRE HAZARD SEVER-ITY ZONE means an area designated by a local agency upon the recommendation of the CDF Director pursuant to Government Code Sections 51177(c), 51178 and 5118 that is not a state responsibility area and where a local agency, city, county, city and county, or district is responsible for fire protection.

LOG WALL CONSTRUCTION. A type of construction in which exterior walls are constructed of solid wood members and where the smallest horizontal dimension of each solid wood member is at least 6 inches (152 mm).

RAFTER TAIL. The portion of roof rafter framing in a sloping roof assembly that projects beyond and overhangs an exterior wall.

ROOF EAVE. The lower portion of a sloping roof assembly that projects beyond and overhangs an exterior wall at the lower end of the rafter tails. Roof eaves may be either "open" or "enclosed." Open roof eaves have exposed rafter tails and an unenclosed space on the underside of the roof deck. Enclosed roof eaves have a boxed-in roof eave soffit with a horizontal underside or sloping rafter tails with an exterior covering applied to the underside of the rafter tails.

ROOF EAVE SOFFIT. An enclosed boxed-in soffit under a roof eave with exterior covering material applied to the soffit framing creating a horizontal surface on the exposed underside

STATE RESPONSIBILITY AREA means lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125 where the financial responsibility of preventing and suppressing forest fires is primarily the responsibility of the state.

WILDFIRE is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources as defined in Public Resources Code Sections 4103 and 4104.

WILDFIRE EXPOSURE is one or a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by vegetation fire to a structure and its immediate environment.

WILDLAND-URBAN INTERFACE FIRE AREA is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

SECTION 703A STANDARDS OF QUALITY

- **703A.1 General.** Building material, systems, assemblies and methods of construction used in this chapter shall be in accordance with Section 703A.
- 703A.2 Qualification by testing. Material and material assemblies tested in accordance with the requirements of Section 703A shall be accepted for use when the results and conditions of those tests are met. Product evaluation testing of material and material assemblies shall be approved or listed by the State Fire Marshal, or identified in a current report issued by an approved agency.
- 703A.3 Approved agency. Product evaluation testing shall be performed by an approved agency as defined in Section 1702. The scope of accreditation for the approved agency shall include building product compliance with this code.
- 703A.4 Labeling. Material and material assemblies tested in accordance with the requirements of Section 703A shall bear an identification label showing the fire test results. That identification label shall be issued by a testing and/or inspecting agency approved by the State Fire Marshal.
 - 1. Identification mark of the approved testing and/or inspecting agency
 - 2. Contact and identification information of the manufacturer
 - 3. Model number or identification of the product or material
 - 4. Pre-test weathering specified in this chapter
 - 5. Compliance standard as described under Section 703A.7

703A.5 Weathering and surface treatment protection.

703A.5.1 General. Material and material assemblies tested in accordance with the requirements of Section

- 703A shall maintain their fire test performance under conditions of use, when installed in accordance with the manufacturers instructions.
- 703A.5.2 Weathering. Fire-retardant-treated wood and fire-retardant-treated wood shingles and shakes shall meet the fire test performance requirements of this chapter after being subjected to the weathering conditions contained in the following standards, as applicable to the materials and the conditions of use.
 - 703A.5.2.1 Fire-retardant-treated wood. Fire-retardant-treated wood shall be tested in accordance with ASTM D2898 (Method A) and the requirements of Section 2303.2.
 - 703A.5.2.2 Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes shall be approved and listed by the State Fire Marshal in accordance with Section 208(c), Title 19 California Code of Regulations.
- 703A.5.3 Surface treatment protection. The use of paints, coatings, stains or other surface treatments are not an approved method of protection as required in this chapter.
- 703A.6 Alternates for materials, design, tests and methods of construction. The enforcing agency is permitted to modify the provisions of this chapter for site-specific conditions in accordance with Section 1.11.2.4. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted in accordance with the California Fire Code, Chapter 49.
- 703A.7 Standards of quality. The State Fire Marshal standards for exterior wildfire exposure protection listed below and as referenced in this chapter are located in the California Referenced Standards Code, Part 12 and Chapter 35 of this code.
 - SFM Standard 12-7A-1, Exterior Wall Siding and Sheathing. A fire resistance test standard consisting of a 150 kW intensity direct flame exposure for a 10-minute duration.
 - **SFM Standard 12-7A-2,** Exterior Windows. A fire resistance test standard consisting of a 150 kW intensity direct flame exposure for an 8-minute duration.
 - SFM Standard 12-7A-3, Horizontal Projection Underside A fire resistance test standard consisting of a 300 kW intensity direct flame exposure for a 10-minute duration.
 - SFM Standard 12-7A-4, Decking. A two-part test consisting of a heat release rate (Part A) deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3-minute duration, and a (Part B) sustained deck assembly combustion test consisting of a deck upper surface burning ember exposure with a 12 mph wind for 40 minutes using a 2.2lb (1kg) burning "Class A" size 12" x 12" x 2.25" (300 mm x 300 mm x 57 mm) roof test brand.
 - **SFM Standard 12-7A-4A**, Decking Alternate Method A. A heat release rate deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3-minute duration,
 - SFM Standard 12-7A-5, Ignition-resistant Material. A generic building material surface burning flame spread

test standard consisting of an extended 30 minute ASTM E84 or UL 723 test method as is used for fire-retardant-treated wood.

ASTM D2898 Standard Practice for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing

ASTM D3909/D3909M Standard Specification for Asphalt Roll Roofing (Glass Felt) Surfaced with Mineral Granules

ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials

ASTM E2632/E2632M Standard Test Method for Evaluating the Under-Deck Fire Test Response of Deck Materials

ASTM E2707 Standard Test Method for Determining Fire Penetration of Exterior Wall Assemblies Using a Direct Flame Impingement Exposure

ASTM E2726/E2726M Standard Test Method for Evaluating the Fire Test Response of Deck Structures to Burning Brands

ASTM E2886/E2886M Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement

ASTM E2957 Standard Test Method for Resistance to Wildfire Penetration of Eaves, Soffits and Other Projections

NFPA 257 Standard on Fire Test for Window and Glass Block Assemblies

UL 723 Standard for Test for Surface Burning Characteristics of Building Materials

SECTION 704A IGNITION-RESISTANT CONSTRUCTION

704A.1 General. The materials prescribed herein for ignition resistance shall conform to the requirements of this chapter.

704A.2 Ignition-resistant materials. Ignition-resistant materials shall comply with one of the following:

- The requirements in Section 704A.3 when tested in accordance with the test procedures set forth in ASTM E84 or UL 723,
- 2. The test procedures and requirements set forth in SFM Standard 12-7A-5 "Ignition-Resistant Material", or
- 3. One of the alternative methods in Section 704A.4.

704A.3 Conditions of acceptance for ignition-resistant material tested in accordance with ASTM E84 or UL 723. A material shall comply with the conditions of acceptance in Items 1 and 2 below when the test is continued for an additional 20-minute period, meaning for a total test period of an "extended" 30-minute test period.

- 1. The material shall exhibit a flame spread index not exceeding 25 and shall show no evidence of progressive combustion following the extended 30-minute test period.
- 2. The material shall exhibit a flame front that does not progress more than 10¹/₂ feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test period.

704A.4 Alternative methods for determining ignition-resistant material. Any one of the following shall be accepted as meeting the definition of ignition-resistant material:

- Noncombustible material. Material that complies with the definition for noncombustible materials in Section 202.
- 2. Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use that complies with the requirements of Section 2303.2.
- 3. Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes, as defined in Section 1505.6 and listed by State Fire Marshal for use as "Class B" roof covering, shall be accepted as an ignition-resistant wall covering material when installed over solid sheathing.

SECTION 705A ROOFING

705A.1 General. Roofs shall comply with the requirements of Chapter 7A and Chapter 15. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.

705A.2 Roof coverings. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to resist the intrusion of flames and embers, be firestopped with approved materials or have one layer of minimum 72 pound (32.4 kg) mineral-surfaced non-perforated cap sheet complying with ASTM D3909 installed over the combustible decking.

705A.3 Roof valleys. Where valley flashing is installed, the flashing shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909, at least 36-inch-wide (914 mm) running the full length of the valley.

705A.4 Roof gutters. Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.

SECTION 706A VENTS

706A.1 General. Where provided, ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation shall be in accordance with Section 1203 and Sections 706A.1 through 706A.3 to resist building ignition from the intrusion of burning embers and flame through the ventilation openings.

706A.2 Requirements. Ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be

fully covered with metal wire mesh, vents, other materials or other devices that meet one of the following requirements:

- 1. Vents shall be listed to ASTM E2886 and comply with all of the following:
 - 1.1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
 - 1.2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
 - 1.3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
- 2. Vents shall comply with all of the following:
 - 2.1. The dimensions of the openings therein shall be a minimum of $^{1}/_{16}$ -inch (1.6 mm) and shall not exceed $^{1}/_{8}$ -inch (3.2 mm).
 - 2.2. The materials used shall be noncombustible.

Exception: Vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.

2.3. The materials used shall be corrosion resistant.

706A.3 Ventilation openings on the underside of eaves and cornices. Vents shall not be installed on the underside of eaves and cornices.

Exceptions:

П

П

- 1. Vents listed to ASTM E2886 and complying with all of the following:
 - 1.1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
 - 1.2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test
 - 1.3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
- 2. The enforcing agency shall be permitted to accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.
- 3. Vents complying with the requirements of Section 706A.2 shall be permitted to be installed on the underside of eaves and cornices in accordance with either one of the following conditions:
 - 3.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or,
 - 3.2. The exterior wall covering and exposed underside of the eave are of noncombustible materials, or ignition-resistant materials, as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material and the requirements of Section 704A.3, and the vent is located more than 12 feet (3.66 m) from the ground or walking surface of a deck, porch, patio or similar surface.

SECTION 707A EXTERIOR COVERING

707A.1 Scope. The provisions of this section shall govern the materials and construction methods used to resist building ignition and/or safeguard against the intrusion of flames resulting from small ember and short-term direct flame contact exposure.

707A.2 *General.* The following exterior covering materials and/or assemblies shall comply with this section:

- 1. Exterior wall covering material
- 2. Exterior wall assembly
- 3. Exterior exposed underside of roof eave overhangs
- 4. Exterior exposed underside of roof eave soffits
- 5. Exposed underside of exterior porch ceilings
- 6. Exterior exposed underside of floor projections
- 7. Exterior underfloor areas

Exceptions:

- 1. Exterior wall architectural trim, embellishments, fascias, and gutters
- 2. Roof or wall top cornice projections and similar assemblies
- 3. Roof assembly projections over gable end walls
- 4. Solid wood rafter tails and solid wood blocking installed between rafters having minimum dimension 2 inch (50.8 mm) nominal
- 5. Deck walking surfaces shall comply with Section 709A.4 only

707A.3 Exterior walls. The exterior wall covering or wall assembly shall comply with one of the following requirements:

- 1. Noncombustible material
- 2. Ignition-resistant material
- 3. Heavy timber exterior wall assembly
- 4. Log wall construction assembly
- 5. Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.3.1.
- 6. Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.

Exception: Any of the following shall be deemed to meet the assembly performance criteria and intent of this section:

- 1. One layer of ⁵/₈-inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing
- 2. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual

707A.3.1 Conditions of acceptance when tested in accordance with ASTM E2707. The ASTM E2707 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 and 2 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

- 1. Absence of flame penetration through the wall assembly at any time.
- Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70min test.

707A.3.2 Extent of exterior wall covering. Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2 inch (50.8 mm) nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

707A.4 Open roof eaves. The exposed roof deck on the underside of unenclosed roof eaves shall consist of one of the following:

- 1. Noncombustible material
- 2. Ignition-resistant material
- 3. One layer of ⁵/₈-inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck
- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the roof deck designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual

Exceptions: The following materials do not require protection:

- 1. Solid wood rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm)
- 2. Solid wood blocking installed between rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm)
- 3. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails
- 4. Fascia and other architectural trim boards

707A.5 Enclosed roof eaves and roof eave soffits. The exposed underside of enclosed roof eaves having either a boxed-in roof eave soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the underside of the rafter tails, shall be protected by one of the following:

- 1. Noncombustible material
- 2. Ignition-resistant material
- 3. One layer of ⁵/₈-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit

- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
- 5. Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
- 6. Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

Exceptions: The following materials do not require protection:

- Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails
- 2. Fascia and other architectural trim boards

707A.6 Exterior porch ceilings. The exposed underside of exterior porch ceilings shall be protected by one of the following:

- 1. Noncombustible material
- 2. Ignition-resistant material
- 3. One layer of ⁵/₈-inch Type X gypsum sheathing applied behind the exterior covering on the underside of the ceiling
- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the ceiling assembly including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
- 5. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
- 6. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

Exception: Architectural trim boards.

707A.7 Floor projections. The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by one of the following:

- 1. Noncombustible material
- 2. Ignition-resistant material
- 3. One layer of ⁵/₈-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor projection including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual

- 5. The underside of a floor projection assembly that meets the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
- 6. The underside of a floor projection assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

Exception: Architectural trim boards.

707A.8 Underfloor protection. The underfloor area of elevated or overhanging buildings shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

- 1. Noncombustible material
- 2. Ignition-resistant material
- 3. One layer of ⁵/₈-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
- 5. The underside of a floor assembly that meets the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
- 6. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

Exception: Heavy timber structural columns and beams do not require protection.

707A.9 Underside of appendages. When required by the enforcing agency the underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

- 1. Noncombustible material
- 2. Ignition-resistant material
- 3. One layer of ⁵/₈-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
- 5. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in either of the following:
 - 5.1. SFM Standard 12-7A-3; or
 - 5.2. ASTM E2957

Exception: Heavy timber structural columns and beams do not require protection.

707A.10 Conditions of acceptance when tested in accordance with ASTM E2957. The test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 through 3 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

- 1. Absence of flame penetration of the eaves or horizontal projection assembly at any time.
- 2. Absence of structural failure of the eaves or horizontal projection subassembly at any time.
- 3. Absence of sustained combustion of any kind at the conclusion of the 40-minute test.

SECTION 708A EXTERIOR WINDOWS, SKYLIGHTS AND DOORS

708A.1 General.

708A.2 Exterior glazing. The following exterior glazing materials and/or assemblies shall comply with this section:

- 1. Exterior windows
- 2. Exterior glazed doors
- 3. Glazed openings within exterior doors
- 4. Glazed openings within exterior garage doors
- 5. Exterior structural glass veneer
- 6. Skylights
- 7. Vents

708A.2.1 Exterior windows, skylights and exterior glazed door assembly requirements. Exterior windows, skylights and exterior glazed door assemblies shall comply with one of the following requirements:

- Be constructed of multipane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or
- 2. Be constructed of glass block units, or
- 3. Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or
- 4. Be tested to meet the performance requirements of SFM Standard 12-7A-2

708A.2.2 Structural glass veneer. The wall assembly behind structural glass veneer shall comply with Section 707A.3.

708A.3 Exterior doors. Exterior doors shall comply with one of the following:

- 1. The exterior surface or cladding shall be of noncombustible material.
- 2. The exterior surface or cladding shall be of ignition-resistant material.
- 3. The exterior door shall be constructed of solid core wood that complies with the following requirements:
 - 3.1. Stiles and rails shall not be less than $1^3/_8$ inches | | thick.

|| |-

- 3.2. Panels shall not be less than $1^{1}/_{4}$ inches thick, except for the exterior perimeter of the panel that shall be permitted to taper to a tongue not less than $3/_{8}$ inch thick.
- 4. The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252.
- 5. The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707.
- The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A-1.

708A.3.1 Exterior door glazing. Glazing in exterior doors shall comply with Section 708A.2.1.

708A.4 Weather stripping. Exterior garage doors shall be provided with weather stripping to resist the intrusion of embers from entering through gaps between doors and door openings when visible gaps exceed $\frac{1}{8}$ inch (3.2 mm). Weather stripping or seals shall be installed on the bottom, sides, and tops of doors to reduce gaps between doors and door openings to $\frac{1}{8}$ inch (3.2 mm) or less.

SECTION 709A DECKING

709A.1 General. The walking surface material of decks, porches, balconies and stairs shall comply with the requirements of this section.

709A.2 Where required. The walking surface material of decks, porches, balconies and stairs shall comply with the requirements of this section when any portion of such surface is within 10 feet (3048 mm) of the building.

709A.3 Decking Surfaces. The walking surface material of decks, porches, balconies and stairs shall be constructed with one of the following materials:

- 1. Material that complies with the performance requirements of Section 709A.4 when tested in accordance with both ASTM E2632 and ASTM E2726.
- 2. Ignition-resistant material that complies with the performance requirements of 704A.3 when tested in accordance with ASTM E84 or UL 723.
- 3. Material that complies with the performance requirements of both SFM Standard 12-7A-4 and SFM Standard 12-7A-5.
- 4. Exterior fire retardant treated wood
- 5. Noncombustible material
- 6. Any material that complies with the performance requirements of SFM Standard 12-7A-4A when attached exterior wall covering is also composed of noncombustible or ignition-resistant material.

Exception: Wall material may be of any material that otherwise complies with this chapter when the decking sur-

face material complies with the performance requirements ASTM E84 with a Class B flame spread rating.

7. Any material that complies with the performance requirements of Section 709A.5 when tested in accordance with ASTM E2632 and when attached exterior wall covering is also composed of only noncombustible or ignition-resistant materials.

Exception: Wall material shall be permitted to be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E84 with a Class B flame spread rating.

709A.4 Requirements for type of ignition-resistant material in Section 709A.3, Item 1. The material shall be tested in accordance with both ASTM E2632 and ASTM E2726 and shall comply with the conditions of acceptance in Sections 709A.4.1 and 709A4.2. The material shall also be tested in accordance with ASTM E84 or UL 723 and comply with the performance requirements of Section 704A.3.

709A.4.1 Conditions of acceptance for ASTM E2632. The ASTM E2632 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 through 3 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

- 1. Peak heat release rate of less than or equal to 25 kW/ft² (269 kW/m²).
- 2. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-min observation period.
- 3. Absence of falling particles that are still burning when reaching the burner or floor.

709A.4.2 Conditions of acceptance for ASTM E2726. The ASTM E2726 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in Items 1 and 2 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

- 1. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-min observation period.
- 2. Absence of falling particles that are still burning when reaching the burner or floor.

709A.5 Requirements for type of ignition-resistant material in Section 709A.3, Item 6. The material shall be tested in accordance with ASTM E2632 and shall comply with the following condition of acceptance. The ASTM E2632 test shall be conducted on a minimum of three test specimens and the peak heat release rate shall be less than or equal to 25 kW/ft² (269 kW/m²). If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the condition of acceptance.

П

SECTION 710A ACCESSORY STRUCTURES

710A.1 General. Accessory buildings and miscellaneous structures defined in this section that have the potential to pose a significant exterior fire exposure hazard to applicable buildings during wildfires shall be constructed to conform to the requirements of this section.

710A.2 Applicability. The provisions of this section shall apply to the buildings covered by Section 701A.3, Exception 1. This section shall also apply to specified attached and detached miscellaneous structures that require a building permit, including but not limited to trellises, arbors, patio covers, carports, gazebos, and similar structures.

Exceptions:

- 1. Decks shall comply with the requirements of Section 709A.
- 2. Awnings and canopies shall comply with the requirements of Section 3105.
- 3. Exterior wall architectural trim, embellishments, and fascias.
- 4. Roof or wall top cornice projections and similar assemblies.

710A.3 Where required. No requirements shall apply to accessory buildings or miscellaneous structures when located at least 50 feet from an applicable building. Applicable accessory buildings and attached miscellaneous structures, or detached miscellaneous structures that are installed at a distance of less than 3 feet from an applicable building, shall comply with this section. When required by the enforcing agency, detached miscellaneous structures that are installed at a distance of more than 3 feet but less than 50 feet from an applicable building shall comply with the requirements of this section.

710A.3.1 Accessory building requirements. Applicable accessory buildings that are less than 120 square feet in floor area and are located more than 30 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2.

710A.3.2 Attached miscellaneous structure requirements. Applicable miscellaneous structures that are attached to, or installed at a distance of less than 3 feet from, an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2.

710A.3.3 Detached miscellaneous structure requirements. When required by the enforcing agency, applicable detached miscellaneous structures that are installed at a distance of more than 3 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2.

803.9 High-density polyethylene (HDPE) and polypropylene (PP). Where high-density polyethylene or polypropylene is used as an interior finish it shall comply with Section 803.1.2.

803.10 Site-fabricated stretch systems. Where used as interior wall or interior ceiling finish materials, site-fabricated stretch systems containing all three components described in the definition in Chapter 2 shall be tested in the manner intended for use, and shall comply with the requirements of Section 803.1.1 or 803.1.2. If the materials are tested in accordance with ASTM E84 or UL 723, specimen preparation and mounting shall be in accordance with ASTM E2573.

803.11 Interior finish requirements based on group. Interior wall and ceiling finish shall have a flame spread index not greater than that specified in Table 803.11 for the group and location designated. Interior wall and ceiling finish materials tested in accordance with NFPA 286 and meeting the acceptance criteria of Section 803.1.2.1, shall be permitted to be used where a Class A classification in accordance with ASTM E84 or UL 723 is required.

803.12 Stability. Interior finish materials regulated by this chapter shall be applied or otherwise fastened in such a manner that such materials will not readily become detached where subjected to room temperatures of 200°F (93°C) for not less than 30 minutes.

TABLE 803.11
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY^k

	SPRIN	IKLERED ¹		NONS	PRINKLERED	
GROUP	Interior exit stairways, interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c	Interior exit stairways, interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c
A-1 & A-2	В	В	С	A	\mathbf{A}^{d}	B ^e
A-3 ^f , A-4, A-5	В	В	С	A	\mathbf{A}^{d}	С
B, E, M, R-1	В	С	С	A	В	С
R-4 ^m	В	С	С	A	В	В
F	С	С	С	В	С	С
H, L	В	В	C^{g}	A	A	В
I-2 ⁿ , <i>I</i> -2.1	В	В	B ^{h, i}	A	A	В
I-3	A	A^{j}	В	NP	NP	NP
I-4	В	В	B ^{h, i}	A	A	В
R-2	С	С	С	В	В	С
R-2.1	В	С	С	A	В	В
R-3 ^m , R-3.1	С	С	С	С	С	С
S	С	С	С	В	В	С
U	No re	strictions		No	restrictions	•

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929m^2 .

 $NP = Not \ permitted \ [SFM]$

- a. Class C interior finish materials shall be permitted for wainscotting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.13.1.
- b. In other than Group I-3 occupancies in buildings less than three stories above grade plane, Class B interior finish for nonsprinklered buildings and Class C interior finish for sprinklered buildings shall be permitted in interior exit stairways and ramps.
- c. Requirements for rooms and enclosed spaces shall be based upon spaces enclosed by partitions. Where a fire-resistance rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered enclosing spaces and the rooms or spaces on both sides shall be considered one. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.
- d. Lobby areas in Group A-1, A-2 and A-3 occupancies shall not be less than Class B materials.
- e. Class C interior finish materials shall be permitted in places of assembly with an occupant load of 300 persons or less.
- f. For places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be permitted.
- g. Class B material is required where the building exceeds two stories.
- h. Class C interior finish materials shall be permitted in administrative spaces.
- $i. \ \ Class\ C\ interior\ finish\ materials\ shall\ be\ permitted\ in\ rooms\ with\ a\ capacity\ of\ four\ persons\ or\ less.$
- j. Class B materials shall be permitted as wainscotting extending not more than 48 inches above the finished floor in corridors and exit access stairways and ramps.
- k. Finish materials as provided for in other sections of this code.
- 1. Applies when protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- m. Where Group R-3 and R-4 occupancies are permitted in Section 903.2.8 to be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3, the requirements for a non-sprinklered building shall apply.

EFFECTIVE JULY 1, 2018

n. Where patients are restrained in psychiatric treatment areas of Group I-2, finishes shall comply with the requirements of a Group I-3.

11

П

803.13 Application of interior finish materials to fire-resistance-rated or noncombustible building elements. Where interior finish materials are applied on walls, ceilings or structural elements required to have a fire-resistance rating or to be of noncombustible construction, these finish materials shall comply with the provisions of this section.

803.13.1 Direct attachment and furred construction. Where walls and ceilings are required by any provision in this code to be of fire-resistance-rated or noncombustible construction, the interior finish material shall be applied directly against such construction or to furring strips not exceeding $1^3/_4$ inches (44 mm), applied directly against such surfaces.

803.13.1.1 Furred construction. If the interior finish material is applied to furring strips, the intervening spaces between such furring strips shall comply with one of the following:

- Be filled with material that is inorganic or noncombustible;
- Be filled with material that meets the requirements of a Class A material in accordance with Section 803.1.1 or 803.1.2; or
- 3. Be fireblocked at a maximum of 8 feet (2438 mm) in every direction in accordance with Section 718.

803.13.2 Set-out construction. Where walls and ceilings are required to be of fire-resistance-rated or noncombustible construction and walls are set out or ceilings are dropped distances greater than specified in Section 803.13.1, Class A finish materials, in accordance with Section 803.1.1 or 803.1.2, shall be used.

Exceptions:

- Where interior finish materials are protected on both sides by an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Where interior finish materials are attached to noncombustible backing or furring strips installed as specified in Section 803.13.1.1.

803.13.2.1 Hangers and assembly members. The hangers and assembly members of such dropped ceilings that are below the horizontal fire-resistance-rated floor or roof assemblies shall be of noncombustible materials. The construction of each set-out wall and horizontal fire-resistance-rated floor or roof assembly shall be of fire-resistance-rated construction as required elsewhere in this code.

Exception: In Type III and V construction, fire-retardant-treated wood shall be permitted for use as hangers and assembly members of dropped ceilings.

803.13.3 Heavy timber construction. Wall and ceiling finishes of all classes as permitted in this chapter that are installed directly against the wood decking or planking of Type IV construction or to wood furring strips applied directly to the wood decking or planking shall be fireblocked as specified in Section 803.13.1.1.

803.13.4 Materials. An interior wall or ceiling finish material that is not more than $^{1}/_{4}$ inch (6.4 mm) thick shall be applied directly onto the wall, ceiling or structural element without the use of furring strips and shall not be suspended away from the building element to which that finish material it is applied.

Exceptions:

- 1. Noncombustible interior finish materials.
- Materials that meet the requirements of Class A
 materials in accordance with Section 803.1.1 or
 803.1.2 where the qualifying tests were made
 with the material furred out from the noncombustible backing shall be permitted to be used with
 furring strips.
- 3. Materials that meet the requirements of Class A materials in accordance with Section 803.1.1 or 803.1.2 where the qualifying tests were made with the material suspended away from the noncombustible backing shall be permitted to be used suspended away from the building element.

SECTION 804 INTERIOR FLOOR FINISH

804.1 General. Interior floor finish and floor covering materials shall comply with Sections 804.2 through 804.4.2.

Exception: Floor finishes and coverings of a traditional type, such as wood, vinyl, linoleum or terrazzo, and resilient floor covering materials that are not comprised of fibers.

- **804.2 Classification.** Interior floor finish and floor covering materials required by Section 804.4.2 to be of Class I or II materials shall be classified in accordance with NFPA 253. The classification referred to herein corresponds to the classifications determined by NFPA 253 as follows: Class I, 0.45 watts/cm² or greater; Class II, 0.22 watts/cm² or greater.
- **804.3 Testing and identification.** Interior floor finish and floor covering materials shall be tested by an agency in accordance with NFPA 253 and identified by a hang tag or other suitable method so as to identify the manufacturer or supplier and style, and shall indicate the interior floor finish or floor covering classification in accordance with Section 804.2. Carpet-type floor coverings shall be tested as proposed for use, including underlayment. Test reports confirming the information provided in the manufacturer's product identification shall be furnished to the building official upon request.
- **804.4 Interior floor finish requirements.** Interior floor covering materials shall comply with Sections 804.4.1 and 804.4.2 and interior floor finish materials shall comply with Section 804.4.3.
 - **804.4.1 Test requirement.** In all other occupancies except Group 1-3 and Group 1-2 areas where patients are restrained, interior floor finish and interior floor covering materials shall comply with the requirements of the ASTM Standard E648, and having a specific optical density smoke rating not to exceed 450 per ASTM E662. For

Group I-3 occupancies and Group I-2 areas where patients are restrained, see Section 804.4.3.

804.4.2 Minimum critical radiant flux. In all occupancies, interior floor finish and floor covering materials in enclosures for stairways and ramps, exit passageways, corridors and rooms or spaces not separated from corridors by partitions extending from the floor to the underside of the ceiling shall withstand a minimum critical radiant flux. The minimum critical radiant flux shall not be less than Class I in Groups I-2 and *R-2.1* and not less than Class II in Groups A, B, E, H, *I-2.1*, I-4, M, R-1, R-2 and S. *For Group I-2 areas where patients are restrained, see Section 804.4.3.*

Exception: Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, Class II materials are permitted in any area where Class I materials are required, and materials complying with ASTM Standard E648, and having a specific optical density smoke rating not to exceed 450 per ASTM E662 are permitted in any area where Class II materials are required.

804.4.3 Group I-2 and Group I-3 Occupancy floor surfaces. Interior floor finish and floor coverings occupied by inmates or patients whose personal liberties are restrained shall be noncombustible.

Exception: Noncombustible floor finish and floor coverings in areas where restraint is not used may have carpet or other floor covering materials applied in areas protected by an automatic sprinkler system and meeting ASTM Standard E648, and having a specific optical density smoke rating not to exceed 450 per ASTM E662. The carpeting and carpet padding shall be tested as a unit in accordance with floor covering radiant panel test meeting class 1 and has a critical radiant flux limit of not less than 0.45 watt per centimeter square. The carpeting and padding shall be identified by a hang-tag or other suitable method as to manufacturer and style and shall indicate the classification of the material based on the limits set forth above.

SECTION 805 COMBUSTIBLE MATERIALS IN TYPES I AND II CONSTRUCTION

805.1 Application. Combustible materials installed on or embedded in floors of buildings of Type I or II construction shall comply with Sections 805.1.1 through 805.1.3.

Exception: Stages and platforms constructed in accordance with Sections 410.3 and 410.4, respectively.

805.1.1 Subfloor construction. Floor sleepers, bucks and nailing blocks shall not be constructed of combustible materials, unless the space between the fire-resistance-rated floor assembly and the flooring is either solidly filled with noncombustible materials or fire-blocked in accordance with Section 718, and provided

that such open spaces shall not extend under or through permanent partitions or walls.

805.1.2 Wood finish flooring. Wood finish flooring is permitted to be attached directly to the embedded or fire-blocked wood sleepers and shall be permitted where cemented directly to the top surface of fire-resistance-rated floor assemblies or directly to a wood subfloor attached to sleepers as provided for in Section 805.1.1.

805.1.3 Insulating boards. Combustible insulating boards not more than $^{1}/_{2}$ inch (12.7 mm) thick and covered with finish flooring are permitted where attached directly to a noncombustible floor assembly or to wood subflooring attached to sleepers as provided for in Section 805.1.1.

SECTION 806 DECORATIVE MATERIALS AND TRIM

[F] 806.1 General. Combustible decorative materials, other than decorative vegetation, shall comply with Sections 806.2 through 806.8.

[F] 806.2 Noncombustible materials. The permissible amount of noncombustible materials shall not be limited.

[F] 806.3 Combustible decorative materials. In other than Group I-3, curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall comply with Section 806.4 and shall not exceed 10 percent of the specific wall or ceiling area to which such materials are attached.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior finish shall comply with Section 803 and shall not be considered decorative materials or furnishings.

Exceptions:

- 1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.13 of this code.
- 2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and similar decorative materials suspended from walls or ceiling shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.
- 3. In Group B and M occupancies, the amount of combustible fabric partitions suspended from the

ceiling and not supported by the floor shall comply with Section 806.4 and shall not be limited.

- **[F] 806.4** Acceptance criteria and reports. Where required to exhibit improved fire performance, curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall be tested by an approved agency and *shall be flame resistant in accordance with the provisions set forth in CCR, Title 19, Division 1, Chapter 8.* Reports of test results shall be prepared in accordance with the test method used and furnished to the building official upon request.
- **[F] 806.5 Foam plastic.** Foam plastic used as trim in any occupancy shall comply with Section 2604.2.
- **[F] 806.6 Pyroxylin plastic.** Imitation leather or other material consisting of or coated with a pyroxylin or similarly hazardous base shall not be used in Group A occupancies.
- [F] 806.7 Interior trim. Material, other than foam plastic used as interior trim, shall have a minimum *Class B flame spread and 450 smoke-developed index in Group I-3 and for all other occupancies* Class C flame spread and smokedeveloped index when tested in accordance with ASTM E84 or UL 723, as described in Section 803.1.1. Combustible trim, excluding handrails and guardrails, shall not exceed 10 percent of the specific wall or ceiling area in which it is attached.
- **[F] 806.8 Interior floor-wall base.** Interior floor-wall base that is 6 inches (152 mm) or less in height shall be tested in accordance with Section 804.2 and shall be not less than Class II. Where a Class I floor finish is required, the floorwall base shall be Class I.

Exception: Interior trim materials that comply with Section 806.7.

SECTION 807 INSULATION

807.1 Insulation. Thermal and acoustical insulation shall comply with Section 720.

SECTION 808 ACOUSTICAL CEILING SYSTEMS

- **808.1** Acoustical ceiling systems. The quality, design, fabrication and erection of metal suspension systems for acoustical tile and lay-in panel ceilings in buildings or structures shall conform with generally accepted engineering practice, the provisions of this chapter and other applicable requirements of this code.
 - **808.1.1 Materials and installation.** Acoustical materials complying with the interior finish requirements of Section 803 shall be installed in accordance with the manufacturer's recommendations and applicable provisions for applying interior finish.

- **808.1.1.1 Suspended acoustical ceilings.** Suspended acoustical ceiling systems shall be installed in accordance with the provisions of ASTM C635 and ASTM C636
- **808.1.1.2** Fire-resistance-rated construction. Acoustical ceiling systems that are part of fire-resistance-rated construction shall be installed in the same manner used in the assembly tested and shall comply with the provisions of Chapter 7.

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

	1		1		нс		Ť	DSA		, 		HPD					I				
Adopting agency	BSC	BSC-CG	SFM	1		1/AC	AC		SS/CC	1	2		4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х	X	X		Х								
Adopt entire chapter as amended (amended sections listed below)			Х	x	х																
Adopt only those sections that are listed below						х	х													X	
Chapter / Section																					
902.1			Χ																		
Fire Appliance			Χ																		
Standpipe System, Classes of.																				Х	
903.2			Χ																		
903.2.1.2			Χ																		
903.2.1.3			Χ																		
903.2.3			Х																		
903.2.4.1			Х																		
903.2.5.4		<u> </u>	Х																		
903.2.6		<u> </u>	Х																		
903.2.6.1			Χ																		
903.2.6.2			Χ																		
903.2.7			Χ																		
903.2.8			Χ																		-
903.2.8.2			Χ																		
903.2.8.3			Χ																		
903.2.8.4			Χ																		
903.2.10			Χ																		
Table 903.2.11.6			Χ																		
903.2.13			Χ																		
903.2.14			Χ																		
903.2.14.1			Χ																		
903.2.14.2			Χ																		
903.2.15			Χ																		
903.2.15.1			Χ																		
903.2.16			Χ																		
903.2.16.1			Χ																		
903.2.17			Χ																		
903.2.17.1			Χ																		
903.2.17.2			Χ																		
903.2.17.2.1			Χ																		
903.2.17.2.2			Χ																		
903.2.17.2.3			Χ																		
903.2.17.2.4			Χ																		
903.2.17.2.5			Χ																		
903.2.17.2.6			Х																		
903.2.18			Χ																		
903.2.19			Χ																		
903.2.19.1			Χ																		
903.2.19.1.1			Χ																		
903.2.19.1.2			Х																		
903.2.20			Х																		
903.3			Χ																		

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS—continued

										_		- IPD							1	1	
Adopting agency	BSC	BSC-CG	SFM	1	HC 2	1/AC	AC	DS/	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Χ							Х	Х	Χ	Х		Χ								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sec-						Х	Х													Х	
tions that are listed below																					
Chapter / Section			.,																		<u> </u>
903.3.1.1			X																		<u> </u>
903.3.1.1.1			Х																		
903.3.1.2			Χ																		
903.3.1.3			Χ																		
903.3.2			Χ																		
903.3.5			Χ																		
903.3.9			Χ																		
903.4.2			Χ																		
903.4.3			Χ																		
904.5			Χ																		
904.6			Χ																		
904.7			Χ																		
904.8			Χ																		
904.9			Χ																		
904.10			Χ																		
904.11.3			Χ																		
904.12			Χ																		
904.13			Χ																		
904.13.2			Χ																		
905.2			Χ																		
905.3			Χ																		
905.3.1			Χ																		
905.3.9			Χ																		
905.3.10			Χ																		
905.3.11			Χ																		
905.3.11.1			Χ																		
905.3.11.2			Χ																		
905.4			Χ																		
905.5			Χ																		
905.7.2			Х																		
906.1			Χ																		
906.2			Χ																		
Table 906.3(1)			Х																		
906.3.2			Χ																		
Table 906.3(2)			Χ																		
906.3.4			Х																		
907.1.2			Χ																		
907.1.3			Χ																		
907.1.4			Х																		
907.1.5			Х																		<u> </u>
907.2			Χ																		
907.2.1			Χ																		
907.2.1.1			Χ																		
907.2.1.3			Χ																		
907.2.2			Χ																		T

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS—continued

	1	1		-	НС			DS/	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			HPD				1	_	ı		ı	Т
Adopting agency	BSC	BSC-CG	SFM	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х							X	X	X	X		X								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sections that are listed below						х	x													х	
Chapter / Section																					
907.2.2.2			Х																		
907.2.3			Х																		
907.2.3.1			Х																		
907.2.3.2			Х																		
907.2.3.3			Х																		
907.2.3.4			Х																		
907.2.3.5			Х																		
907.2.3.6	İ		Х																		
907.2.3.6.1			Х																		
907.2.3.6.2			Х																		
907.2.3.7			Х																		
907.2.3.8			Х																		
907.2.3.9			Х																		
907.2.3.9.1			Х																		
907.2.3.9.2			Х																		
907.2.3.10			Х																		
907.2.5.1			Х																		
907.2.6			Х																		
907.2.6.2			Х																		
907.2.6.2.1			Х																		
907.2.6.2.2			Х																		
907.2.6.3			Х																		
907.2.6.3.3			Х																		
907.2.6.3.4			Х																		
907.2.6.4			Х																		
907.2.9			Х																		
907.2.9.1			Х																		
907.2.9.4			Х																		
907.2.9.4.1			Х																		
907.2.11			Х																		
907.2.11.1			Х																		
907.2.11.2			Х				1														
907.2.11.2.1			Х				1														1
907.2.11.2.2			Х				1														
907.2.11.2.3			Х																		†
907.2.11.3			Х																		†
907.2.11.4			Х																		†
907.2.11.5			Х				1														1
907.2.11.6			Х				1														
907.2.11.8			Х																		†
907.2.11.9	1		Χ																		
907.2.13	1		Х																		t
907.2.13.1	1		Х																		
907.2.13.1.2			Х																		
907.2.24			Х																		

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS—continued

Adopting agency	Bec	BSC-CG	SEM		НС	D		DS			OSI	HPD		BSCC	DBh	AGP	DWP	CEC	CA	SL	SLC
		BSC-CG	SFIN	1	2	1/AC	AC		SS/CC		2	3		ВЗСС	DFN	AGN	DWA	CEC	CA	3L	SLC
Adopt entire chapter	Х							Х	Х	X	X		X								
Adopt entire chapter as																					
amended (amended			Х	X	X																
sections listed below)																					
Adopt only those sections						Х	X													Х	
that are listed below																					
Chapter / Section			.,																		
907.2.24.1 907.2.24.2			X																		
			X																		
907.2.24.3			X																		
907.2.24.4			Х																		
907.2.24.4.1			Х																		
907.2.24.4.2			Х																		
907.2.24.4.3			Х																		
907.2.25			Х																		
907.2.25.1			Х																		
907.2.25.2			Х																		
907.2.26			Χ																		
907.2.26.1			Χ																		
907.2.26.2			Χ																		
907.2.26.3			Χ																		
907.2.26.4			Χ																		
907.2.26.4.1			Χ																		
907.2.26.4.2			Χ																		
907.2.27			Χ																		
907.2.28			Χ																		
907.2.28.1			Χ																		
907.2.29			Χ																		
907.2.29.1			Χ																		
907.3			Χ																		
907.3.2			Χ																		
907.3.2.1			Χ																		
907.3.2.2			Χ																		
907.3.2.3			Χ																		
907.3.2.4			Х																		
907.4.2.1			X																		
907.4.2.2			X				Х														
907.4.2.7			X																		
907.5.2.1			X																		
907.5.2.1.3			X																		
907.5.2.2			X																		
907.5.2.2.4			X																		
			X				V														
907.5.2.3							X														
907.5.2.3.1			X				X														
907.5.2.3.2			X				Х														
Table 907.5.2.3.2			X	,,	.,	.,	X														ļ
907.5.2.3.3			X	Х	Х	Х	X														ļ
907.5.2.3.4			X				Х														ļ
907.5.2.4			Х																		
907.5.2.5			Χ																		
907.6.1.1			Х																		
907.6.4			Х																		
907.6.4.1			Χ																		

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS—continued

	1	TAPIE	1		НС			DS			OSI									1		1
Adopting agency	BSC	BSC-CG	SFM	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC	
Adopt entire chapter	Х							Х	Х	Х	Х		Х									1
Adopt entire chapter as amended (amended sections listed below)			х	х	x																	
Adopt only those sections that are listed below						х	х													х		
Chapter / Section																						
907.6.4.1.1			Х																			l
907.6.4.2			Х																			l
907.6.4.3			Х																			l
907.6.4.4			Х																			l
907.6.6			Х																			
907.6.6.3			Х																			
908.2			Х																			
909.5.3			Х																			1 <
909.5.3.1			Х																			
909.12.1			Х																			
909.13.1				Х	Х																	l
909.16			Х																			
909.16.1			Х																			
909.18.9	1		Х																			
909.20			Х																			' '
909.20.1			Х																			l
909.20.2.2			X																			
909.20.2.3			X																			1 ' '
909.20.2.4			X																			l
909.20.2.5			X																			l
909.20.3			X																			l
909.20.3.2			Х																			
909.20.4			Х																			
909.20.4.1			X																			
909.20.4.2			X																			l
909.20.4.3			X																			l
909.20.4.3.1			X																			l
909.20.4.3.2			X																			l
909.20.4.3.3			X																			l
910.2.1			X																			l
910.3.1			X																			l
911.1			X	 	 				-												\vdash	
911.1.6	1		X	-			1							 							\vdash	
911.1.7			X	 	 				-												\vdash	11
912.4			X	 	 				-												\vdash	
912.6	1		X					 													\vdash	
913.6	1		X					 													\vdash	l
915.1	1		X	~	Х		1	}						-							┼	l
915.1.1	1		X	^	^		1	}						-							┼	l
915.1.1	1		X	Х	Х			-						-							\vdash	l
915.2.1	-		X	X					 					1							\vdash	
	1					-	-							-	-			-			$\vdash \vdash$	l
915.4			Х	Χ	Х																	i

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 9 – FIRE PROTECTION SYSTEMS—continued

Adopting agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				D000	DDII	400	DWD	CEC	C A	CI	CI C
				1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC DP	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х	X	X		X								
Adopt entire chapter as amended (amended sections listed below)			х	х	х																
Adopt only those sections that are listed below						х	Х													X	
Chapter / Section																					
915.4.1, Exceptions 2 and 3			Х	Х	Х																
915.4.2			Х	Х	Х																
915.4.3			Х	Х	Χ																
915.4.4			Х	Х	Χ																
915.5.2			Х	Х	Χ																
915.5.3			Х	Х	Χ																
915.6			Х	Х	Х																
915.7			Х	Х	Х	Х															
916			Х													,					

The state agency does not adopt sections identified by the following symbol: †

11

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

[F] 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for fire areas containing Group A-1 occupancies and intervening floors of the building where one of the following conditions exists:

- 1. The fire area exceeds 12,000 square feet (1115 m²).
- The fire area has an occupant load of 300 or more.
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
- 4. The fire area contains a multitheater complex.

[F] 903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for fire areas containing Group A-2 occupancies and intervening floors of the building where one of the following conditions exists:

- 1. The fire area exceeds 5,000 square feet (464.5 m²);
- 2. The fire area has an occupant load of 100 or more; or
- The fire area is located on a floor other than a level of exit discharge serving such occupancies.
- 4. The structure exceeds 5,000 square feet (465 m²), contains more than one fire area containing a Group A-2 occupancy, and is separated into two or more buildings by fire walls of less than fourhour fire-resistance rating without openings.

[F] 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for fire areas containing Group A-3 occupancies and intervening floors of the building where one of the following conditions exists:

- 1. The fire area exceeds 12,000 square feet (1115 m²):
- 2. The fire area has an occupant load of 300 or more; or
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
- 4. The structure exceeds 12,000 square feet (1155 m²), contains more than one fire area containing exhibition and display rooms, and is separated into two or more buildings by fire walls of less than four-hour fire-resistance rating without openings.

[F] 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for fire areas containing Group A-4 occupancies and intervening floors of the building where one of the following conditions exists:

- 1. The fire area exceeds 12,000 square feet (1115 m²);
- The fire area has an occupant load of 300 or more; or
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

[F] 903.2.1.5 Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 1,000 square feet (93 m²).

[F] 903.2.1.6 Assembly occupancies on roofs. Where an occupied roof has an assembly occupancy with an occupant load exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the level of exit discharge shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Exception: Open parking garages of Type I or Type II construction.

903.2.1.7 Multiple fire areas. An automatic sprinkler system shall be provided where multiple fire areas of Group A-1, A-2, A-3 or A-4 occupancies share exit or exit access components and the combined occupant load of theses fire areas is 300 or more.

[F] 903.2.2 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

- Four or more care recipients are incapable of selfpreservation, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.
- 2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest level of exit discharge, including the level of exit discharge.

[F] 903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

- 1. Throughout all Group E fire areas greater than 12,000 square feet (1115 m²) in area.
- 2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

- In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in quantities not exceeding the maximum allowable quantity are used or stored.
- 4. Throughout any Group E structure greater than 12,000 square feet (1115 m²) in area, which contains more than one fire area, and which is separated into

- two or more buildings by fire walls of less than four hour fire resistance rating without openings.
- 5. For public school state funded construction projects see Section 903.2.19.
- 6. For public school campuses: Kindergarten through 12th grade, see Section 903.2.20.
- [F] 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:
 - 1. A Group F-1 fire area exceeds 12,000 square feet (1115 m^2) .
 - 2. A Group F-1 fire area is located more than three stories above grade plane.
 - 3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
 - A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).
 - **[F] 903.2.4.1 Woodworking operations.** An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 2,500 square feet (232 m²) in area which generate finely divided combustible waste or use finely divided combustible materials.
 - [SFM] A fire wall of less than four-hour fire-resistance rating without openings, or any fire wall with openings, shall not be used to establish separate fire areas.
- **[F] 903.2.5 Group H.** Automatic sprinkler systems shall be provided in high-hazard occupancies as required in Sections 903.2.5.1 through 903.2.5.3.
 - **[F] 903.2.5.1 General.** An automatic sprinkler system shall be installed in Group H occupancies.
 - **[F] 903.2.5.2 Group H-5 occupancies.** An automatic sprinkler system shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall be not less than that required by this code for the occupancy hazard classifications in accordance with Table 903.2.5.2.

Where the design area of the sprinkler system consists of a corridor protected by one row of sprinklers, the maximum number of sprinklers required to be calculated is 13.

[F] TABLE 903.2.5.2 GROUP H-5 SPRINKLER DESIGN CRITERIA

LOCATION	OCCUPANCY HAZARD CLASSIFICATION
Fabrication areas	Ordinary Hazard Group 2
Service corridors	Ordinary Hazard Group 2
Storage rooms without dispensing	Ordinary Hazard Group 2
Storage rooms with dispensing	Extra Hazard Group 2
Corridors	Ordinary Hazard Group 2

- [F] 903.2.5.3 Pyroxylin plastics. An automatic sprinkler system shall be provided in buildings, or portions thereof, where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg).
- [F] 903.2.5.4 Group H occupancies located above the 10th story. The fire sprinkler system shall be designed and zoned to provide separate indication upon waterflow for each side of the 2-hour fire-smoke barrier above the 10th story.
- **[F] 903.2.6 Group I.** An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

- 1. Those areas exempted by Section 407.6 of the California Building Code.
- 2. Pursuant to Health and Safety Code Section 13113(d), Group I-2 occupancies, or any alterations thereto, located in Type IA construction in existence on March 4, 1972.
- [F] 903.2.6.1 Group I-2. In an existing, unsprinklered Group I-2, nurses' station open to fire-resistive exit access corridors shall be protected by an automatic sprinkler system located directly above the nurses' station. It shall be permitted to connect the automatic sprinkler system to the domestic water service.
- [F] 903.2.6.2 Group I-3. Every building, or portion thereof, where inmates or persons are in custody or restrained shall be protected by an automatic sprinkler system conforming to NFPA 13. The main sprinkler control valve or valves and all other control valves in the system shall be locked in the open position and electrically supervised so that at least an audible and visual alarm will sound at a constantly attended location when valves are closed. The sprinkler branch piping serving cells may be embedded in the concrete construction.
- **[F] 903.2.7 Group M.** An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
 - A Group M fire area exceeds 12,000 square feet (1115 m²).
 - 2. A Group M fire area is located more than three stories above grade plane.
 - 3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
 - 4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).
 - 5. The structure exceeds 24,000 square feet (465 m²), contains more than one fire area containing a Group M occupancy, and is separated into two or more buildings by fire walls of less than 4-hour fire resistance rating without openings.

308

[F] 903.2.11.6 Other required suppression systems. In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.11.6 require the installation of a fire suppression system for certain buildings and areas.

[F] TABLE 903.2.11.6
ADDITIONAL REQUIRED SUPPRESSION SYSTEMS

SECTION	SUBJECT							
402.5, 402.6.2	Covered and open mall buildings							
403.3	High-rise buildings and Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access							
404.3	Atriums							
405.3	Underground structures							
407.6	Group I-2							
410.7	Stages							
411.4	Special amusement buildings							
412.3.6	Airport traffic control towers							
412.4.6, 412.4.6.1, 412.6.5	Aircraft hangars							
415.11.11	Group H-5 HPM exhaust ducts							
416.5	Flammable finishes							
417.4	Drying rooms							
419.5	Live/work units							
424.3	Children's play structures							
440	Horse racing stables							
441	Pet kennels							
449	Public libraries							
507	Unlimited area buildings							
509.4	Incidental uses							
1029.6.2.3	Smoke-protected assembly seating							
CFC	Sprinkler system requirements as set forth in Section 903.2.11.6 of the <i>California Fire Code</i>							

For SI: 1 cubic foot = 0.23 m^3 .

[F] 903.2.12 During construction. Automatic sprinkler systems required during construction, alteration and demolition operations shall be provided in accordance with Chapter 33 of the *California Fire Code*.

903.2.13 Reserved.

903.2.14 Motion picture and television production studio sound stages, approved production facilities and production locations.

903.2.14.1 Existing sound stages and approved production facilities. All existing sound stages and approved production facilities equipped with an automatic fire sprinkler system shall be maintained in accordance with the provisions of California Fire Code Chapter 9.

903.2.14.2 New sound stages. All new sound stages shall be equipped with an approved automatic fire

sprinkler system. The system shall be installed in accordance with the provisions of the California Fire Code Chapter 9 and shall meet the minimum design requirements of an Extra Hazard, Group 2 system.

903.2.15 Automatic sprinkler system—existing high-rise buildings. See California Fire Code Chapter 11 and California Existing Building Code.

903.2.15.1 Existing Group R-1 and R-2 high-rise buildings fire-extinguishing systems. See California Fire Code Chapter 11 and California Existing Building Code.

903.2.16 Group L occupancies. An automatic sprinkler system shall be installed throughout buildings housing Group L occupancies. Sprinkler system design for research laboratories and similar areas of a Group L occupancy shall not be less than that required for Ordinary Hazard Group 2 with a design area of not less than 3,000 square feet (279 m²).

In mixed occupancies, portions of floors or buildings not classified as Group L occupancies shall be provided with sprinkler protection designed of not less than that required for Ordinary Hazard Group 1 with a design area of not less than 3,000 square feet (279 m²).

903.2.16.1 Group L occupancies located above the 10th story. The automatic sprinkler system shall be designed and zoned to provide separate indication upon water-flow for each side of the 2-hour fire-smoke barrier above the 10th story.

903.2.17 Fixed guideway and passenger rail transit systems.

903.2.17.1 Automatic sprinkler system. An automatic sprinkler system shall be installed in all stations of fixed guideway transit systems.

Exceptions:

- 1. Guideways when the closest sprinkler heads to the guideway are within 3 feet (914 mm) of the edge, over the platform, and spaced 6 feet (1829 mm) on center parallel to the guideway
- 2. Station agent booths not exceeding 150 square feet (13.9 m²) in area, when provided with an approved smoke detector connected to the building fire alarm system
- 3. Power substations
- 4. Machinery rooms, electrical rooms and train control rooms protected by an approved automatic fixed fire-extinguishing system
- 5. Open stations
- 6. Station platform areas open to three or more sides

311

903.2.17.2 Station guideway deluge system. Underground stations and stations in open cuts with walls 5 feet (1524 mm) above he top of the running rail and with a raised platform shall be provided with an undervehicle guideway manually activated deluge sprinkler system. In open cut stations, such system shall be pro-

vided in guideways which are situated between a raised platform edge and a retaining wall.

- 903.2.17.2.1 Systems shall be provided along the entire length of track at each station platform.
- 903.2.17.2.2 Deluge nozzles with caps shall be located in the approximate center of track with spacing designed to completely wet the undersides of the vehicle at the applied density.
- **903.2.17.2.3** System density shall be a minimum of 0.19 gallon per minute (gpm) per square foot (0.72 L/m per m^2) for the design area. When more than one zone is provided, two adjacent zones are required to be considered operating for calculating purposes.
- 903.2.17.2.4 Deluge systems shall be directly connected to a water supply capable of supplying the required flow rate for a minimum 30-minute duration.
- 903.2.17.2.5 Controls or manually operable valves shall be in a location acceptable to the Fire Code Official. All deluge systems shall be monitored by the station fire alarm system.
- 903.2.17.2.6 Each valve shall be monitored by a separate circuit. The alarm panel shall be located in an area normally occupied by station personnel or signals shall be transmitted to the operations control center (OCC).
- 903.2.18 Group U private garages and carports accessory to Group R-3 occupancies. Carports with habitable space above and attached garages, accessory to Group R-3 occupancies, shall be protected by residential fire sprinklers in accordance with this section. Residential fire sprinklers shall be connected to, and installed in accordance with, an automatic residential fire sprinkler system that complies with Section R313 of the California Residential Code or with NFPA 13D. Fire sprinklers shall be residential sprinklers or quick-response sprinklers, designed to provide a minimum density of 0.05 gpm/ft² (2.04 mm/min) over the area of the garage and/or carport, but not to exceed two sprinklers for hydraulic calculation purposes. Garage doors shall not be considered obstructions with respect to sprinkler placement.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing carports and/or garages that do not have an automatic residential fire sprinkler system installed in accordance with this section.

- 903.2.19 Public school state funded construction projects for kindergarten through 12th grade automatic sprinkler system requirements.
 - 903.2.19.1 New public school campus. An automatic sprinkler system shall be provided in all occupancies. The provisions of this section shall apply to any public school project consisting of one or more buildings on a new school campus and receiving state funds pursuant to Leroy F. Greene School Facilities Act of 1998, California Education Code Sections 17070.10 through

17079. For purposes of this section, new campus refers to a school site, where an application for construction of original buildings was made to DSA on or after July 1, 2002.

An automatic fire sprinkler system is not required in locations identified in Section 903.2.20.

- 903.2.19.1.1 Sprinklers shall be installed in spaces where the ceiling creates a "ceiling-plenum" or space above the ceiling is utilized for environmental air.
- 903.2.19.1.2 Fire-resistive substitution for new campus. A new public school campus shall be entitled to include in the design and construction documents all of the applicable fire-resistive construction substitutions as permitted by this code.
- 903.2.20 Public school campuses. An automatic fire sprinkler system is not required to be provided in the following locations on Kindergarten through 12th grade.
 - 1. A relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. Also see CCR, Title 24, Part 1, California Administrative Code, Section 4-314 for definition of relocatable building.
 - 2. Detached buildings designed and used for noninstructional purposes that meet the applicable requirements for that occupancy. Buildings would include but not be limited to:

Concession Stand Press Box Restroom Facilities Shade Structure Snack Bar Storage Building Ticket Booth

- **[F] 903.3 Installation requirements.** Automatic sprinkler systems shall be designed and installed in accordance with Sections 903.3.1 through *903.3.9*.
 - **[F] 903.3.1 Standards.** Sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1 unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable.
 - **[F] 903.3.1.1 NFPA 13 sprinkler systems.** Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 as amended in Chapter 35 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.2.
 - **[F] 903.3.1.1.1 Exempt locations.** *In other than Group I-2, I-2.1 and I-3 occupancies* automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will

[F] 907.2.2.1 Ambulatory care facilities. Fire areas containing ambulatory care facilities shall be provided with an electronically supervised automatic smoke detection system installed within the ambulatory care facility and in public use areas outside of tenant spaces, including public corridors and elevator lobbies.

Exception: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, provided the occupant notification appliances will activate throughout the notification zones upon sprinkler waterflow.

907.2.2.2 Group B Educational facilities. Every Group B building used for educational purposes shall be provided with a manual or automatic fire alarm system. This provision shall apply to, but shall not necessarily be limited to, every community college and university.

Exception: Privately owned trade or vocational schools or any firm or company which provides educational facilities and instructions for its employees.

[F] 907.2.3 Group E. An automatic fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E occupancies with an occupant load of 50 or more persons or containing more than one classroom or one or more rooms used for Group E or I-4 day care purposes in accordance with this section. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. One additional manual fire alarm box shall be located at the administration office or location approved by the AHJ.

Exceptions:

>

- 1. For public school state funded construction projects see Section 907.2.29.
- 2. For public schools see Section 907.2.3.7.
- 3. For private schools see Section 907.2.3.8.

907.2.3.1 System connection. Where more than one fire alarm control unit is used at the school campus, they shall be interconnected and shall operate all notification appliances.

Exception: Interconnection of fire alarm control units is not required when all the following are provided:

- 1. Buildings that are separated a minimum of 20 feet (6096 mm) and in accordance with the California Building Code; and
- 2. There is a method of two way communication between each classroom and the school administrative office approved by the fire enforcing agency; and
- 3. A method of manual activation of each fire alarm system is provided.

907.2.3.2 Assemblies located within a Group E occupancy. Assembly occupancies with an occupant load of less than 1,000 and located within a Group E occupancy campus or building shall be provided with a fire alarm system as required for the Group E occupancy.

907.2.3.3 Notification. The fire alarm system notification shall comply with the requirements of Section 907.5.

907.2.3.4 Annunciation. Annunciation of the fire alarm system shall comply with the requirements of Section 907.6.3.1.

907.2.3.5 Monitoring. School fire alarm systems shall be monitored in accordance with Section 907.6.6.2.

907.2.3.6 Automatic fire alarm system. Automatic detection shall be provided in accordance with this section.

907.2.3.6.1 Smoke detectors. Smoke detectors shall be installed at the ceiling of every room and in "ceiling-plenums" utilized for environmental air. Where the ceiling is attached directly to the underside of the roof structure, smoke detectors shall be installed on the ceiling only.

Exception: Where the environment or ambient conditions exceed smoke detector installation guidelines; heat detectors or fire sprinklers shall be used.

907.2.3.6.2 Heat detectors. Heat detectors shall be installed in combustible spaces where sprinklers or smoke detectors are not installed.

907.2.3.7 Public school campuses. An automatic fire alarm system in compliance with Section 907.2.3 shall be provided in new buildings for all occupancies on Kindergarten through 12th grade public school campuses.

Exceptions:

- 1. A manual fire alarm system may be provided for a relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. Also see CCR, Title 24, Part 1, California Administrative Code, Section 4-314 for definition of relocatable building.
- 2. A fire alarm system is not required for detached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include but not be limited to a:

Concession Stand Press Box Restroom Facility Shade Structure Snack Bar Storage Building Ticket Booth П

907.2.3.8 Private schools. An automatic fire alarm system shall be provided in new buildings of private schools.

Exception: Automatic detection devices are not required where an approved automatic sprinkler system is installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate on sprinkler water flow and manual activation is provided from a normally occupied location.

907.2.3.9 Day-care, Group E.

907.2.3.9.1 An automatic fire alarm system shall be provided in all buildings used as or containing a Group E day-care.

Exception: Automatic detection devices are not required where an approved automatic sprinkler system is installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate on sprinkler water flow and manual activation is provided from a normally occupied location.

907.2.3.9.2 Smoke detectors shall be installed in every room used for sleeping or napping.

907.2.3.10 Day-care, Group E or Group I-4 located on a public school campus. An automatic fire alarm system shall be provided in all buildings used as or containing a Group E or Group I-4 day-care.

[F] 907.2.4 Group F. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group F occupancies where both of the following conditions exist:

- 1. The Group F occupancy is two or more stories in height; and
- The Group F occupancy has a combined occupant load of 500 or more above or below the lowest level of exit discharge.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler waterflow.

[F] 907.2.5 Group H. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group H-5 occupancies and in occupancies used for the manufacture of organic coatings. An automatic smoke detection system shall be installed for highly toxic gases, organic peroxides and oxidizers in accordance with Chapters 60, 62 and 63, respectively, of the *California Fire Code*.

907.2.5.1 Group H occupancies located above the 10th story. Manual fire alarm boxes shall be required on each side of the 2-hour fire-smoke barrier and at each exit above the 10th story.

[F] 907.2.6 Group I. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I occupancies. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2 and 907.2.6.3.3.

Exceptions:

- 1. Large family day-care.
- 2. Occupant notification systems are not required to be activated where private mode signaling installed in accordance with NFPA 72 is approved by the fire code official and staff evacuation responsibilities are included in the fire safety and evacuation plan required by Section 404 of the *California Fire Code*.

907.2.6.1 Reserved.

[F] 907.2.6.2 Group I-2 and Group I-2.1. A manual and automatic fire alarm system shall be installed in Group I-2 and I-2.1 occupancies. Where automatic fire suppression systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

Exception: Where an entire facility is used for the housing of persons, none of whom are physically or mentally handicapped or nonambulatory, and are between the ages of 18 and 64, the buildings or structures comprising such facility shall be exempt from the provisions of this subsection relating to the installation of an automatic fire alarm system.

907.2.6.2.1 Notification. The fire alarm notification system shall be in accordance with Section 907.5.2.5.

907.2.6.2.2 Automatic fire detection. Smoke detectors shall be provided in accordance with this section

1. In patient and client sleeping rooms. Actuation of such detectors shall cause a visual display on the corridor side of the room in which the detector is located and shall cause an audible and visual alarm at the respective nurses' station. A nurse call system listed for this function is an acceptable means of providing the audible and visual alarm at the respective nurses' station and corridor room display. Operation of the smoke detector shall not include any alarm verification feature.

Exception: In patient and client rooms equipped with existing automatic door closers having integral smoke detector, the integral detector is allowed to substitute for the room smoke detector, provided it meets all the required alerting functions.

- 2. Group I-2 nurses' stations. A minimum of one (1) smoke detector shall be installed at the nurses' station and centrally located.
- 3. In waiting areas and corridors onto which they open, in the same smoke compartment, in accordance with Section 407.2.1.
- 4. In areas where patients are restrained, smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces of smoke compartments and in adjacent smoke compartments where occupants of those compartments utilize the same means of egress.
- **[F] 907.2.6.3 Group I-3 occupancies.** Group I-3 occupancies shall be equipped with a manual fire alarm system and automatic smoke detection system installed for alerting staff.

Exception: An automatic smoke detection system is not required within temporary holding cells.

- **[F] 907.2.6.3.1 System initiation.** Actuation of an automatic fire-extinguishing system, automatic sprinkler system, a manual fire alarm box or a fire detector shall initiate an approved fire alarm signal which automatically notifies staff.
- **[F] 907.2.6.3.2 Manual fire alarm boxes.** Manual fire alarm boxes are not required to be located in accordance with Section 907.4.2 where the fire alarm boxes are provided at staff-attended locations having direct supervision over areas where manual fire alarm boxes have been omitted.
 - [F] 907.2.6.3.2.1 Manual fire alarm boxes in detainee areas. Manual fire alarm boxes are allowed to be locked in areas occupied by detainees, provided that staff members are present within the subject area and have keys readily available to operate the manual fire alarm boxes.
- **[F] 907.2.6.3.3 Automatic smoke detection system.** An automatic smoke detection system shall be installed throughout resident housing areas, including sleeping units and contiguous day rooms, group activity spaces and other common spaces normally accessible to *inmates*.

Exceptions:

1. Other approved smoke detection arrangements may be used to prevent damage or tampering or for other purposes provided the function of detecting any fire is fulfilled and the location of the detectors is such that the speed of detection will be equivalent to that provided by the spacing and location required in accordance with NFPA 72 as referenced in Chapter 35. This may include the location of detectors in return air ducts from cells, behind grilles or in other locations. Spot type, combination duct and open area smoke detectors

- may be used when located not more than 14 inches (356mm) from the return air grill. For initiation and annunciation purposes, these detectors may be combined in groups of four. The fire code official having jurisdiction, however, must approve the proposed equivalent performance of the design.
- 2. For detention housing and/or mental health housing area(s), including correctional medical and mental health uses, automatic smoke detection system in sleeping units shall not be required when all of the following conditions are met:
 - 2.1. All rooms, including the inmate cells are provided with an automatic sprinkler system in accordance with Section 903.3.1.1.
 - 2.2. Building is continuously staffed by a correctional officer at all times.
- 3. Smoke detectors are not required to be installed in inmate cells with two or fewer occupants in detention facilities which do not have a correctional medical and mental health use.
- 4. Smoke detectors are not required to be installed in inmate day rooms of detention facilities where 24-hour direct visual supervision is provided by a correctional officer(s) and a manual fire alarm box is located in the control room.
- 907.2.6.3.4 System annunciation. A staff alerting fire alarm shall sound at all staff control stations on the floor of activation and an audible and visual signal shall be indicated on an annunciator at the facility control center upon activation of any automatic extinguishing system, automatic detection system, or any smoke detector or manual actuating or initiating device. In addition, where there are staff-control stations on the floor, an audible, visual and manual alarm shall be located in each staff control station.

Fire and trouble signals of fire alarm systems and sprinkler water-flow and supervisory signals of extinguishing systems shall be annunciated in an area designated as the facility control center which shall be constantly attended by staff personnel. All such signals shall produce both an audible signal and visual display at the facility control center indicating the building, floor zone or other designated area from which the signal originated in accordance with Section 907.6.4.

All local detention facilities within the scope of Section 6031.4 of the Penal Code shall have a automatic smoke detection system. A manual fire alarminitiating device shall be installed in all guard control stations and shall be capable of alerting personnel in a central control point to the presence of fire or smoke within the facility.

907.2.6.4 Large family day-care. Every large family day-care home shall be provided with at least one manual fire alarm box at a location approved by the authority having jurisdiction. Such device shall actuate a fire alarm signal, which shall be audible throughout the facility at a minimum level of 15 dB above ambient noise level. These devices need not be interconnected to any other fire alarm device, have a control unit or be electrically supervised or provided with emergency power. Such device or devices shall be attached to the structure and must be a device that is listed and approved by the Office of the State Fire Marshal.

[F] 907.2.7 Group M. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group M occupancies where one of the following conditions exists:

- 1. The combined Group M occupant load of all floors is 500 or more persons.
- 2. The Group M occupant load is more than 100 persons above or below the lowest level of exit discharge.

Exceptions:

- 1. A manual fire alarm system is not required in covered or open mall buildings complying with Section 402.
- Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will automatically activate throughout the notification zones upon sprinkler waterflow.

[F] 907.2.7.1 Occupant notification. During times that the building is occupied, the initiation of a signal from a manual fire alarm box or from a waterflow switch shall not be required to activate the alarm notification appliances when an alarm signal is activated at a constantly attended location from which evacuation instructions shall be initiated over an emergency voice/alarm communication system installed in accordance with Section 907.5.2.2.

[F] 907.2.8 Group R-1. Fire alarm systems and smoke alarms shall be installed in Group R-1 occupancies as required in Sections 907.2.8.1 through 907.2.8.3.

[F] 907.2.8.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-1 occupancies.

Exceptions:

 A manual fire alarm system is not required in buildings not more than two stories in height where all individual sleeping units and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by at least 1-hour fire partitions and

- each individual sleeping unit has an exit directly to a public way, egress court or yard.
- Manual fire alarm boxes are not required throughout the building when all of the following conditions are met:
 - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2;
 - 2.2. The notification appliances will activate upon sprinkler waterflow; and
 - 2.3. At least one manual fire alarm box is installed at an approved location.

[F] 907.2.8.2 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior corridors serving sleeping units.

Exception: An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

[F] 907.2.8.3 Smoke alarms. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.11.

[F] 907.2.9 Group R-2 *and R-2.1.* Fire alarm systems and smoke alarms shall be installed in Group R-2 *and R-2.1* occupancies as required in Sections 907.2.9.1 *and* 907.2.9.4.

- **[F] 907.2.9.1 Manual fire alarm system.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where:
 - Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge;
 - Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit; or
 - 3. The building contains more than 16 dwelling units or sleeping units.
 - 4. Congregate residences with more than 16 occupants.

Exceptions:

 A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, egress court or yard. alarm boxes as permitted by the enforcing agency. Such devices shall provide two-way communication between the operations control center and each device. Such devices shall be located as required for manual fire alarm boxes, and shall be distinctly identified by signs, coloring or other means acceptable to the enforcing agency.

4. Automatic smoke detectors in all ancillary spaces.

Exceptions:

- 1. Ancillary spaces protected by an approved fixed automatic extinguishing system; or
- 2. Ancillary spaces protected by quickresponse sprinklers.
- 5. Automatic control of exiting components.
- 907.2.26.3 Emergency voice/alarm communication system. Each station shall be provided with a an emergency voice/alarm communication system capable of transmitting voice, recorded or electronically generated textual messages to all areas of the station. The system(s) shall be configured such that the messages can be initiated from either the Emergency Management Panel (EMP) or the operations control center.
- 907.2.26.4 Emergency telephones. A dedicated twoway emergency communication phone system designed and installed in accordance with NFPA 72 shall be provided in all underground stations to facilitate direct communications for emergency response between remote locations and the EMP.
 - 907.2.26.4.1 Remote emergency phones shall be located at ends of station platforms, each hose outlet connection and station valve rooms.
 - 907.2.26.4.2 Provisions shall be made in the design of this two-way emergency communication phone system for extensions of the system to the next passenger station or guideway portal.
- **907.2.27 Winery caves.** An approved manual fire alarm system conforming to the provisions of Section 907.2 shall be provided in all Type 3 winery caves.
- 907.2.28 Group L. A manual fire alarm system shall be installed throughout buildings containing Group L occupancies. When Group L occupancies are located in mixed use buildings, at least one manual fire alarm box shall be located in the Group L occupancy.
 - 907.2.28.1 Group L occupancies located above the 10th story. Manual fire alarm boxes shall be required on each side of the 2-hour fire-smoke barrier and at each exit above the 10th story.
- 907.2.29 Public school state funded construction projects for kindergarten through 12th grade automatic fire alarm system requirements.

existing public school campus. An automatic fire alarm system shall be provided for all portions within the scope of an alteration project. The provisions of this section shall apply to any public school project on an existing campus and receiving state funds pursuant to Leroy F. Green, School Facilities Act of 1998, California Education Code Sections 17070.10 through 17079. For purposes of this section, an existing campus refers to a school site, where an application for construction of original buildings was made to DSA prior to July 1, 2002.

Exceptions:

- 1. A manual fire alarm system may be provided for a construction project that has an estimated total cost of less than \$200,000.
- 2. A manual fire alarm system may be provided for a relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. See California Administrative Code, Section 4-314 for definition of relocatable building.
- 3. A fire alarm system is not required for detached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include, but not be limited to:

Concession Stand Press Box Restroom Facilities Shade Structure Snack Bar Storage Building Ticket Booth

- **[F] 907.3 Fire safety functions.** Automatic fire detectors utilized for the purpose of performing fire safety functions shall be connected to the building's fire alarm control unit where a fire alarm system is *installed*. Detectors shall, upon actuation, perform the intended function and activate the alarm notification appliances or activate a visible and audible supervisory signal at a constantly attended location. In buildings not equipped with a fire alarm system, the automatic fire detector shall be powered by normal electrical service and, upon actuation, perform the intended function. The detectors shall be located in accordance with NFPA 72.
 - [F] 907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is required by Section 907.2. Activation of a duct smoke detector shall initi-

>

ate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the *California Mechanical Code*. In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal and not as a fire alarm. They shall not be used as a substitute for required open area detection.

Exceptions:

- The supervisory signal at a constantly attended location is not required where duct smoke detectors activate the building's alarm notification appliances.
- 2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.
- **907.3.2 Delayed egress locks.** Where delayed egress locks or devices are installed on means of egress doors in accordance with Section 1010.1.9.7, an automatic smoke detection system shall be installed as required by that section *and Section 1010.1.9.7*.
 - 907.3.2.1 In other than Groups I, R-2.1 and R-4 occupancies for single-story building, smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces. For multiple-story buildings, smoke detectors shall be installed throughout all occupied areas and mechanical/electrical spaces for the story where delayed egress devices are installed. Additional detectors are required on adjacent stories where occupants of those stories utilize the same means of egress.

Exception: Refer to Section 907.3.2.4 for Group A courthouse occupancies.

- 907.3.2.2 For Group I and R-2.1 occupancies. Smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces of smoke-compartments where delayed egress devices are installed. Additional detectors are required in adjacent smoke-compartments where occupants of those compartments utilize the same means of egress.
- 907.3.2.3 For Group R-4. Occupancies licensed as residential care facilities for the elderly, and housing clients with Alzheimer's disease or dementia residential facilities, smoke detectors shall be installed at ceilings throughout all occupiable rooms and areas and mechanical/electrical rooms and spaces.
- 907.3.2.4 For Group A Courthouse occupancies. An approved automatic smoke detection system shall be installed at ceilings in all occupied corridors and

- mechanical/electrical spaces of smoke-compartments where delayed egress devices are installed.
- **[F] 907.3.3 Elevator emergency operation.** Automatic fire detectors installed for elevator emergency operation shall be installed in accordance with the provisions of *California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders* and NFPA 72.
- **[F] 907.3.4 Wiring.** The wiring to the auxiliary devices and equipment used to accomplish the above fire safety functions shall be monitored for integrity in accordance with NFPA 72.
- **[F] 907.4 Initiating devices.** Where manual or automatic alarm initiation is required as part of a fire alarm system, the initiating devices shall be installed in accordance with Sections 907.4.1 through 907.4.3.1.
 - **[F] 907.4.1 Protection of fire alarm control unit.** In areas that are not continuously occupied, a single smoke detector shall be provided at the location of each fire alarm control unit, notification appliance circuit power extenders, and supervising station transmitting equipment.

Exception: Where ambient conditions prohibit installation of a smoke detector, a heat detector shall be permitted.

- **[F] 907.4.2 Manual fire alarm boxes.** Where a manual fire alarm system is required by another section of this code, it shall be activated by fire alarm boxes installed in accordance with Sections 907.4.2.1 through 907.4.2.6.
 - **[F] 907.4.2.1 Location.** Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each exit. In buildings not protected by an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the exit access travel distance to the nearest box does not exceed 200 feet (60 960 mm).

Exception: When individual dwelling units are served by a single exit stairway, additional boxes at other than the ground floor may be omitted.

- **907.4.2.2 Height.** The height of the manual fire alarm boxes shall be not less than 42 inches (1067 mm) and a not more than 48 inches (1219 mm) measured vertically, from the floor level to the *highest point of the* activating handle or lever of the box. *Manual fire alarm boxes shall also comply with Section 11B-309*.
- **[F] 907.4.2.3 Color.** Manual fire alarm boxes shall be red in color.
- **[F] 907.4.2.4 Signs.** Where fire alarm systems are not monitored by a supervising station, an approved permanent sign shall be installed adjacent to each manual fire alarm box that reads: WHEN ALARM SOUNDS CALL FIRE DEPARTMENT.

Exception: Where the manufacturer has permanently provided this information on the manual fire alarm box.



- **[F] 907.4.2.5 Protective covers.** The fire code official is authorized to require the installation of listed manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. A protective cover that emits a local alarm signal shall not be installed unless approved. Protective covers shall not project more than that permitted by Section 1003.3.3.
- [F] 907.4.2.6 Unobstructed and unobscured. Manual fire alarm boxes shall be accessible, unobstructed, unobscured and visible at all times.
- **907.4.2.7 Operation.** Manual fire alarm boxes shall be operable with one hand including boxes with protective covers.
- **[F] 907.4.3 Automatic smoke detection.** Where an automatic smoke detection system is required it shall utilize smoke detectors unless ambient conditions prohibit such an installation. In spaces where smoke detectors cannot be utilized due to ambient conditions, approved automatic heat detectors shall be permitted.
 - **[F] 907.4.3.1 Automatic sprinkler system.** For conditions other than specific fire safety functions noted in Section 907.3, in areas where ambient conditions prohibit the installation of smoke detectors, an automatic sprinkler system installed in such areas in accordance with Section 903.3.1.1 or 903.3.1.2 and that is connected to the fire alarm system shall be approved as automatic heat detection.
- **[F] 907.5 Occupant notification systems.** A fire alarm system shall annunciate at the fire alarm control unit and shall initiate occupant notification upon activation, in accordance with Sections 907.5.1 through 907.5.2.3.4. Where a fire alarm system is required by another section of this code, it shall be activated by:
 - 1. Automatic fire detectors.
 - 2. Automatic sprinkler system waterflow devices.
 - 3. Manual fire alarm boxes.
 - 4. Automatic fire-extinguishing systems.

Exception: Where notification systems are allowed elsewhere in Section 907 to annunciate at a constantly attended location.

[F] 907.5.1 Presignal feature. A presignal feature shall not be installed unless approved by the fire code official and the fire department. Where a presignal feature is provided, a signal shall be annunciated at a constantly attended location approved by the fire department, in order that occupant notification can be activated in the event of fire or other emergency.

- **[F] 907.5.2 Alarm notification appliances.** Alarm notification appliances shall be provided and shall be listed for their purpose.
 - **[F] 907.5.2.1 Audible alarms.** Audible alarm notification appliances shall be provided and emit a distinctive sound that is not to be used for any purpose other than that of a fire alarm. *In Group I-2 occupancies, audible appliances located in patient areas shall be only chimes or similar sounding appliances for alerting staff. See Section 907.6.6.*

Exceptions:

- 1. Audible alarm notification appliances are not required in *patient* areas of Group I-2 occupancies that are in compliance with Section 907.2.6, Exception 2.
- 2. A visible alarm notification appliance installed in a nurses' control station or other continuously attended staff location in a Group I-2 suite shall be an acceptable alternative to the installation of audible alarm notification appliances throughout the suite in Group I-2 occupancies that are in compliance with Section 907.2.6, Exception 2.
- 3. Where provided, audible notification appliances located in each occupant evacuation elevator lobby in accordance with Section 3008.9.1 shall be connected to a separate notification zone for manual paging only.
- [F] 907.5.2.1.1 Average sound pressure. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupiable space within the building.
- **[F] 907.5.2.1.2 Maximum sound pressure.** The maximum sound pressure level for audible alarm notification appliances shall be 110 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than 95 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.
- 907.5.2.1.3 Audible alarm signal. The audible signal shall be the standard fire alarm evacuation signal, ANSI S3.41 Audible Emergency Evacuation Signal, "three pulse temporal pattern," as described in NFPA 72.

Exception: The use of the existing evacuation signaling scheme shall be permitted where approved by the enforcing agency.

[F] 907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404 of the California Fire Code. In high-rise buildings and Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access, the system shall operate on a minimum of the alarming floor, the floor above and the floor below. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

- 1. Elevator groups.
- 2. Interior exit stairways.
- 3. Each floor.
- 4. Areas of refuge as defined in Chapter 2.

Exception: In Group *I-2, I-2.1 and R-2.1* occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

- [F] 907.5.2.2.1 Manual override. A manual override for emergency voice communication shall be provided on a selective and all-call basis for all paging zones.
- [F] 907.5.2.2.2 Live voice messages. The emergency voice/alarm communication system shall also have the capability to broadcast live voice messages by paging zones on a selective and all-call basis.
- [F] 907.5.2.2.3 Alternate uses. The emergency voice/alarm communication system shall be allowed to be used for other announcements, provided the manual fire alarm use takes precedence over any other use.
- [F] 907.5.2.2.4 Emergency voice/alarm communication captions. Where stadiums, arenas and grandstands have 15,000 fixed seats or more and provide audible public announcements with prerecorded or real-time captions, the emergency/voice alarm communication system shall also be captioned. Prerecorded or live emergency captions shall be from an approved location constantly attended by personnel trained to respond to an emergency.
- [F] 907.5.2.2.5 Emergency power. Emergency voice/alarm communications systems shall be provided with emergency power in accordance with

Section 2702. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

[F] 907.5.2.3 Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.4.

Exceptions:

- 1. In other than Group I-2 and I-2.1, visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
- 2. Visible alarm notification appliances shall not be required in *enclosed exit stairways*, *enclosed exit ramps*, *exterior exit stairs and exterior exit ramps*.
- 3. Visible alarm notification appliances shall not be required in elevator cars.

[F] 907.5.2.3.1 Public use areas and common use areas. Visible alarm notification appliances shall be provided in public use areas and common use areas, *including but not limited to:*

- 1. Band rooms
- 2. Classrooms
- 3. Corridors
- 4. Gymnasiums
- 5. Lobbies
- 6. Meeting rooms
- 7. Multipurpose rooms
- 8. Music practice rooms
- 9. Occupational shops
- 10. Occupied rooms where ambient noise impairs hearing of the fire alarm
- 11. Sanitary facilities including restrooms, bathrooms and shower rooms

Exception: Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with not less than 20-percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing-impaired employee(s).

[F] 907.5.2.3.2 Groups R-1 and R-2.1. Group R-1 and R-2.1 dwelling units or sleeping units in accordance with Table 907.5.2.3.2 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.

[F] TABLE	907.5.2.3.2
VISIBLE	ALARMS

NUMBER OF SLEEP UNITS	SLEEPING ACCOMMODATIONS WITH VISIBLE ALARMS
6 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

[SFM] Also see Chapter 11B, Section 11B-224.4 and Table 11B-224.4.

[F] 907.5.2.3.3 Group R-2. In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances in accordance with *NFPA 72*. Such capability shall be permitted to include the potential for future interconnection of the building fire alarm system with the unit smoke alarms, replacement of audible appliances with combination audible/visible appliances, or future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances.

907.5.2.3.4 Groups R-2.1, R-3.1 and R-4. Protective social care facilities which house persons who are hearing impaired, shall be provided with notification appliances for the hearing impaired installed in accordance with NFPA 72 and which shall activated upon initiation of the fire alarm system or the smoke alarms.

907.5.2.4 Group E schools. One audible alarm notification appliance shall be mounted on the exterior of a buildings to alert occupants at each playground area.

907.5.2.5 Groups I-2 and I-2.1. Audible notification appliances shall be used in nonpatient areas. Visible appliances are allowed to be used in lieu of audible appliances in patient occupied areas. Audible appliances located in patient areas shall be only chimes or similar sounding appliances for alerting staff.

In occupancies housing nonambulatory persons where restraint is practiced, staff and attendants shall be provided and housed or located in such a manner that such supervisory personnel will also be alerted upon activation of the fire alarm system or any detector required by this section.

[F] 907.6 Installation and monitoring. A fire alarm system shall be installed and monitored in accordance with Sections 907.6.1 through 907.6.6.2 and NFPA 72.

[F] 907.6.1 Wiring. Wiring shall comply with the requirements of *the California Electrical Code* and NFPA 72. Wireless protection systems utilizing radio-frequency transmitting devices shall comply with the special requirements for supervision of low-power wireless systems in NFPA 72.

907.6.1.1 High-rise buildings. Wiring for fire alarm signaling line circuits, initiating circuits and notification circuits in high-rise buildings shall be in accordance with the following:

1. Class A in accordance with NFPA 72.

Exception: Initiating circuits which serve only a single initiating device.

2. Enclosed in continuous metallic raceways or raceways encased in not less than 2 inches (51 mm) of concrete in accordance with the California Electrical Code.

Exception: Metallic cable (MC) shall be permitted for fire alarm notification circuits where continuous metallic raceways are not required for survivability.

[F] 907.6.2 Power supply. The primary and secondary power supply for the fire alarm system shall be provided in accordance with NFPA 72.

Exception: Back-up power for single-station and multiple-station smoke alarms as required in Section 907.2.11.4.

[F] 907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

Exceptions:

- 1. Fire alarm systems in single-story buildings less than 22,500 square feet (2090 m²) in area.
- 2. Fire alarm systems that only include manual fire alarm boxes, waterflow initiating devices and not more than 10 additional alarm-initiating devices.
- Special initiating devices that do not support individual device identification.
- 4. Fire alarm systems or devices that are replacing existing equipment.

[F] 907.6.3.1 Annunciation. The initiating device status shall be annunciated at an approved on-site location.

[F] 907.6.4 Zones. Fire alarm systems shall be divided into zones where required by this section. For the purposes of annunciation and notification, zoning shall be in accordance with the following:

- 1. Where the fire-protective signaling system serves more than one building, each building shall be considered as a separate zone.
- 2. Each floor of a building shall be considered as a separate zone.
- 3. Each section of floor of a building that is separated by fire walls or by horizontal exits shall be considered as a separate zone.
- Each zone shall not exceed 22,500 square feet (2090 m²). The length of any zone shall not exceed 300 feet (91 440 mm) in any direction.

Exception: Automatic sprinkler system zones shall not exceed the area permitted by NFPA 13.

- 5. For Group I-3 occupancies each cell complex shall be considered a separate zone.
- 6. For Group H and L occupancies above the 10th story, each side of the 2-hour fire-smoke barrier shall be considered a separate zone.
- 7. Annunciation shall be further divided into zones where deemed necessary by the enforcing agency.

907.6.4.1 Annunciation. Alarm, supervisory and trouble signals shall be annunciated in the main control unit by means of an audible signal and a visual display in accordance with NFPA 72. Identification of the type of alarm and supervisory initiating devices, such as manual, automatic, sprinkler waterflow, sprinkler valve supervisory, fire-pump supervisory, etc., shall be separately indicated.

Exception: Group R-3 occupancies.

[F] 907.6.4.1.1 Annunciator panel. An annunciator panel complying with Section 907.6.4.1 and the associated controls shall be provided in an approved remote location where deemed necessary by the enforcing agency. The visual zone indication shall lock in until the system is reset and shall not be canceled by the operation of an audible-alarm silencing switch.

[F] 907.6.4.2 High-rise buildings. In high-rise buildings and Group 1-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access, a separate zone by floor shall be provided for each of the following types of alarm-initiating devices where provided:

1. Smoke detectors.

- 2. Sprinkler waterflow devices.
- 3. Manual fire alarm boxes.
- Other approved types of automatic fire detection devices or suppression systems.

907.6.4.3 High-rise buildings zoning annunciator panel. In high-rise buildings, a zoning annunciator panel shall be provided in the Fire Command Center. This panel shall not be combined with the Firefighter Smoke Control Panel unless approved. Panel shall be in matrix format or an approved equivalent configuration. All indicators shall be based upon positive confirmation. The panel shall include the following features at a minimum:

- 1. Fire alarm initiating devices with individual annunciation per floor for manual fire alarm boxes, area smoke detectors, elevator lobby smoke detectors, duct smoke detectors, heat detectors, auxiliary alarms and sprinkler waterflow. (Red LED)
- 2. Sprinkler and standpipe system control valves per floor—supervisory. (Yellow LED)
- 3. Common fire alarm system trouble. (Yellow LED)
- 4. Annunciation Panel Power On. (Green LED)
- 5. Lamp test. (Push Button)

907.6.4.4 Notification zoning. Upon activation of initiating devices where occupant notification is required for evacuation, all notification zones shall operate simultaneously throughout the building.

Exceptions:

- 1. High-rise buildings as permitted in Section 907.2.13.
- 2. Hospitals and convalescent facilities with staff alerting notification appliances or emergency voice/alarm communication, zoning shall be in accordance with the approved fire plan.
- 3. Detention facilities.
- 4. Upon approval by the fire code official in buildings which are sprinklered throughout, specific notification zoning shall be permitted where the notification zones are separated by a minimum of a 2-hour fire barrier and 2-hour fire-resistive floor assembly. The system shall have the capability to activate all other notification zones by automatic and manual means.
- 5. Upon approval by the fire code official in buildings which are sprinklered throughout, specific notification zoning shall be permitted where the activated initiating device or

fire extinguishing system is separated from any nonactive notification zones by a minimum of 300-ft horizontal distance. The system shall have the capability to activate all other notification zones by automatic and manual means.

- 6. Where a Group H or L occupancy is located above the 10th story, each side of the 2-hour fire-smoke barrier shall be considered a separate zone.
- [F] 907.6.5 Access. Access shall be provided to each fire alarm device and notification appliance for periodic inspection, maintenance and testing.
- **[F] 907.6.6 Monitoring.** Fire alarm systems required by this chapter or by the *California Fire Code* shall be monitored by an approved supervising station in accordance with NFPA 72 *and this section*.

Exception: Monitoring by a supervising station is not required for:

- 1. Single- and multiple-station smoke alarms required by Section 907.2.11.
- 2. Group I-3 occupancies shall be monitored in accordance with Section 907.2.6.3.
- Automatic sprinkler systems in one- and twofamily dwellings.
- [F] 907.6.6.1 Automatic telephone-dialing devices. Automatic telephone-dialing devices used to transmit an emergency alarm shall not be connected to any fire department telephone number unless approved by the fire chief.
- **[F] 907.6.6.2 Termination of monitoring service.** Termination of fire alarm monitoring services shall be in accordance with Section 901.9 of the *California Fire Code*.
- 907.6.6.3 Group E schools. Automatic fire alarm systems shall be monitored and shall transmit the alarm, supervisory and trouble signals to an approved supervising station in accordance with NFPA 72. The supervising station shall be listed as either UUFX (Central Station) or UUJS (remote & proprietary) by the Underwriters Laboratory Inc. (UL) or other approved listing and testing laboratory or shall comply with the requirements of standard, FM 3011. Termination of monitoring services shall be in accordance with Section 907.6.6.2.
- **[F] 907.7 Acceptance tests and completion.** Upon completion of the installation, the fire alarm system and all fire alarm components shall be tested in accordance with NFPA 72.

- [F] 907.7.1 Single- and multiple-station alarm devices. When the installation of the alarm devices is complete, each device and interconnecting wiring for multiple-station alarm devices shall be tested in accordance with the smoke alarm provisions of NFPA 72.
- **[F] 907.7.2 Record of completion.** A record of completion in accordance with NFPA 72 verifying that the system has been installed and tested in accordance with the approved plans and specifications shall be provided.
- **[F] 907.7.3 Instructions.** Operating, testing and maintenance instructions and record drawings ("as-builts") and equipment specifications shall be provided at an approved location.
- **[F] 907.8 Inspection, testing and maintenance.** The maintenance and testing schedules and procedures for fire alarm and fire detection systems shall be in accordance with Section 907.8 of the *California Fire Code*.

SECTION 908 EMERGENCY ALARM SYSTEMS

- **[F] 908.1 Group H occupancies.** Emergency alarms for the detection and notification of an emergency condition in Group H occupancies shall be provided in accordance with Section 415.5.
- **[F] 908.2 Group H-5 occupancy.** Emergency alarms for notification of an emergency condition in an HPM facility shall be provided as required in Section 415.11.3.5.

SECTION 909 SMOKE CONTROL SYSTEMS

- **[F] 909.1 Scope and purpose.** This section applies to mechanical or passive smoke control systems where they are required by other provisions of this code. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke- and heat-venting provisions found in Section 910. Mechanical smoke control systems shall not be considered exhaust systems under Chapter 5 of the *California Mechanical Code*.
- [F] 909.2 General design requirements. Buildings, structures or parts thereof required by this code to have a smoke control system or systems shall have such systems designed

<

FIRE PROTECTION SYSTEMS

in accordance with the applicable requirements of Section 909 and the generally accepted and well-established principles of engineering relevant to the design. The construction documents shall include sufficient information and detail to adequately describe the elements of the design necessary for the proper implementation of the smoke control systems. These documents shall be accompanied by sufficient information and analysis to demonstrate compliance with these provisions.

[F] 909.3 Special inspection and test requirements. In addition to the ordinary inspection and test requirements that buildings, structures and parts thereof are required to undergo, smoke control systems subject to the provisions of Section 909 shall undergo special inspections and tests sufficient to verify the proper commissioning of the smoke control design in its final installed condition. The design submission

Text continues on page 341.

П

structure in areas/spaces where carbon monoxide alarms are required.

- **[F] 915.5 Carbon monoxide detection systems.** Carbon monoxide detection systems shall be an acceptable alternative to carbon monoxide alarms and shall comply with Sections 915.5.1 through 915.5.3.
 - [F] 915.5.1 General. Carbon monoxide detection systems shall comply with NFPA 720. Carbon monoxide detectors shall be listed in accordance with UL 2075.
 - **[F] 915.5.2 Locations.** Carbon monoxide detectors shall be installed in the locations specified in Section 915.2 *or NFPA 720*.
 - **[F] 915.5.3 Combination detectors.** Combination carbon monoxide/smoke detectors installed in carbon monoxide detection systems shall be an acceptable alternative to carbon monoxide detectors, provided they are listed in accordance with UL 2075 and UL 268.

Combination carbon monoxide/smoke detectors shall comply with all requirements for listing and approval by the Office of the State Fire Marshal for smoke alarms.

- **[F] 915.6 Maintenance.** Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with the *NFPA 720. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end-of-life signals shall be replaced.*
- 915.7 Visible alarms. In buildings containing covered multifamily dwellings as defined in Chapter 2, all required carbon monoxide alarms shall be equipped with the capability to support visible alarm notification in accordance with NFPA 720.

SECTION 916 GAS DETECTION SYSTEMS

- [F] 916.1 General. Gas detection systems required by this code shall comply with Sections 916.2 through 916.11.
- [F] 916.2 Construction documents. Documentation of the gas detection system design and equipment to be used that is adequate to demonstrate compliance with the requirements of this code shall be provided with the application for permit.
- [F] 916.3 Equipment. Gas detection system equipment shall be designed for use with the gases being detected and shall be installed in accordance with manufacturers' instructions.
- [F] 916.4 Power connections. Gas detection systems shall be permanently connected to the building electrical power supply or shall be permitted to be cord connected to an unswitched receptacle using an approved restraining means that secures the plug to the receptacle.
- [F] 916.5 Emergency and standby power. Where standby or emergency power is not required elsewhere by this code, standby or emergency power shall be provided or the gas detection system shall initiate a trouble signal at an approved location if the power supply is interrupted.
- [F] 916.6 Sensor locations. Where a specific location for sensors is not specified elsewhere by this code, sensors shall

be installed in approved locations where leaking gases are expected to accumulate.

- [F] 916.7 Gas sampling. Gas sampling shall be performed continuously. Sample analysis shall be processed immediately after sampling, except as follows:
 - 1. For HPM gases, sample analysis shall be performed at intervals not exceeding 30 minutes.
 - 2. For toxic gases that are not HPM, sample analysis shall be performed at intervals not exceeding 5 minutes in accordance with Section 6004.2.2.7 of the International Fire Code.
 - 3. Where a less frequent or delayed sampling interval is approved.

[F] 916.8 System activation. A gas detection alarm shall be initiated where any sensor detects a concentration of gas exceeding the following thresholds:

- 1. For flammable gases, a gas concentration exceeding 25 percent of the lower flammable limit (LFL).
- 2. For non-flammable gases, a gas concentration exceeding the threshold specified by the section of this code requiring a gas detection system.

Upon activation of a gas detection alarm, alarm signals or other required responses shall be as specified by the section of this code or the International Fire Code requiring a gas detection system. Audible and visible alarm signals associated with a gas detection alarm shall be distinctive from fire alarm and carbon monoxide alarm signals.

- [F] 916.9 Signage. Signs shall be provided adjacent to gas detection system alarm signaling devices that advise occupants of the nature of the signals and actions to take in response to the signal.
- [F] 916.10 Fire alarm system connections. Gas sensors and gas detection systems shall not be connected to fire alarm systems unless approved and connected in accordance with the fire alarm equipment manufacturer's instructions.
- [F] 916.11 Inspection, testing and sensor calibration. Gas detection systems and sensors shall be inspected, tested and calibrated in accordance with the International Fire Code.

SECTION 917 EMERGENCY RESPONDER RADIO COVERAGE

[F] 917.1 General. Emergency responder radio coverage shall be provided in all new buildings in accordance with Section 510 of the *California Fire Code*.

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 10 – MEANS OF EGRESS—continued

A death a second		BSC- CEM HCD DSA				A	OSHPD								Т .			a			
Adopting agency	BSC	CG	SFM	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х												
Adopt entire chapter as amended (amended sections listed below)			Х	х	х	х				х	х		х								
Adopt only those sections that are listed below							Х														
Chapter / Section																					
1011.6			Х																		
1011.11			Χ																		
1011.11 (2nd paragraph only)							Х														
1011.15			Χ																		
1012 (1st paragraph below title only)							Х														
1012.1						Χ															
1012.6.3						Χ															
1012.6.4						Χ															
1012.6.5						Χ															
1012.10						Χ															
1013.1			Х																		
1013.2			Χ																		
1013.4			Х			Χ	Х														
1013.6.3			Χ																		
1013.7			Χ																		
1013.8			Х																		
1014 (1st paragraph below title only)							Х														
1014.8			Χ			Χ															
1015.2			Χ				Х														
1015.3			Х	Χ	Χ	Х	Х														
1015.4			Χ																		
1015.8				Χ	Χ	Χ															
1016.2			Χ																		
1016.2.2			Χ																		
Table 1017.2			Х																		
1018 (1st paragraph below title only)							Х														
1018.3 Exc. only							Х	1													
1018.5 Exc. only							Х	†													
1019.3			Х					1													
1019.4			Х																		
1020.1			Х																		
Table 1020.1			Х																		—
Table 1020.2			X																		
1020.4			X	-				 	 			-		1							—

(continued)

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 10 – MEANS OF EGRESS—continued

A doubling a group of	BSC BSC- SFI		SFM		нс	D		DS	Δ.		os	HPD		BSCC	DDII	400	DWR	050	CA	SL	SLC
Adopting agency	BSC	CG	SFIN	1	2	1/AC	AC	SS	SS/CC	1	2	3	4	BSCC	DPH	AGR	DWK	CEC	CA	SL	SLC
Adopt entire chapter	Х							Х	Х												
Adopt entire chapter as amended (amended sections listed below)			х	x	х	х				x	x		x								
Adopt only those sections that are listed below							X														
Chapter / Section																					
1020.5			Χ							Χ	Х		Х								
1020.6			Х																		
1023.2			Х																		
1023.9			Х																		
1023.9 (2nd paragraph only)							Х														
1023.9.1			Х																		
1023.11.1			Х																		
1023.11.2			Х																		
1024.2			Х																		
1026.4.2			Х																		
1028.1			Х																		
1028.5			Х																		
1029.1			Х																		
1029.2			Х																		
1029.3			Х																		
1029.3.1			Х																		
1029.6.4			Х																		
1029.9.1			Х																		
1030.1			Х																		
1030.4			Х																		

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

- 3. In Group R-3 occupancies not required to be adaptable or accessible, the landing at an exterior doorway shall not be more than 7³/4 inches (197 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door, does not swing over the landing.
- 4. Variations in elevation due to differences in finish materials, but not more than ¹/₂ inch (12.7 mm).
- 5. Exterior decks, patios or balconies that are part of *adaptable or accessible* dwelling units, have impervious surfaces and that are not more than 4 inches (102 mm) below the finished floor level of the adjacent interior space of the dwelling unit. *See also Chapter 11A, Section 1132A.4.*
- 6. Doors serving equipment spaces not required to be accessible in accordance with Section 11B-203.5 and serving an occupant load of five or less shall be permitted to have a landing on one side to be not more than 7 inches (178 mm) above or below the landing on the egress side of the door.

1010.1.6 Landings at doors. Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). Where a landing serves an occupant load of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Exception: Landing length in the direction of travel in Groups R-3 and U and within individual units of Group R-2 need not exceed 36 inches (914 mm).

1010.1.7 Thresholds. Thresholds at doorways shall not exceed $^{3}/_{4}$ inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or $^{1}/_{2}$ inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than $^{1}/_{4}$ inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

Exceptions:

Ш

- 1. In occupancy Group R-2 or R-3, threshold heights for sliding and side-hinged exterior doors shall be permitted to be up to 7³/₄ inches (197 mm) in height if all of the following apply:
 - 1.1. The door is not part of the required means of egress.
 - 1.2. The door is not part of an accessible route as required by *Chapter 11A or 11B*.
 - 1.3. The door is not part of an adaptable or accessible dwelling unit.
- 2. In adaptable or accessible dwelling units, where Exception 5 to Section 1010.1.5 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 4³/₄ inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 4¹/₂ inches (114 mm) above the exterior deck, patio or balcony for other doors.

1010.1.8 Door arrangement. Space between two doors in a series shall be 48 inches (1219 mm) minimum plus the width of a door swinging into the space. Doors in a series shall swing either in the same direction or away from the space between the doors.

Exceptions:

- 1. The minimum distance between horizontal sliding power-operated doors in a series shall be 48 inches (1219 mm).
- Storm and screen doors serving individual dwelling units in Groups R-2 and R-3 need not be spaced 48 inches (1219 mm) from the other door.
- Doors within individual dwelling units in Groups R-2 and R-3 other than adaptable or accessible dwelling units.

1010.1.9 Door operations. Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

1010.1.9.1 Hardware. Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter *11A* or *11B* shall not require tight grasping, tight pinching or twisting of the wrist to operate.

These design requirements for door handles, pulls, latches, locks and other operating devices, intended for use on required means of egress doors in other than Group R and M occupancies with an occupant load of 10 or less, shall comply with SFM Standard 12-10-2, Section 12-10-202 contained in the CCR, Title 24, Part 12, California Referenced Standards Code.

1010.1.9.2 Hardware height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

1010.1.9.3 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exist:

- 1. Places of detention or restraint.
- 2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
 - The locking device is readily distinguishable as locked;
 - 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED

- WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
- 2.3. The use of the key-operated locking device is revokable by the building official for due cause.
- Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts does not have a doorknob or surfacemounted hardware.
- 4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.
- 5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.

1010.1.9.4 Bolt locks. Manually operated flush bolts or surface bolts are not permitted.

Exceptions:

- On doors not required for egress in individual dwelling units or sleeping units.
- Where a pair of doors serves a storage or equipment room, manually operated edge- or surfacemounted bolts are permitted on the inactive leaf.
- 3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.
- 4. Where a pair of doors serves a Group B, F or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress capacity requirements and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
- 5. Where a pair of doors serves patient care rooms in Group I-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress capacity requirements and the inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.

1010.1.9.5 Unlatching. The unlatching of any door or leaf shall not require more than one operation.

Exceptions:

- 1. Places of detention or restraint.
- 2. Where manually operated bolt locks are permitted by Section 1010.1.9.4.
- 3. Doors with automatic flush bolts as permitted by Section 1010.1.9.3, Item 3.

- 4. Doors from individual dwelling units and sleeping units of Group R occupancies as permitted by Section 1010.1.9.3, Item 4.
- **1010.1.9.5.1 Closet and bathroom doors in Group R-4 occupancies.** In Group R-4 occupancies, closet doors that latch in the closed position shall be openable from inside the closet, and bathroom doors that latch in the closed position shall be capable of being unlocked from the ingress side.
- 1010.1.9.6 Controlled egress doors in Group I-2. Electric locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group I-2 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:
 - 1. The door locks shall unlock on actuation of the automatic sprinkler system or automatic smoke detection system.
 - 2. The door locks shall unlock on loss of power controlling the lock or lock mechanism.
 - 3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the fire command center, a nursing station or other approved location. The switch shall directly break power to the lock.
 - 4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.
 - 5. All staff shall have the keys, codes or other means necessary to operate the locking systems.
 - 6. Emergency lighting shall be provided at the door.
 - 7. The door locking system units shall be listed in accordance with UL 294.

Exceptions:

- 1. Items 1 through 4 shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
- 2. Items 1 through 4 shall not apply to doors to areas where a listed egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.
- **1010.1.9.7 Delayed egress.** Delayed egress locking systems shall be permitted to be installed on doors serving any occupancy except Group A, E, H and L occupancies.

Exception: Group A occupancy courtrooms are permitted to utilize delayed egress locks.

Buildings with delayed egress locks shall be equipped throughout with an automatic sprinkler sys-

tem in accordance with Section 903.3.1.1 and an approved automatic smoke detection system installed in accordance with Section 907. The *delayed egress* locking system shall be installed and operated in accordance with all of the following:

- 1. The delay electronics of the delayed egress locking system shall deactivate upon actuation of the automatic sprinkler system or automatic fire detection system, allowing immediate, free egress.
- 2. The delay electronics of the delayed egress locking system shall deactivate upon loss of *electrical* power, allowing immediate free egress *to any one of the following:*
 - 2.1. The egress-control device itself.
 - 2.2. The smoke detection system.
 - 2.3. Means of egress illumination as required by Section 1008.
- 3. The delayed egress locking system shall have the capability of being deactivated at the fire command center and approved locations.
- 4. An attempt to egress shall initiate an irreversible process that shall allow such egress in not more than 15 seconds when a physical effort to exit is applied to the egress side door hardware for not more than 3 seconds. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics have been deactivated, rearming the delay electronics shall be by manual means only. The time delay established for each egress-control device shall not be field adjustable. For applications listed in Section 1.9.1 regulated by the Division of the State Architect-Access Compliance, see Chapter 11B, 11B-404.2.9.

Exception: *In facilities housing Alzheimer's or dementia clients,* a delay of not more than 30 seconds is permitted on a delayed egress door.

5. The egress path from any point shall not pass through more than one delayed egress locking system.

Exception: In Group I-2 or I-3 occupancies, the egress path from any point in the building shall pass through not more than two delayed egress locking systems provided the combined delay does not exceed 30 seconds.

- 5.1. A tactile sign shall also be provided in Braille and raised characters, which complies with Chapter 11B, Sections 11B-703.1, 11B-703.2, 11B-703.3 and 11B-703.5.
- 6. A sign shall be provided on the door and shall be located above and within 12 inches (305 mm) of the door exit hardware:
 - 6.1. For doors that swing in the direction of egress, the sign shall read: KEEP PUSH-ING. THIS DOOR WILL OPEN IN 15 [30] SECONDS. ALARM WILL SOUND.

- 6.2. For doors that swing in the opposite direction of egress, the sign shall read: KEEP PULLING. THIS DOOR WILL OPEN IN 15 [30] SECONDS. ALARM WILL SOUND.
- 6.3. The sign shall comply with the visual character requirements in Section 11B-703.5. Sign lettering shall be at least 1 inch (25 mm) in height and shall have a stroke of not less than ½ inch (3.2 mm).
- 6.4. A tactile sign shall also be provided in Braille and raised characters, which complies with Chapter 11B, Sections 11B-703.1, 11B-703.2, 11B-703.3 and 11B-703.5.

Exception: Where approved, in Group I occupancies, the installation of a sign is not required where care recipients who because of clinical needs require restraint or containment as part of the function of the treatment area.

- 7. Emergency lighting shall be provided on the egress side of the door.
- 8. The delayed egress locking system units shall be listed in accordance with UL 294.
- 9. Actuation of the panic bar or other door-latching hardware shall activate an audible signal at the door
- 10. The unlatching shall not require more than one operation.
- 11. Regardless of the means of deactivation, relocking of the egress-control device shall be by manual means only at the door.

1010.1.9.8 Sensor release of electrically locked egress doors. The electric locks on sensor released doors located in a means of egress in buildings with an occupancy in Group A, B, I-2, I-4, M, R-1, R-2 or *R-2-1* and entrance doors to tenant spaces in occupancies in Group A, B, I-2, I-4, M, R-1, R-2 or *R-2.1* are permitted where installed and operated in accordance with all of the following criteria:

- 1. The sensor shall be installed on the egress side, arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
- 2. Loss of power to the lock or locking system shall automatically unlock the doors.
- 3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of other electronics—and the doors shall remain unlocked for not less than 30 seconds.

- 4. Activation of the building fire alarm system, where provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
- Activation of the building automatic sprinkler system or fire detection system, where provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
- 6. The door locking system units shall be listed in accordance with UL 294.

1010.1.9.9 Electromagnetically locked egress doors. Doors in the means of egress in buildings with an occupancy in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 shall be permitted to be locked with an electromagnetic locking system where equipped with hardware that incorporates a built-in switch and where installed and operated in accordance with all of the following:

- 1. The hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
- 2. The hardware is capable of being operated with one hand.
- 3. Operation of the hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
- 4. Loss of power to the locking system automatically unlocks the door.
- 5. Where panic or fire exit hardware is required by Section 1010.1.10, operation of the panic or fire exit hardware also releases the electromagnetic lock.
- The locking system units shall be listed in accordance with UL 294.

1010.1.9.10 Reserved.

1010.1.9.11 Stairway doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

- 1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
- 2. This section shall not apply to doors arranged in accordance with Section 403.5.3.
- 3. In stairways serving not more than four stories, doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.
- 4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occu-

- pancies where the only interior access to the tenant space is from a single exit stairway where permitted in Section 1006.3.2.
- 5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stairway where permitted in Section 1006.3.2.

1010.1.9.12 Access-controlled elevator lobby doors in high-rise office buildings. For elevator lobbies in high-rise office buildings where the occupants of the floor are not required to travel through the elevator lobby to reach an exit, when approved by the fire chief, the doors separating the elevator lobby from the adjacent occupied tenant space that also serve as the entrance doors to the tenant space shall be permitted to be equipped with an approved entrance and egress access control system provided all of the following requirements are met:

- The building is provided throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 2. A smoke detector is installed on the ceiling on the tenant side of the elevator lobby doors along the center line of the door opening, not less than 1 foot and not more than 5 feet from the door opening, and is connected to the fire alarm system.
- 3. A remote master switch capable of unlocking the elevator lobby doors shall be provided in the fire command center for use by the fire department.
- 4. Locks for the elevator lobby shall be U.L. and California State Fire Marshal listed fail-safe type locking mechanisms. The locking device shall automatically release on activation of any fire alarm device on the floor of alarm (waterflow, smoke detector, manual pull stations, etc.). All locking devices shall unlock, but not unlatch, upon activation.
- 5. A two-way voice communication system, utilizing dedicated lines, shall be provided from each locked elevator lobby to the 24-hour staffed location on site, annunciated as to location. Operating instructions shall be posted above each two-way communication device.

Exception: When approved by the fire chief, two-way voice communication system to an off-site facility may be permitted where means to remotely unlock the access controlled doors from the off-site facility are provided.

6. An approved momentary mushroom-shaped palm button connected to the doors and installed adjacent to each locked elevator lobby door shall be provided to release the door locks when operated by an individual in the elevator lobby. The locks shall be reset manually at the door. Mount palm

- 3. Handrail brackets or balusters attached to the bottom surface of the handrail that do not project horizontally beyond the sides of the handrail within 1½ inches (38 mm) of the bottom of the handrail shall not be considered obstructions. For each ½ inch (12.7 mm) of additional handrail perimeter dimension above 4 inches (102 mm), the vertical clearance dimension of 1½ inches (38 mm) shall be permitted to be reduced by ½ inch (3.2 mm).
- 4. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of the handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.
- Handrails serving stepped aisles or ramped aisles are permitted to be discontinuous in accordance with Section 1029.15.1.

1014.5 Fittings. Handrails shall not rotate within their fittings.

1014.6 Handrail extensions. Handrails shall return to a wall, guard or the walking surface or shall be continuous to the handrail of an adjacent flight of stairs or ramp run. Where handrails are not continuous between flights, the handrails shall extend horizontally not less than 12 inches (305 mm) beyond the top riser and continue to slope for the depth of one tread beyond the bottom riser. At ramps where handrails are not continuous between runs, the handrails shall extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. The extensions of handrails shall be in the same direction of the flights of stairs at stairways and the ramp runs at ramps.

Exceptions:

- Handrails within a dwelling unit that is not required to be accessible need extend only from the top riser to the bottom riser.
- 2. Handrails serving aisles in rooms or spaces used for assembly purposes are permitted to comply with the handrail extensions in accordance with Section 1029.15.
- 3. Handrails for alternating tread devices and ships ladders are permitted to terminate at a location vertically above the top and bottom risers. Handrails for alternating tread devices are not required to be continuous between flights or to extend beyond the top or bottom risers.

1014.7 Clearance. Clear space between a handrail and a wall or other surface shall be not less than $1^{1}/_{2}$ inches (38 mm). A handrail and a wall or other surface adjacent to the handrail shall be free of any sharp or abrasive elements.

1014.8 Projections. On ramps and on ramped aisles that are part of an accessible route, the clear width between handrails shall be 36 inches (914 mm) minimum. Projections into the required width of aisles, stairways and ramps at each side shall not exceed $4^{1}/_{2}$ inches (114 mm) at or below the handrail height. Projections into the required width shall not be limited above the minimum headroom height required in Section 1011.3. Projections due to intermediate handrails shall not

constitute a reduction in the egress width. Where a pair of intermediate handrails are provided within the stairway width without a walking surface between the pair of intermediate handrails and the distance between the pair of intermediate handrails is greater than 6 inches (152 mm), the available egress width shall be reduced by the distance between the closest edges of each such intermediate pair of handrails that is greater than 6 inches (152 mm).

In Group 1-2 occupancy ramps required for exit access shall not be less than 8 ft in width and handrails are permitted to protrude $3^{1}/_{2}$ inches from the wall on both sides. Ramps used as exits and stairways used for the movement of bed and litter patients, the clear width between handrails shall be 44 inches (1118 mm) minimum.

[HCD 1-AC] In addition, projections shall comply with Chapter 11A, when applicable.

1014.9 Intermediate handrails. Stairways shall have intermediate handrails located in such a manner that all portions of the stairway minimum width or required capacity are within 30 inches (762 mm) of a handrail. On monumental stairs, handrails shall be located along the most direct path of egress travel.

SECTION 1015 GUARDS

1015.1 General. Guards shall comply with the provisions of Sections 1015.2 through 1015.7. Operable windows with sills located more than 72 inches (1829 mm) above finished grade or other surface below shall comply with Section 1015.8.

1015.2 Where required. Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, aisles, stairs, ramps and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Guards shall be adequate in strength and attachment in accordance with Section 1607.8.

Exception: Guards are not required for the following locations:

- 1. On the loading side of loading docks or piers.
- On the audience side of stages and raised platforms, including stairs leading up to the stage and raised platforms.
- 3. On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.
- 4. At vertical openings in the performance area of stages and platforms.
- 5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
- 6. Along vehicle service pits not accessible to the public.
- 7. In assembly seating areas at cross aisles in accordance with Section 1029.16.2.
- 8. Elevated facility observation station access hatches at detention facilities.

1015.2.1 Glazing. Where glass is used to provide a guard or as a portion of the guard system, the guard shall comply with Section 2407. Where the glazing provided does not meet the strength and attachment requirements of Section 1607.8, complying guards shall be located along glazed sides of open-sided walking surfaces.

1015.3 Height. Required guards shall be not less than 42 inches (1067 mm) high, measured vertically as follows:

- 1. From the adjacent walking surfaces.
- On stairways and stepped aisles, from the line connecting the leading edges of the tread nosings.
- 3. On ramps and ramped aisles, from the ramp surface at the guard.

Exceptions:

- 1. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, guards on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
- 2. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, where the top of the guard also serves as a handrail on the open sides of stairs, the top of the guard shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.
- 3. The guard height in assembly seating areas shall comply with Section 1029.16 as applicable.
- 4. Along alternating tread devices and ships ladders, guards where the top rail also serves as a handrail shall have height not less than 30 inches (762 mm) and not more than 34 inches (864 mm), measured vertically from the leading edge of the device tread nosing.

1015.4 Opening limitations. Required guards shall not have openings which allow passage of a sphere 4 inches (102 mm) in diameter from the walking surface to the required guard height.

Exceptions:

- 1. From a height of 36 inches (914 mm) to 42 inches (1067 mm), guards shall not have openings that allow passage of a sphere 4³/₈ inches (111 mm) in diameter.
- 2. The triangular openings at the open sides of a stair, formed by the riser, tread and bottom rail shall not allow passage of a sphere 6 inches (152 mm) in diameter.
- 3. At elevated walking surfaces for access to and use of electrical, mechanical or plumbing systems or equipment, guards shall not have openings which allow passage of a sphere 21 inches (533 mm) in diameter.
- 4. In areas that are not open to the public within occupancies in Group I-3, F, H or S, and for alternating

- tread devices and ship ladders, guards shall not have openings which allow passage of a sphere 21 inches (533 mm) in diameter.
- 5. In assembly seating areas, guards required at the end of aisles in accordance with Section 1029.16.4 shall not have openings that allow passage of a sphere 4 inches (102 mm) in diameter up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, guards shall not have openings that allow passage of a sphere 8 inches (203 mm) in diameter.
- 6. Within individual dwelling units and sleeping units in Group R-2 and R-3 occupancies, guards on the open sides of stairs shall not have openings which allow passage of a sphere 4³/₈ (111 mm) inches in diameter.
- 7. In lifeguard towers not open to the public, guards shall not have openings which allow passage of a sphere 21 inches (533 mm) in diameter.

1015.5 Screen porches. Porches and decks which are enclosed with insect screening shall be provided with guards where the walking surface is located more than 30 inches (762 mm) above the floor or grade below.

1015.6 Mechanical equipment, systems and devices. Guards shall be provided where various components that require service are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of such components. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

Exception: Guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from the roof edge or open side of the walking surface.

1015.7 Roof access. Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

Exception: Guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and

placed not less than 10 feet (3048 mm) from the roof edge or open side of the walking surface.

1015.8 Window openings. Windows in Group *R-1*, R-2 and R-3 buildings including dwelling units, where the top of the sill of an operable window opening is located less than 36 inches above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

- 1. Operable windows where the top of the sill of the opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F2006.
- Operable windows where the openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.
- Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.
- Operable windows that are provided with window opening control devices that comply with Section 1015.8.1.

1015.8.1 Window opening control devices. Window opening control devices shall comply with ASTM F2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2.

SECTION 1016 EXIT ACCESS

1016.1 General. The exit access shall comply with the applicable provisions of Sections 1003 through 1015. Exit access arrangement shall comply with Sections 1016 through 1021.

1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

- 1. Exit access through an enclosed elevator lobby is permitted *in other than a Group I-2 and I-2.1*. Access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies required by Section 3006. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.
- Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an exit.

Exception: Means of egress are not prohibited through adjoining or intervening rooms or spaces in

- a Group H, S or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.
- 3. An exit access shall not pass through a room that can be locked to prevent egress.
- Means of egress from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.
- 5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

Exceptions:

- 1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.
- Means of egress are not prohibited through stockrooms in Group M occupancies where all of the following are met:
 - 2.1. The stock is of the same hazard classification as that found in the main retail area.
 - 2.2. Not more than 50 percent of the exit access is through the stockroom.
 - 2.3. The stockroom is not subject to locking from the egress side.
 - 2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) aisle defined by full- or partial-height fixed walls or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.
- 6. The means of egress shall not pass through any room subject to locking except in Group I-3 occupancies classified as detention facilities and psychiatric treatment areas in Group I-2 occupancies.
- 1016.2.1 Multiple tenants. Where more than one tenant occupies any one floor of a building or structure, each tenant space, dwelling unit and sleeping unit shall be provided with access to the required exits without passing through adjacent tenant spaces, dwelling units and sleeping units.

Exception: The means of egress from a smaller tenant space shall not be prohibited from passing through a larger adjoining tenant space where such rooms or spaces of the smaller tenant occupy less than 10 percent of the area of the larger tenant space through which they pass; are the same or similar occupancy group; a discernible path of egress travel to an exit is provided; and the means of egress into the adjoining space is not subject to locking from the egress side. A required means of egress serving the larger tenant space shall not pass through the smaller tenant space or spaces.

391

1016.2.2 Basement exits in Group I-2 occupancies. For additional requirements for occupancies in Group I-2 or I-2.1. see Section 407.

SECTION 1017 EXIT ACCESS TRAVEL DISTANCE

1017.1 General. Travel distance within the exit access portion of the means of egress system shall be in accordance with this section.

1017.2 Limitations. Exit access travel distance shall not exceed the values given in Table 1017.2.

1017.2.1 Exterior egress balcony increase. Exit access travel distances specified in Table 1017.2 shall be increased up to an additional 100 feet (30 480 mm) provided the last portion of the exit access leading to the exit occurs on an exterior egress balcony constructed in accordance with Section 1021. The length of such balcony shall be not less than the amount of the increase taken.

1017.2.2 Group F-1 and S-1 increase. The maximum exit access travel distance shall be 400 feet (122 m) in Group F-1 or S-1 occupancies where all of the following conditions are met:

- 1. The portion of the building classified as Group F-1 or S-1 is limited to one story in height.
- 2. The minimum height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet (7315 mm).
- 3. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

1017.3 Measurement. Exit access travel distance shall be measured from the most remote point within a story along the natural and unobstructed path of horizontal and vertical egress travel to the entrance to an exit.

Exception: In open parking garages, exit access travel distance is permitted to be measured to the closest riser of an exit access stairway or the closest slope of an exit access ramp.

1017.3.1 Exit access stairways and ramps. Travel distance on exit access stairways or ramps shall be included in the exit access travel distance measurement. The measurement along stairways shall be made on a plane parallel and tangent to the stair tread nosings in the center of the stair and landings. The measurement along ramps shall be made on the walking surface in the center of the ramp and landings.

SECTION 1018 AISLES

1018.1 General. Aisles and aisle accessways serving as a portion of the exit access in the means of egress system shall comply with the requirements of this section. Aisles or aisle accessways shall be provided from all occupied portions of the exit access that contain seats, tables, furnishings, displays

TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE^a

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
A, E, F-1, M, R, S-1	200 ^e	250 ^b
R-2.1	Not Permitted	250°
В	200	300°
F-2, S-2, U	300	400°
H-1	Not Permitted	75 ^d
H-2	Not Permitted	100 ^d
H-3	Not Permitted	150 ^d
H-4	Not Permitted	175 ^d
H-5	Not Permitted	200°
I-2, <i>I</i> -2.1, I-3 ^f , I-4	Not Permitted	200°
L	Not Permitted	200°

For SI: 1 foot = 304.8 mm.

 a. See the following sections for modifications to exit access travel distance requirements:

Section 402.8: For the distance limitation in malls.

Section 404.9: For the distance limitation through an atrium space.

Section 407.4: For the distance limitation in Group I-2 or I-2.1.

Section 408.3.10: For increased limitation in Group I-3

Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.

Section 411.4: For the distance limitation in special amusement buildings.

Section 412.7: For the distance limitations in aircraft manufacturing facilities.

Section 1017.2.2: For increased limitation in Groups F-1 and S-1.

Section 1006.2.2.2: For the distance limitation in refrigeration machinery rooms.

Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.

Section 1006.3.2: For buildings with one exit.

Section 1017.2.2: For increased distance limitation in Groups F-1 and S-1.

Section 1029.7: For increased limitation in assembly seating.

Section 3103.4: For temporary structures.

Section 3104.9: For pedestrian walkways.

- b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.
- Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- d. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.1.
- e. Group R-3 and R-4 buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3. See Section 903.2.8 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.3.
- f. Not permitted in nonsprinklered Group I-3 occupancies.

and similar fixtures or equipment. The minimum width or required capacity of aisles shall be unobstructed.

Exception: Encroachments complying with Section 1005.7.

1018.2 Aisles in assembly spaces. Aisles and aisle accessways serving a room or space used for assembly purposes shall comply with Section 1029.

[DSA-AC] In addition to the requirements of this section, means of egress, which provide access to, or egress from,

buildings or facilities where accessibility is required for applications listed in Section 1.9.1 regulated by the Division of the State Architect-Access Compliance, shall also comply with Chapter 11A or Chapter 11B, Section 11B-403, as applicable.

1018.3 Aisles in Groups B and M. In Group B and M occupancies, the minimum clear aisle width shall be determined by Section 1005.1 for the occupant load served, but shall be not less than that required for corridors by Section 1020.2.

Exception: Nonpublic aisless serving less than 50 people and not required to be accessible by Chapter 11B, (see Section 11B-403) need not exceed 28 inches (711 mm) in width.

1018.4 Aisle accessways in Group M. An aisle accessway shall be provided on not less than one side of each element within the merchandise pad. The minimum clear width for an aisle accessway not required to be accessible shall be 30 inches (762 mm). The required clear width of the aisle accessway shall be measured perpendicular to the elements and merchandise within the merchandise pad. The 30-inch (762 mm) minimum clear width shall be maintained to provide a path to an adjacent aisle or aisle accessway. The common path of egress travel shall not exceed 30 feet (9144 mm) from any point in the merchandise pad.

Exception: For areas serving not more than 50 occupants, the common path of egress travel shall not exceed 75 feet (22 860 mm).

1018.5 Aisles in other than assembly spaces and Groups B and M. In other than rooms or spaces used for assembly purposes and Group B and M occupancies, the minimum clear aisle capacity shall be determined by Section 1005.1 for the occupant load served, but the width shall be not less than that required for corridors by Section 1020.2.

Exception: Nonpublic aisles serving less than 50 people and not required to be accessible by *Chapter 11B (see Section 11B-403)* need not exceed 28 inches (711 mm) in width.

SECTION 1019 EXIT ACCESS STAIRWAYS AND RAMPS

1019.1 General. Exit access stairways and ramps serving as an exit access component in a means of egress system shall comply with the requirements of this section. The number of stories connected by exit access stairways and ramps shall include basements, but not mezzanines.

1019.2 All occupancies. Exit access stairways and ramps that serve floor levels within a single story are not required to be enclosed.

1019.3 Occupancies other than Groups I-2, *R*-2.1, I-3, *and R*-2.1. In other than Group I-2, *I*-2.1, I-3, *and R*-2.1 occupancies, floor openings containing exit access stairways or ramps that do not comply with one of the conditions listed in this section shall be enclosed with a shaft enclosure constructed in accordance with Section 713.

1. Exit access stairways and ramps that serve or atmospherically communicate between only two stories.

Such interconnected stories shall not be open to other stories.

- 2. In Group R-1, R-2, *R-2.1*, R-3 or *R-3.1* occupancies, exit access stairways and ramps connecting four stories or less serving and contained within an individual dwelling unit or sleeping unit or live/work unit.
- 3. Exit access stairways serving and contained within a Group R-3 congregate residence or a Group R-4 facility are not required to be enclosed.
- 4. Exit access stairways and ramps in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, where the area of the vertical opening between stories does not exceed twice the horizontal projected area of the stairway or ramp and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13. In other than Group B and M occupancies, this provision is limited to openings that do not connect more than four stories.
- 5. Exit access stairways and ramps within an atrium complying with the provisions of Section 404.
- 6. Exit access stairways and ramps in open parking garages that serve only the parking garage.
- 7. Exit access stairways and ramps serving open-air seating complying with the exit access travel distance requirements of Section 1029.7.
- 8. Exit access stairways and ramps serving the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, places of religious worship, auditoriums and sports facilities.
- 9. Fixed-guideway transit stations, constructed in accordance with Section 443.

1019.4 Group I-2, *I-2.1*, I-3, *and R-2.1* occupancies. In Group I-2, *I-2.1*, I-3, *and R-2.1* occupancies, floor openings between stories containing exit access stairways or ramps are required to be enclosed with a shaft enclosure constructed in accordance with Section 713.

Exception: In Group I-3 occupancies, exit access stairways or ramps constructed in accordance with Section 408 are not required to be enclosed.

SECTION 1020 CORRIDORS

1020.1 Construction. Corridors shall be fire-resistance rated in accordance with Table 1020.1. The corridor walls required to be fire-resistance rated shall comply with Section 708 for fire partitions.

Exceptions:

 A fire-resistance rating is not required for corridors in an occupancy in Group E where each room that is used for instruction has not less than one door opening directly to the exterior and rooms for assembly purposes have not less than one-half of the required means of egress doors opening directly to the exte-

393

- rior. Exterior doors specified in this exception are required to be at ground level.
- 2. A fire-resistance rating is not required for corridors contained within a dwelling unit or sleeping unit in an occupancy in Group R.
- 3. A fire-resistance rating is not required for corridors in open parking garages.
- 4. A fire-resistance rating is not required for corridors in an occupancy in Group B that is a space requiring only a single means of egress complying with Section 1006.2.
- Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on unrated exterior walls where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.
- 6. A fire-resistance rating is not required for corridors within suites in a Group I-2 or I-2.1 constructed in accordance with Section 407.4.4.5 or 407.4.4.6.
- 7. A fire-resistance rating is not required for corridors within Group I-3 occupancies that comply with intervening spaces, see Section 408.1.2.2.

TABLE 1020.1 CORRIDOR FIRE-RESISTANCE RATING

	OCCUPANT LOAD	REQUIRED FIRE- RESISTANCE RATING (hours)							
OCCUPANCY	SERVED BY CORRIDOR	Without sprinkler system	With sprinkler system ^c						
H-1, H-2, H-3	All	Not Permitted	1						
H-4, H-5, <i>L</i>	Greater than 30	Not Permitted	1						
A ^e , B, F, M, S, U	Greater than 30	1	0						
R-1, R-2, R-3, R-3.1, R-4	Greater than 10	1^d	1						
I-2 ^a , <i>I-2.1</i> , I-4	Greater than 6	Not Permitted	1						
I-3, R-2.1	Greater than 6	Not Permitted	1 ^b						
E	Greater than 10	1	0						

- a. For requirements for occupancies in Group I-2 *and I-2.1*, see Sections 407.2 and 407.3.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Sections 408.1.2 and 408.8.
- Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.
- d. Group R-3 and R-4 buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3. See Section 903.2.8 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.3.
- e. [SFM] See Section 1029.

1020.2 Width and capacity. The required capacity of corridors shall be determined as specified in Section 1005.1, but the minimum width shall be not less than that specified in Table 1020.2.

Exception: In Group I-2 occupancies, corridors are not required to have a clear width of 96 inches (2438 mm) in

areas where there will not be stretcher or bed movement for access to care or as part of the defend-in-place strategy.

1020.3 Obstruction. The minimum width or required capacity of corridors shall be unobstructed.

Exception: Encroachments complying with Section 1005.7.

TABLE 1020.2 MINIMUM CORRIDOR WIDTH

OCCUPANCY	MINIMUM WIDTH (inches)
Any facilities not listed below	44
Access to and utilization of mechanical, plumbing or electrical systems or equipment	24
With a required occupancy capacity less than 50	36
Within a dwelling unit	36
In Group E with a corridor having a required capacity of 100 or more	72
In corridors and areas serving stretcher traffic in ambulatory care facilities	72
Group I-2 in areas where required for bed movement	96
Corridors in Group I-2 and I-3 occupancies serving any area caring for one or more nonambulatory persons.	96

For SI: 1 inch = 25.4 mm.

1020.4 Dead ends. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet (6096 mm) in length.

Exceptions:

- 1. In occupancies in Group I-3 of Condition 2, 3 or 4, the dead end in a corridor shall not exceed 50 feet (15 240 mm).
- 2. In occupancies in Groups B, E, F, M, R-1, R-2, *R*-2.1, R-4, S and U, where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of the dead-end corridors shall not exceed 50 feet (15 240 mm).
- A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.

1020.5 Air movement in corridors. Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts.

Exceptions:

 Use of a corridor as a source of makeup air for exhaust systems in rooms that open directly onto such corridors, including toilet rooms, bathrooms, dressing rooms, and janitor closets, shall be permitted, provided that each such corridor is directly sup**1027.4 Side yards.** The open areas adjoining exterior exit stairways or ramps shall be either yards, courts or public ways; the remaining sides are permitted to be enclosed by the exterior walls of the building.

1027.5 Location. Exterior exit stairways and ramps shall have a minimum fire separation distance of 10 feet (3048 mm) measured at right angles from the exterior edge of the stairway or ramps, including landings, to:

- 1. Adjacent lot lines.
- 2. Other portions of the building.
- Other buildings on the same lot unless the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance.

For the purposes of this section, other portions of the building shall be treated as separate buildings.

1027.6 Exterior exit stairway and ramp protection. Exterior exit stairways and ramps shall be separated from the interior of the building as required in Section 1023.2. Openings shall be limited to those necessary for egress from normally occupied spaces. Where a vertical plane projecting from the edge of an exterior exit stairway or ramp and landings is exposed by other parts of the building at an angle of less than 180 degrees (3.14 rad), the exterior wall shall be rated in accordance with Section 1023.7.

Exceptions:

- 1. Separation from the interior of the building is not required for occupancies, other than those in Group R-1 or R-2, in buildings that are not more than two stories above grade plane where a level of exit discharge serving such occupancies is the first story above grade plane.
- 2. Separation from the interior of the building is not required where the exterior exit stairway or ramp is served by an exterior exit ramp or balcony that connects two remote exterior exit stairways or other approved exits with a perimeter that is not less than 50 percent open. To be considered open, the opening shall be not less than 50 percent of the height of the enclosing wall, with the top of the openings not less than 7 feet (2134 mm) above the top of the balcony.
- 3. Separation from the open-ended corridor of the building is not required for exterior exit stairways or ramps, provided that Items 3.1 through 3.5 are met:
 - 3.1. The building, including open-ended corridors, and stairways and ramps, shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
 - 3.2. The open-ended corridors comply with Section 1020.
 - 3.3. The open-ended corridors are connected on each end to an exterior exit stairway or ramp complying with Section 1027.

- 3.4. The exterior walls and openings adjacent to the exterior exit stairway or ramp comply with Section 1023.7.
- 3.5. At any location in an open-ended corridor where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3.3 m²) or an exterior stairway or ramp shall be provided. Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases.

SECTION 1028 EXIT DISCHARGE

1028.1 General. Exits shall discharge directly to the exterior of the building. The exit discharge shall be at grade or shall provide a direct path of egress travel to grade. The exit discharge shall not reenter a building. The combined use of Exceptions 1 and 2 shall not exceed 50 percent of the number and minimum width or required capacity of the required exits.

Exceptions:

- Not more than 50 percent of the number and minimum width or required capacity of interior exit stairways and ramps is permitted to egress through areas on the level of discharge provided all of the following conditions are met:
 - 1.1. Discharge of interior exit stairways and ramps shall be provided with a free and unobstructed path of travel to an exterior exit door and such exit is readily visible and identifiable from the point of termination of the enclosure.
 - 1.2. The entire area of the level of exit discharge is separated from areas below by construction conforming to the fire-resistance rating for the enclosure.
 - 1.3. The egress path from the interior exit stairway and ramp on the level of exit discharge is protected throughout by an approved automatic sprinkler system. Portions of the level of exit discharge with access to the egress path shall be either equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, or separated from the egress path in accordance with the requirements for the enclosure of interior exit stairways or ramps.
 - 1.4. Where a required interior exit stairway or ramp and an exit access stairway or ramp serve the same floor level and terminate at the same level of exit discharge, the termination of the exit access stairway or ramp and the exit discharge door of the interior exit stairway or ramp shall be separated by

401

a distance of not less than 30 feet (9144 mm) or not less than one-fourth the length of the maximum overall diagonal dimension of the building, whichever is less. The distance shall be measured in a straight line between the exit discharge door from the interior exit stairway or ramp and the last tread of the exit access stairway or termination of slope of the exit access ramp.

- 2. Not more than 50 percent of the number and minimum width or required capacity of the interior exit stairways and ramps is permitted to egress through a vestibule provided all of the following conditions are met:
 - 2.1. The entire area of the vestibule is separated from areas below by construction conforming to the fire-resistance rating of the interior exit stairway or ramp enclosure.
 - 2.2. The depth from the exterior of the building is not greater than 10 feet (3048 mm) and the length is not greater than 30 feet (9144 mm).
 - 2.3. The area is separated from the remainder of the level of exit discharge by a fire partition constructed in accordance with Section 708.

Exception: The maximum transmitted temperature rise is not required.

- 2.4. The area is used only for means of egress and exits directly to the outside.
- 3. Horizontal exits complying with Section 1026 shall not be required to discharge directly to the exterior of the building.

1028.2 Exit discharge width or capacity. The minimum width or required capacity of the exit discharge shall be not less than the minimum width or required capacity of the exits being served.

1028.3 Exit discharge components. Exit discharge components shall be sufficiently open to the exterior so as to minimize the accumulation of smoke and toxic gases.

1028.4 Egress courts. Egress courts serving as a portion of the exit discharge in the means of egress system shall comply with the requirements of Sections 1028.4.1 and 1028.4.2.

1028.4.1 Width or capacity. The required capacity of egress courts shall be determined as specified in Section 1005.1, but the minimum width shall be not less than 44 inches (1118 mm), except as specified herein. Egress courts serving Group R-3 and U occupancies shall be not less than 36 inches (914 mm) in width. The required capacity and width of egress courts shall be unobstructed to a height of 7 feet (2134 mm).

Exception: Encroachments complying with Section 1005.7.

Where an egress court exceeds the minimum required width and the width of such egress court is then reduced along the path of exit travel, the reduction in width shall be gradual. The transition in width shall be affected by a guard not less than 36 inches (914 mm) in height and shall not create an angle of more than 30 degrees (0.52 rad) with respect to the axis of the egress court along the path of egress travel. The width of the egress court shall not be less than the required capacity.

1028.4.2 Construction and openings. Where an egress court serving a building or portion thereof is less than 10 feet (3048 mm) in width, the egress court walls shall have not less than 1-hour fire-resistance-rated construction for a distance of 10 feet (3048 mm) above the floor of the egress court. Openings within such walls shall be protected by opening protectives having a fire protection rating of not less than $\frac{3}{4}$ hour.

Exceptions:

- 1. Egress courts serving an occupant load of less than 10.
- 2. Egress courts serving Group R-3.

1028.5 Access to a public way. The exit discharge shall provide a direct and unobstructed access to a public way.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

- 1. The area shall be of a size to accommodate not less than 5 square feet (0.46 m²) for each person.
- 2. For other than Group E buildings, the area shall be located on the same lot not less than 50 feet (15 240 mm) away from the building requiring egress. For Group E buildings, the area shall be located on the same lot at least 50 feet (15 240 mm) away from any building.
- 3. The area shall be permanently maintained and identified as a safe dispersal area.
- 4. The area shall be provided with a safe and unobstructed path of travel from the building.
- 5. In correctional facilities, the area shall be of a size to accommodate not less than 7 square feet (0.6503 m²) for each person. Accessible path of egress travel to the safe dispersal area and clear ground space for 5 percent of the occupants meeting Section 11B-305.3 shall be provided.

SECTION 1029 ASSEMBLY

1029.1 General. A room or space used for assembly purposes that contains seats, tables, displays, equipment or other material shall comply with this section.

Exception: Group A occupancies within Group I-3 facilities are exempt from egress requirements of Section 1029.

1029.1.1 Bleachers. Bleachers, grandstands and folding and telescopic seating, that are not building elements, shall comply with ICC 300.

1029.1.1.1 Spaces under grandstands and bleachers. Where spaces under grandstands or bleachers are used

for purposes other than ticket booths less than 100 square feet $(9.29~\text{m}^2)$ and toilet rooms, such spaces shall be separated by fire barriers complying with Section 707 and horizontal assemblies complying with Section 711 with not less than 1-hour fire-resistance-rated construction.

1029.2 Assembly main exit. A building, room or space used for assembly purposes that has an occupant load of greater than 300 and is provided with a main exit, that main exit shall be of sufficient capacity to accommodate not less than one-half of the occupant load, but such capacity shall be not less than the total required capacity of all means of egress leading to the exit. Where the building is classified as a Group A occupancy, the main exit shall front on not less than one street or an unoccupied space of not less than 20 feet (6096 mm) in width that adjoins a street or public way. In a building, room or space used for assembly purposes where there is not a well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total capacity of egress is not less than 100 percent of the required capacity and not less than one exit shall discharge on a street or an unoccupied space of not less than 20 feet (6096 mm) in capacity that adjoins a street or publicway. Smoke-protected seating shall comply with Section 1029.6.2.

1029.3 Assembly other exits. In addition to having access to a main exit, each level in a building used for assembly purposes having an occupant load greater than 300 and provided with a main exit, shall be provided with additional means of egress that shall provide an egress capacity for not less than one-half of the total occupant load served by that level and shall comply with Section 1007.1. Not less than one-half of the additional means of egress required by this section shall be directly to an exit, or through a lobby, that is not used to access the main exit, to an exit, or to a one hour rated corridor to an exit. In a building used for assembly purposes where there is not a welldefined main exit or where multiple main exits are provided, exits for each level shall be permitted to be distributed around the perimeter of the building, provided that the total width of egress is not less than 100 percent of the required width and not less than one exit shall discharge on a street or an unoccupied space of not less than 20 feet (6096 mm) in capacity that adjoins a street or publicway. Smoke-protected seating shall comply with Section 1029.6.2.

1029.3.1 Occupant loads between 100 and 300. Group A occupancies or assembly occupancies accessory to Group E occupancies that have an occupant load of 100 to 300 not less than one of the required means of egress shall exit through one of the following:

1. Directly to an exit

- 2. Egress through a lobby that is not used to access the other required exit
- 3. To a one-hour rated corridor to an exit
- 4. Continuous through a one-hour rated lobby to an exit.

Not less than one exit shall discharge on a street or an unoccupied space of not less than 20 feet (6096 mm) in capacity that adjoins a street or public way.

1029.4 Foyers and lobbies. In Group A-1 occupancies, where persons are admitted to the building at times when seats are not available, such persons shall be allowed to wait in a lobby or

similar space, provided such lobby or similar space shall not encroach upon the minimum width or required capacity of the means of egress. Such foyer, if not directly connected to a public street by all the main entrances or exits, shall have a straight and unobstructed corridor or path of travel to every such main entrance or exit.

1029.5 Interior balcony and gallery means of egress. For balconies, galleries or press boxes having a seating capacity of 50 or more located in a building, room or space used for assembly purposes, not less than two means of egress shall be provided, with one from each side of every balcony, gallery or press box.

1029.6 Capacity of aisle for assembly. The required capacity of aisles shall be not less than that determined in accordance with Section 1029.6.1 where smoke-protected assembly seating is not provided and with Section 1029.6.2 or 1029.6.3 where smoke-protected assembly seating is provided.

1029.6.1 Without smoke protection. The required capacity in inches (mm) of the aisles for assembly seating without smoke protection shall be not less than the occupant load served by the egress element in accordance with all of the following, as applicable:

- 1. Not less than 0.3 inch (7.6 mm) of aisle capacity for each occupant served shall be provided on stepped aisles having riser heights 7 inches (178 mm) or less and tread depths 11 inches (279 mm) or greater, measured horizontally between tread nosings.
- 2. Not less than 0.005 inch (0.127 mm) of additional aisle capacity for each occupant shall be provided for each 0.10 inch (2.5 mm) of riser height above 7 inches (178 mm).
- 3. Where egress requires stepped aisle descent, not less than 0.075 inch (1.9 mm) of additional aisle capacity for each occupant shall be provided on those portions of aisle capacity having no handrail within a horizontal distance of 30 inches (762 mm).
- 4. Ramped aisles, where slopes are steeper than one unit vertical in 12 units horizontal (8-percent slope), shall have not less than 0.22 inch (5.6 mm) of clear aisle capacity for each occupant served. Level or ramped aisles, where slopes are not steeper than one unit vertical in 12 units horizontal (8-percent slope), shall have not less than 0.20 inch (5.1 mm) of clear aisle capacity for each occupant served.

1029.6.2 Smoke-protected assembly seating. The required capacity in inches (mm) of the aisle for smoke-protected assembly seating shall be not less than the occupant load served by the egress element multiplied by the appropriate factor in Table 1029.6.2. The total number of seats specified shall be those within the space exposed to the same smoke-protected environment. Interpolation is permitted between the specific values shown. A life safety evaluation, complying with NFPA 101, shall be done for a facility utilizing the reduced width requirements of Table 1029.6.2 for smoke-protected assembly seating.

Exception: For outdoor smoke-protected assembly seating with an occupant load not greater than 18,000,

403

the required capacity in inches (mm) shall be determined using the factors in Section 1029.6.3.

1029.6.2.1 Smoke control. Aisles and aisle accessways serving a smoke-protected assembly seating area shall be provided with a smoke control system complying with Section 909 or natural ventilation designed to maintain the smoke level not less than 6 feet (1829 mm) above the floor of the means of egress.

1029.6.2.2 Roof height. A smoke-protected assembly seating area with a roof shall have the lowest portion of the roof deck not less than 15 feet (4572 mm) above the highest aisle or aisle accessway.

Exception: A roof canopy in an outdoor stadium shall be permitted to be less than 15 feet (4572 mm) above the highest aisle or aisle accessway provided that there are no objects less than 80 inches (2032 mm) above the highest aisle or aisle accessway.

1029.6.2.3 Automatic sprinklers. Enclosed areas with walls and ceilings in buildings or structures containing smoke-protected assembly seating shall be protected with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

Exceptions:

- 1. The floor area used for contests, performances or entertainment provided the roof construction is more than 50 feet (15 240 mm) above the floor level and the use is restricted to low fire hazard uses.
- 2. Press boxes and storage facilities less than 1,000 square feet (93 m²) in area.
- 3. Outdoor seating facilities where seating and the means of egress in the seating area are essentially open to the outside.

1029.6.3 Outdoor smoke-protected assembly seating. The required capacity in inches (mm) of aisles shall be not less than the total occupant load served by the egress element multiplied by 0.08 (2.0 mm) where egress is by stepped aisle and multiplied by 0.06 (1.52 mm) where egress is by level aisles and ramped aisles.

Exception: The required capacity in inches (mm) of aisles shall be permitted to comply with Section 1029.6.2 for the number of seats in the outdoor smoke-protected assembly seating where Section 1029.6.2 permits less capacity.

1029.6.4 Public address system. See Section 907.2.1.3.

1029.7 Travel distance. Exits and aisles shall be so located that the travel distance to an exit door shall be not greater than 200 feet (60 960 mm) measured along the line of travel in nonsprinklered buildings. Travel distance shall be not more than 250 feet (76 200 mm) in sprinklered buildings. Where aisles are provided for seating, the distance shall be measured along the aisles and aisle accessways without travel over or on the seats.

Exceptions:

- 1. Smoke-protected assembly seating: The travel distance from each seat to the nearest entrance to a vomitory or concourse shall not exceed 200 feet (60 960 mm). The travel distance from the entrance to the vomitory or concourse to a stairway, ramp or walk on the exterior of the building shall not exceed 200 feet (60 960 mm).
- 2. Open-air seating: The travel distance from each seat to the building exterior shall not exceed 400 feet (122 m). The travel distance shall not be limited in facilities of Type I or II construction.

1029.8 Common path of egress travel. The common path of egress travel shall not exceed 30 feet (9144 mm) from any seat to a point where an occupant has a choice of two paths of egress travel to two exits.

Exceptions:

- 1. For areas serving less than 50 occupants, the common path of egress travel shall not exceed 75 feet (22 860 mm).
- For smoke-protected assembly seating, the common path of egress travel shall not exceed 50 feet (15 240 mm).

1029.8.1 Path through adjacent row. Where one of the two paths of travel is across the aisle through a row of seats to another aisle, there shall be not more than 24 seats between the two aisles, and the minimum clear width between rows for the row between the two aisles shall be 12 inches (305 mm) plus 0.6 inch (15.2 mm) for each additional seat above seven in the row between aisles.

Exception: For smoke-protected assembly seating there shall be not more than 40 seats between the two aisles and the minimum clear width shall be 12 inches (305 mm) plus 0.3 inch (7.6 mm) for each additional seat.

TABLE 1029.6.2
CAPACITY FOR AISLES FOR SMOKE-PROTECTED ASSEMBLY

TOTAL NUMBER OF SEATS IN	INCHES OF CAPACITY PER SEAT SERVED											
THE SMOKE-PROTECTED ASSEMBLY SEATING	Stepped aisles with handrails within 30 inches	Stepped aisles without handrails within 30 inches	Level aisles or ramped aisles not steeper than 1 in 10 in slope	Ramped aisles steeper than 1 in 10 in slope								
Equal to or less than 5,000	0.200	0.250	0.150	0.165								
10,000	0.130	0.163	0.100	0.110								
15,000	0.096	0.120	0.070	0.077								
20,000	0.076	0.095	0.056	0.062								
Equal to or greater than 25,000	0.060	0.075	0.044	0.048								

For SI: 1 inch = 25.4 mm.

MEZZANINE SHALL

MULTI-BEDROOM HOUSING UNIT SHOPPING CENTER (OR SHOPPING MALL)

SHOULD NFPA SIDEWALK NOSING SIGN OCCUPANT LOAD SINK **OCCUPIABLE SPACE** SITE OPEN RISER

SLEEPING ACCOMMODATIONS **OPERABLE PART**

SOFT CONTAINED PLAY STRUCTURE PASSENGER ELEVATOR

SPACE PATH OF TRAVEL

SPECIFIED PUBLIC TRANSPORTATION **PEDESTRIAN STAGE** PEDESTRIAN WAY **STAIR PERMANENT STAIRWAY PERMIT STORY**

STRUCTURAL FRAME PLACE OF PUBLIC ACCOMMODATION

STRUCTURE PLATFORM TACTILE PLATFORM (WHEELCHAIR) LIFT

TACTILE SIGN PLAY AREA

TECHNICALLY INFEASIBLE PLAY COMPONENT

TEEING GROUND POINT-OF-SALE DEVICE

TEMPORARY POWDER ROOM

TEXT TELEPHONE POWER-ASSISTED DOOR TRANSFER DEVICE PRIVATE BUILDING OR FACILITY TRANSIENT LODGING

PROFESSIONAL OFFICE OF A HEALTH CARE PRO-TRANSIT BOARDING PLATFORM

VIDER

PICTOGRAM

TRANSITION PLATE PUBLIC BUILDING OR FACILITY

TREAD PUBLIC ENTITY TTY PUBLIC ENTRANCE

UNREASONABLE HARDSHIP **PUBLIC HOUSING**

USE ZONE PUBLIC USE

VALUATION THRESHOLD **PUBLIC-USE AREAS**

VEHICULAR WAY PUBLIC WAY

WALK **QUALIFIED HISTORIC BUILDING OR FACILITY WET BAR**

RAMP WHEELCHAIR

REASONABLE PORTION WHEELCHAIR SPACE RECOMMEND

WORKSTATION

REMODELING

WORK AREA EQUIPMENT REPAIR

11B-107 Special conditions appeals action. See Chapter 1, RESIDENTIAL DWELLING UNIT

Section 1.9.1.5. RESTRICTED ENTRANCE 11B-108 Maintenance of accessible features. A public

RISER accommodation shall maintain in operable working condition those features of facilities and equipment that are required to RUNNING SLOPE be accessible to and useable by persons with disabilities. Iso-SELF-SERVICE STORAGE lated or temporary interruptions in service or accessibility SERVICE ENTRANCE due to maintenance or repairs shall be permitted.

DIVISION 2:SCOPING REQUIREMENTS

11B-201 Application

11B-201.1 Scope. All areas of newly designed and newly constructed buildings and facilities and altered portions of existing buildings and facilities shall comply with these requirements.

11B-201.2 Application based on building or facility use. Where a site, building, facility, room, or space contains more than one use, each portion shall comply with the applicable requirements for that use.

11B-201.3 Temporary and permanent structures. These requirements shall apply to temporary and permanent buildings and facilities.

11B-201.4 Construction support facilities. These requirements shall apply to temporary or permanent construction support facilities for uses and activities not directly associated with the actual processes of construction, including but not limited to offices, meeting rooms, plan rooms, other administrative or support functions. When provided, toilet and bathing facilities serving construction support facilities shall comply with Section 11B-213. When toilet and bathing facilities serving construction support facilities are provided by portable units, at least one of each type shall be accessible and connected to the construction support facilities it serves by an accessible route.

Exception: During construction an accessible route shall not be required between site arrival points or the boundary of the area of construction and the entrance to the construction support facilities if the only means of access between them is a vehicular way not providing pedestrian access.

11B-202 Existing buildings and facilities

11B-202.1 General. Additions and alterations to existing buildings or facilities shall comply with Section 11B-202.

11B-202.2 Additions. Each addition to an existing building or facility shall comply with the requirements for new construction *and* shall comply with *Section 11B-*202.4.

11B-202.3 Alterations. Where existing elements or spaces are altered, each altered element or space shall comply with the applicable requirements of *Division 2*, including Section 11B-202.4.

Exceptions:

- 1. Reserved.
- 2. Technically infeasible. In alterations, where the enforcing authority determines compliance with applicable requirements is technically infeasible, the alteration shall provide equivalent facilitation or comply with the requirements to the maximum extent feasible. The details of the finding that full compliance with the requirements is technically infeasible shall be recorded and entered into the files of the enforcing agency.

- 3. Residential dwelling units not required to be accessible in compliance with *this code* shall not be required to comply with *Section 11B-202.3*.
- 11B-202.3.1 Prohibited reduction in access. An alteration that decreases or has the effect of decreasing the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.

11B-202.3.2 Extent of application. An alteration of an existing element, space, or area of a building or facility shall not impose a requirement for accessibility greater than required for new construction.

11B-202.3.3 Alteration of single elements. If alterations of single elements, when considered together, amount to an alteration of a room or space in a building or facility, the entire room or space shall be made accessible.

11B-202.4 Path of travel requirements in alterations, additions and structural repairs. When alterations or additions are made to existing buildings or facilities, an accessible path of travel to the specific area of alteration or addition shall be provided. The primary accessible path of travel shall include:

- 1. A primary entrance to the building or facility,
- 2. Toilet and bathing facilities serving the area,
- 3. Drinking fountains serving the area,
- 4. Public telephones serving the area, and
- 5. Signs.

Exceptions:

- Residential dwelling units shall comply with Section 11B-233.3.4.2.
- 2. If the following elements of a path of travel have been constructed or altered in compliance with the accessibility requirements of the immediately preceding edition of the California Building Code, it shall not be required to retrofit such elements to reflect the incremental changes in this code solely because of an alteration to an area served by those elements of the path of travel:
 - 1. A primary entrance to the building or facility,
 - 2. Toilet and bathing facilities serving the area,
 - 3. Drinking fountains serving the area,
 - 4. Public telephones serving the area, and
 - 5. Signs.

Note: The language in this exception, which refers to the "immediately preceding edition of the California Building Code," shall permit a reference back to one CBC edition only and is not accumulative to prior editions.

3. Additions or alterations to meet accessibility requirements consisting of one or more of the following items shall be limited to the actual scope of

work of the project and shall not be required to comply with Section 11B-202.4:

- 1. Altering one building entrance.
- 2. Altering one existing toilet facility.
- 3. Altering existing elevators.
- 4. Altering existing steps.
- 5. Altering existing handrails.
- 4. Alterations solely for the purpose of barrier removal undertaken pursuant to the requirements of the Americans with Disabilities Act (Public Law 101-336, 28 C.F.R., Section 36.304) or the accessibility requirements of this code as those requirements or regulations now exist or are hereafter amended including, but not limited to, one or more of the following items shall be limited to the actual scope of work of the project and shall not be required to comply with Section 11B-202.4:
 - 1. Installing ramps.
 - 2. Making curb cuts in sidewalks and entrance.
 - 3. Repositioning shelves.
 - 4. Rearranging tables, chairs, vending machines, display racks, and other furniture.
 - 5. Repositioning telephones.
 - 6. Adding raised markings on elevator control buttons.
 - 7. Installing flashing alarm lights.
 - 8. Widening doors.
 - 9. Installing offset hinges to widen doorways.
 - Eliminating a turnstile or providing an alternative accessible route.
 - 11. Installing accessible door hardware.
 - 12. Installing grab bars in toilet stalls.
 - 13. Rearranging toilet partitions to increase maneuvering space.
 - 14. Insulating lavatory pipes under sinks to prevent burns.
 - 15. Installing a raised toilet seat.
 - 16. Installing a full-length bathroom mirror.
 - 17. Repositioning the paper towel dispenser in a bathroom.
 - 18. Creating designated accessible parking spaces.
 - 19. Removing high-pile, low-density carpeting.
- 5. Alterations of existing parking lots by resurfacing and/or restriping shall be limited to the actual scope of work of the project and shall not be required to comply with Section 11B-202.4.
- 6. The addition or replacement of signs and/or identification devices shall be limited to the actual scope of work of the project and shall not be required to comply with Section 11B-202.4.
- 7. Projects consisting only of heating, ventilation, air conditioning, reroofing, electrical work not involving placement of switches and receptacles, cosmetic work

- that does not affect items regulated by this code, such as painting, equipment not considered to be a part of the architecture of the building or area, such as computer terminals and office equipment shall not be required to comply with Section 11B-202.4 unless they affect the usability of the building or facility.
- 8. When the adjusted construction cost, as defined, is less than or equal to the current valuation threshold, as defined, the cost of compliance with Section 11B-202.4 shall be limited to 20 percent of the adjusted construction cost of alterations, structural repairs or additions. When the cost of full compliance with Section 11B-202.4 would exceed 20 percent, compliance shall be provided to the greatest extent possible without exceeding 20 percent.

When the adjusted construction cost, as defined, exceeds the current valuation threshold, as defined, and the enforcing agency determines the cost of compliance with Section 11B-202.4 is an unreasonable hardship, as defined, full compliance with Section 11B-202.4 shall not be required. Compliance shall be provided by equivalent facilitation or to the greatest extent possible without creating an unreasonable hardship; but in no case shall the cost of compliance be less than 20 percent of the adjusted construction cost of alterations, structural repairs or additions. The details of the finding of unreasonable hardship shall be recorded and entered into the files of the enforcing agency and shall be subject to Chapter 1, Section 1.9.1.5, Special Conditions for Persons with Disabilities Requiring Appeals Action Ratification.

For the purposes of this exception, the adjusted construction cost of alterations, structural repairs or additions shall not include the cost of alterations to path of travel elements required to comply with Section 11B-202.4.

In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access in the following order:

- 1. An accessible entrance:
- 2. An accessible route to the altered area;
- 3. At least one accessible restroom for each sex or one accessible unisex (single-user or family) restroom;
- 4. Accessible telephones;
- 5. Accessible drinking fountains; and
- 6. When possible, additional accessible elements such as parking, signs, storage and alarms.

If an area has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area or a different area on the same path of travel are undertaken within three years of the original alteration, the total cost of alterations to the areas on that path of travel during the preceding three-year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate.

- 9. Certain types of privately funded, multistory buildings and facilities were formerly exempt from accessibility requirements above and below the first floor under this code, but as of April 1, 1994 are no longer exempt due to more restrictive provisions in the federal Americans with Disabilities Act. In alteration projects involving buildings and facilities previously approved and built without elevators, areas above and below the ground floor are subject to the 20-percent disproportionality provisions described in Exception 8, above, even if the value of the project exceeds the valuation threshold in Exception 8. The types of buildings and facilities are:
 - Office buildings and passenger vehicle service stations of three stories or more and 3,000 or more square feet (279 m²) per floor.
 - 2. Offices of physicians and surgeons.
 - 3. Shopping centers.
 - 4. Other buildings and facilities three stories or more and 3,000 or more square feet (279 m²) per floor if a reasonable portion of services sought and used by the public is available on the accessible level.

For the general privately funded multistory building exception applicable to new construction and alterations, see Section 11B-206.2.3, Exception 1.

The elevator exception set forth in this section does not obviate or limit in any way the obligation to comply with the other accessibility requirements in this code. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor.

10. Alterations solely for the purpose of installing electric vehicle charging stations (EVCS) at facilities where vehicle fueling, recharging, parking or storage is a primary function shall comply with Section 11B-202.4 to the maximum extent feasible without exceeding 20 percent of the cost of the work directly associated with the installation of EVCS.

Alterations solely for the purpose of installing EVCS at facilities where vehicle fueling, recharging, parking or storage is not a primary function shall not be required to comply with Section 11B-202.4

11B-202.5 Alterations to qualified historic buildings and facilities. Alterations to a qualified historic building or facility shall comply with the State Historical Building Code, Part 8, Title 24, of the California Code of Regulations.

Exception: Reserved.

11B-203 General exceptions

11B-203.1 General. Sites, buildings, facilities, and elements are exempt from these requirements to the extent specified by 11B-203.

11B-203.2 Construction sites. Structures and sites directly associated with the actual processes of construction, includ-

ing but not limited to, scaffolding, bridging, materials hoists, materials storage and construction trailers shall not be required to comply with these requirements or to be on an accessible route. Portable toilet units provided for use exclusively by construction personnel on a construction site shall not be required to comply with *Section 11B*-213 or to be on an accessible route.

11B-203.3 Raised areas. Areas raised primarily for purposes of security, life safety, or fire safety, including but not limited to, observation or lookout galleries, prison guard towers, fire towers or life guard stands shall not be required to comply with these requirements or to be on an accessible route.

11B-203.4 Limited access spaces. Spaces not customarily occupied and accessed only by ladders, catwalks, crawl spaces or very narrow passageways shall not be required to comply with these requirements or to be on an accessible route.

11B-203.5 Machinery spaces. Spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment shall not be required to comply with these requirements or to be on an accessible route. Machinery spaces include, but are not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; water or sewage treatment pump rooms and stations; electric substations and transformer vaults; and highway and tunnel utility facilities.

11B-203.6 Single occupant structures. Single occupant structures accessed only by passageways below grade or elevated above standard curb height, including but not limited to, toll booths that are accessed only by underground tunnels, shall not be required to comply with these requirements or to be on an accessible route.

11B-203.7 Detention and correctional facilities. In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel and that do not serve holding cells or housing cells required to comply with Section 11B-232, shall not be required to comply with these requirements or to be on an accessible route.

11B-203.8 Residential facilities. In public housing residential facilities, common use areas that do not serve residential dwelling units required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4 and adaptable features complying with Chapter 11A, Division IV shall not be required to comply with these requirements or to be on an accessible route.

11B-203.9 Employee workstations. Employee workstations shall be on an accessible route complying with Division 4. Spaces and elements within employee workstations shall only be required to comply with Sections 11B-207.1, 11B-215.3, 11B-302, 11B-303, 11B-308.1.1, 11B-308.1.2, and 11B-404.2.3 unless exempted by other parts of this code. Common use circulation paths within employee workstations shall comply with Section 11B-206.2.8.

Exception: Receptacles, controls, and switches that are an integral part of workstation furnishings, fixtures, and equipment shall not be required to comply with Sections 11B-308.1.1 and 11B-308.1.2.

Raised structures used solely for refereeing, judging or scoring a sport shall not be required to comply with these requirements or to be on an accessible route. An accessible route complying with Division 4 shall be provided to the ground- or floor-level entry points, where provided, of stairs, ladders, or other means of reaching the raised elements or areas.

11B-203.11 Water slides. Water slides shall not be required to comply with these requirements or to be on an accessible route. An accessible route complying with Division 4 shall be provided to the ground- or floor-level entry points, where provided, of stairs, ladders or other means of reaching the raised elements or areas.

11B-203.12 Animal containment areas. Animal containment areas that are not for public use shall not be required to comply with these requirements or to be on an accessible route. Animal containment areas for public use shall be on an accessible route.

11B-203.13 Raised boxing or wrestling rings. Raised boxing or wrestling rings shall not be required to comply with these requirements or to be on an accessible route. An accessible route complying with Division 4 shall be provided to the ground- or floor-level entry points, where provided, of stairs, ladders or other means of reaching the raised elements or areas.

11B-203.14 Raised diving boards and diving platforms. Raised diving boards and diving platforms shall not be required to comply with these requirements or to be on an accessible route. An accessible route complying with Division 4 shall be provided to the ground- or floor-level entry points, where provided, of stairs, ladders or other means of reaching the raised elements or areas.

11B-204 Protruding objects

11B-204.1 General. Protruding objects on circulation paths shall comply with Section 11B-307.

Exceptions:

- 1. Within areas of sport activity, protruding objects on circulation paths shall not be required to comply with *Section 11B*-307.
- 2. Within play areas, protruding objects on circulation paths shall not be required to comply with *Section 11B*-307 provided that ground level accessible routes provide vertical clearance in compliance with *Section 11B*-1008.2.

11B-205 Operable parts

11B-205.1 General. Operable parts on accessible elements, accessible routes, and in accessible rooms and spaces shall comply with Section 11B-309.

Exceptions:

- 1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to comply with *Section 11B*-309.
- 2. Electrical or communication receptacles serving a dedicated use shall not be required to comply with *Section 11B*-309.
- 3. Reserved.

- 4. Floor electrical receptacles shall not be required to comply with *Section 11B*-309.
- 5. HVAC diffusers shall not be required to comply with *Section 11B*-309.
- 6. Except for light switches, where redundant controls are provided for a single element, one control in each space shall not be required to comply with *Section 11B*-309.
- 7. Cleats and other boat securement devices shall not be required to comply with *Section 11B*-309.3.
- 8. Exercise machines and exercise equipment shall not be required to comply with *Section 11B*-309.

11B-206 Accessible routes

11B-206.1 General. Accessible routes shall be provided in accordance with Section 11B-206 and shall comply with Division 4.

*11B***-206.2 Where required.** Accessible routes shall be provided where required by *Section 11B*-206.2.

11B-206.2.1 Site arrival points. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger drop-off and loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve. Where more than one route is provided, all routes must be accessible.

Exceptions:

- 1. Reserved.
- An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.
- 3. General circulation paths shall be permitted when located in close proximity to an accessible route.

11B-206.2.2 Within a site. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

Exception: An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements, and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.

11B-206.2.3 Multi-story buildings and facilities. At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

Exceptions:

- 1. The following types of privately funded multistory buildings do not require a ramp or elevator above and below the first floor:
 - 1.1. Multi-storied office buildings (other than the professional office of a health care provider) and passenger vehicle service stations less than three stories high or less than 3,000 square feet (279 m²) per story.

517

1.2. Any other privately funded multi-storied building that is not a shopping center, shopping mall or the professional office of a health care provider, or a terminal, depot or other station used for specified public transportation, or an airport passenger terminal and that is less than three stories high or less than 3,000 square feet (279 m²) per story if a reasonable portion of all facilities and accommodations normally sought and used by the public in such a building are accessible to and usable by persons with disabilities.

2. Reserved.

- 3. In detention and correctional facilities, an accessible route shall not be required to connect stories where cells with mobility features required to comply with *Section 11B*-807.2, all common use areas serving cells with mobility features required to comply with *Section 11B*-807.2, and all public use areas are on an accessible route.
- 4. In residential facilities, an accessible route shall not be required to connect stories where residential dwelling units with mobility features required to comply with Sections 11B-809.2 through 11B-809.4, residential dwelling units with adaptable features complying with Chapter 11A, Division IV, all common use areas serving residential dwelling units with mobility features required to comply with Sections 11B-809.2 through 11B-809.4, all common use areas serving residential dwelling units with adaptable features complying with Chapter 11A, Division IV, and public use areas serving residential dwelling units are on an accessible route.
- 5. Within multi-story transient lodging guest rooms with mobility features required to comply with *Section 11B*-806.2, an accessible route shall not be required to connect stories provided that spaces complying with *Section 11B*-806.2 are on an accessible route and sleeping accommodations for two persons minimum are provided on a story served by an accessible route.
- 6. In air traffic control towers, an accessible route shall not be required to serve the cab and *the equipment areas on* the floor immediately below the cab.

7. Reserved.

11B-206.2.3.1 Stairs and escalators in existing buildings. In alterations and additions, where an escalator or stair is provided where none existed previously and major structural modifications are necessary for the installation, an accessible route shall be provided between the levels served by the escalator or stair unless exempted by Section 11B-206.2.3 Exceptions 1 through 7.

11B-206.2.3.2 Distance to elevators. In new construction of buildings where elevators are required by Sec-

tion 11B-206.2.3, and which exceed 10,000 square feet (929 m²) on any floor, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet (60,960 mm) of travel of each stair and each escalator. In existing buildings that exceed 10,000 square feet (929 m²) on any floor and in which elevators are required by Section 11B-206.2.3, whenever a newly constructed means of vertical access is provided via stairs or an escalator, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet (60,960 mm) of travel of each new stair or escalator.

Exception: Stairs used solely for emergency egress.

11B-206.2.4 Spaces and elements. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility, *including mezzanines*, which are otherwise connected by a circulation path unless exempted by Section 11B-206.2.3 Exceptions 1 through 7.

Exceptions:

1. Reserved.

2. In assembly areas with fixed seating required to comply with *Section 11B-221*, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided.

3. Reserved.

11B-206.2.5 Restaurants, cafeterias, banquet facilities and bars. In restaurants, cafeterias, banquet facilities, bars, and similar facilities, an accessible route shall be provided to all functional areas, including raised or sunken areas, and outdoor areas.

Exceptions:

1. In *alterations of* buildings or facilities not required to provide an accessible route between stories, an accessible route shall not be required to a mezzanine dining area where the mezzanine contains less than 25 percent of the total combined area for seating and dining and where the same decor and services are provided in the accessible area.

2. Reserved.

3. In sports facilities, tiered dining areas providing seating required to comply with *Section 11B-221* shall be required to have accessible routes serving at least 25 percent of the dining area provided that accessible routes serve seating complying with *Section 11B-221* and each tier is provided with the same services.

11B-206.2.6 Performance areas. Where a circulation path directly connects a performance area to an assembly seating area, an accessible route shall directly connect the assembly seating area with the performance area. An accessible route shall be provided from performance areas to ancillary areas or facilities used by performers unless exempted by Section 11B-206.2.3 Exceptions 1 through 7.

11B-206.2.7 Press boxes. Press boxes in assembly areas shall be on an accessible route.

Exceptions:

- 1. An accessible route shall not be required to press boxes in bleachers that have points of entry at only one level provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.
- 2. An accessible route shall not be required to free-standing press boxes that are elevated above grade 12 feet (3660 mm) minimum provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

11B-206.2.8 Employee work areas. Common use circulation paths within employee work areas shall comply with Section 11B-402.

Exceptions:

- 1. Reserved.
- 2. Common use circulation paths located within employee work areas that are an integral component of work area equipment shall not be required to comply with *Section 11B*-402.
- 3. Common use circulation paths located within exterior employee work areas that are fully exposed to the weather shall not be required to comply with *Section 11B*-402.
- 11B-206.2.9 Amusement rides. Amusement rides required to comply with Section 11B-234 shall provide accessible routes in accordance with Section 11B-206.2.9. Accessible routes serving amusement rides shall comply with Division 4 except as modified by Section 11B-1002.2.
 - 11B-206.2.9.1 Load and unload areas. Load and unload areas shall be on an accessible route. Where load and unload areas have more than one loading or unloading position, at least one loading and unloading position shall be on an accessible route.
 - 11B-206.2.9.2 Wheelchair spaces, ride seats designed for transfer, and transfer devices. When amusement rides are in the load and unload position, wheelchair spaces complying with Section 11B-1002.4, amusement ride seats designed for transfer complying with Section 11B-1002.5, and transfer devices complying with Section 11B-1002.6 shall be on an accessible route.
- 11B-206.2.10 Recreational boating facilities. Boat slips required to comply with Section 11B-235.2 and boarding piers at boat launch ramps required to comply with Section 11B-235.3 shall be on an accessible route. Accessible routes serving recreational boating facilities shall comply with Division 4, except as modified by Section 11B-1003.2.
- *11B*-206.2.11 Bowling lanes. Where bowling lanes are provided, at least 5 percent, but no fewer than one of each type of bowling lane, shall be on an accessible route.

- 11B-206.2.12 Court sports. In court sports, at least one accessible route shall directly connect both sides of the court.
- 11B-206.2.13 Exercise machines and equipment. Exercise machines and equipment required to comply with 11B-236 shall be on an accessible route.
- 11B-206.2.14 Fishing piers and platforms. Fishing piers and platforms shall be on an accessible route. Accessible routes serving fishing piers and platforms shall comply with *Division 4* except as modified by *Section 11B*-1005.1.
- 11B-206.2.15 Golf facilities. At least one accessible route shall connect accessible elements and spaces within the boundary of the golf course. In addition, accessible routes serving golf car rental areas; bag drop areas; course weather shelters complying with Section 11B-238.2.3; course toilet rooms; and practice putting greens, practice teeing grounds, and teeing stations at driving ranges complying with Section 11B-238.3 shall comply with Division 4 except as modified by Section 11B-1006.2.
 - **Exception:** Golf car passages complying with *Section 11B*-1006.3 shall be permitted to be used for all or part of accessible routes required by *Section 11B*-206.2.15.
- 11B-206.2.16 Miniature golf facilities. Holes required to comply with Section 11B-239.2, including the start of play, shall be on an accessible route. Accessible routes serving miniature golf facilities shall comply with Division 4 except as modified by Section 11B-1007.2.
- 11B-206.2.17 Play areas. Play areas shall provide accessible routes in accordance with Section 11B-206.2.17. Accessible routes serving play areas shall comply with Division 4 except as modified by Section 11B-1008.2.
 - 11B-206.2.17.1 Ground level and elevated play components. At least one accessible route shall be provided within the play area. The accessible route shall connect ground level play components required to comply with Section 11B-240.2.1 and elevated play components required to comply with Section 11B-240.2.2, including entry and exit points of the play components.
 - 11B-206.2.17.2 Soft contained play structures. Where three or fewer entry points are provided for soft contained play structures, at least one entry point shall be on an accessible route. Where four or more entry points are provided for soft contained play structures, at least two entry points shall be on an accessible route.
- 11B-206.2.18 Area of sport activity. An accessible route shall be provided to the boundary of each area of sport activity.
- 11B-206.3 Location. Accessible routes shall coincide with or be located in the same area as general circulation paths. Where circulation paths are interior, required accessible routes shall also be interior. An accessible route shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes, except as permitted by Chapter 10.

11B-206.4 Entrances. Entrances shall be provided in accordance with Section 11B-206.4. Entrance doors, doorways, and gates shall comply with Section 11B-404 and shall be on an accessible route complying with Section 11B-402.

Exceptions:

- 1. Reserved.
- 2. Reserved.

11B-206.4.1 Entrances and exterior ground floor exits. All entrances and exterior ground-floor exits to buildings and facilities shall comply with Section 11B-404.

Exceptions:

- Exterior ground floor exits serving smoke-proof enclosures, stairwells, and exit doors serving stairs only shall not be required to comply with Section 11B-404.
- 2. Exits in excess of those required by Chapter 10, and which are more than 24 inches (610 mm) above grade shall not be required to comply with Section 11B-404. Directional signs shall comply with Chapter 10, Section 1009.10.
- 11B-206.4.2 Parking structure entrances. Where direct access is provided for pedestrians from a parking structure to a building or facility entrance, each direct access to the building or facility entrance shall comply with Section 11B-404.
- 11B-206.4.3 Entrances from tunnels or elevated walkways. Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, all entrances to the building or facility from each tunnel or walkway shall comply with Section 11B-404
- 11B-206.4.4 Transportation facilities. In addition to the requirements of Sections 11B-206.4.2, 11B-206.4.3, and 11B-206.4.5 through 11B-206.4.9, transportation facilities shall provide entrances in accordance with Section 11B-206.4.4.
 - 11B-206.4.4.1 Location. In transportation facilities, where different entrances serve different transportation fixed routes or groups of fixed routes, *entrances* serving each fixed route or group of fixed routes shall comply with *Section 11B-404*.
 - **Exception:** Entrances to key stations and existing intercity rail stations retrofitted in accordance with 49 CFR 37.49 or 49 CFR 37.51 shall not be required to comply with *Section 11B-*206.4.4.1.
 - 11B-206.4.4.2 Direct connections. Direct connections to other facilities shall provide an accessible route complying with Section 11B-404 from the point of connection to boarding platforms and all transportation system elements required to be accessible. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements required to be accessible.
 - **Exception:** In key stations and existing intercity rail stations, existing direct connections shall not be required to comply with *Section 11B*-404.

- 11B-206.4.4.3 Key stations and intercity rail stations. Key stations and existing intercity rail stations required by Subpart C of 49 CFR part 37 to be altered, shall have *entrances* complying with Section 11B-404.
- 11B-206.4.5 Tenant spaces. All entrances to each tenancy in a facility shall comply with Section 11B-404.
 - **Exception:** Self-service storage facilities not required to comply with *Section 11B-225.3* shall not be required to be on an accessible route.
- 11B-206.4.6 Residential dwelling unit primary entrance. In residential dwelling units, at least one primary entrance shall comply with Section 11B-404. The primary entrance to a residential dwelling unit shall not be to a bedroom.
- 11B-206.4.7 Restricted entrances. Where restricted entrances are provided to a building or facility, *all restricted entrances* to the building or facility shall comply with Section 11B-404.
- 11B-206.4.8 Service entrances. If a service entrance is the only entrance to a building or to a tenancy in a facility, that entrance shall comply with Section 11B-404. In existing buildings and facilities, a service entrance shall not be the sole accessible entrance unless it is the only entrance to a building or facility.
- 11B-206.4.9 Entrances for inmates or detainees. Where entrances used only by inmates or detainees and security personnel are provided at judicial facilities, detention facilities, or correctional facilities, at least one such entrance shall comply with Section 11B-404.
- 11B-206.4.10 Medical care and long-term care facilities. Weather protection by a canopy or roof overhang shall be provided at a minimum of one accessible entrance to licensed medical care and licensed long-term care facilities where the period of stay may exceed twenty-four hours. The area of weather protection shall include the passenger drop-off and loading zone complying with Section 11B-209.3 and the accessible route from the passenger loading zone to the accessible entrance it serves.
- 11B-206.5 Doors, doorways, and gates. Doors, doorways and gates providing user passage shall be provided in accordance with *Section 11B-206.5*.
 - 11B-206.5.1 Entrances. Each entrance to a building or facility required to comply with Section 11B-206.4 shall comply with Section 11B-404.
 - 11B-206.5.2 Rooms and spaces. Within a building or facility, every door, doorway or gate serving rooms and spaces complying with this chapter shall comply with Section 11B-404.
 - 11B-206.5.3 Transient lodging facilities. In transient lodging facilities, entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with Section 11B-806.2 shall comply with Section 11B-404.2.3.
 - **Exception:** Shower and sauna doors in guest rooms that are not required to provide mobility features complying with *Section 11B*-806.2 shall not be required to comply with *Section 11B*-404.2.3.

П

11B-206.5.4 Residential dwelling units. In residential dwelling units required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4, all doors and doorways providing user passage shall comply with Section 11B-404.

11B-206.6 Elevators. Elevators provided for passengers shall comply with Section 11B-407. Where multiple elevators are provided, each elevator shall comply with Section 11B-407.

Exceptions:

- 1. In a building or facility permitted to use the exceptions to *Section 11B*-206.2.3 or permitted by *Section 11B*-206.7 to use a platform lift, elevators complying with *Section 11B*-408 shall be permitted.
- 2. Elevators complying with Section 11B-408 or 11B-409 shall be permitted in multi-story residential dwelling units. Elevators provided as a means of access within a private residence shall be installed so that they are not accessible to the general public or to other occupants of the building.
- 3. Destination-oriented elevators complying with Section 11B-411 shall be permitted.

11B-206.6.1 Existing elevators. Where elements of existing elevators are altered, the same element shall also be altered in all elevators that are programmed to respond to the same hall call control as the altered elevator and shall comply with the requirements of Section 11B-407 for the altered element.

Exception: Where a group of existing elevators are altered into a destination-oriented elevator system, or where elements of existing destination-oriented elevators are altered, the same elements shall also be altered in all elevators that are programmed to respond to the same call console or group of call consoles and shall comply with the requirements of Section 11B-411 for the altered elements.

11B-206.7 Platform lifts. Platform lifts shall comply with Section 11B-410. Platform lifts shall be permitted as a component of an accessible route in new construction in accordance with Section 11B-206.7. Platform lifts shall be permitted as a component of an accessible route in an existing building or facility.

11B-206.7.1 Performance areas and speakers' platforms. Platform lifts shall be permitted to provide accessible routes to performance areas and speakers' platforms.

11B-206.7.2 Wheelchair spaces. Platform lifts shall be permitted to provide an accessible route to comply with the wheelchair space dispersion and line-of-sight requirements of Sections 11B-221 and 11B-802.

11B-206.7.3 Incidental spaces. Platform lifts shall be permitted to provide an accessible route to incidental spaces which are not public use spaces and which are occupied by five persons maximum.

11B-206.7.4 Judicial spaces. Platform lifts shall be permitted to provide an accessible route to: jury boxes and witness stands; raised courtroom stations including, judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations; and to depressed areas such as the well of a court.

11B-206.7.5 Existing site constraints. Platform lifts shall be permitted where existing exterior site constraints make use of a ramp or elevator infeasible.

11B-206.7.6 Guest rooms and residential dwelling units. Platform lifts shall be permitted to connect levels within transient lodging guest rooms required to provide mobility features complying with Section 11B-806.2 or residential dwelling units required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4 and adaptable features complying with Chapter 11A, Division IV.

11B-206.7.7 Amusement rides. Platform lifts shall be permitted to provide accessible routes to load and unload areas serving amusement rides.

11B-206.7.8 Play areas. Platform lifts shall be permitted to provide accessible routes to play components or soft contained play structures.

11B-206.7.9 Team or player seating. Platform lifts shall be permitted to provide accessible routes to team or player seating areas serving areas of sport activity.

11B-206.7.10 Recreational boating facilities and fishing piers and platforms. Platform lifts shall be permitted to be used instead of gangways that are part of accessible routes serving recreational boating facilities and fishing piers and platforms.

11B-206.8 Security barriers. Security barriers, including but not limited to, security bollards and security check points, shall not obstruct a required accessible route or accessible means of egress.

Exception: Where security barriers incorporate elements that cannot comply with these requirements such as certain metal detectors, fluoroscopes, or other similar devices, the accessible route shall be permitted to be located adjacent to security screening devices. The accessible route shall permit persons with disabilities passing around security barriers to maintain visual contact with their personal items to the same extent provided others passing through the security barrier.

11B-207 Accessible means of egress

11B-207.1 General. Means of egress shall comply with Chapter 10, Section 1009.

Exceptions:

- 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.
- 2. Areas of refuge shall not be required in detention and correctional facilities.

11B-207.2 Platform lifts. Standby power shall be provided for platform lifts permitted by Chapter 10, Section 1009.5 to serve as a part of an accessible means of egress. To ensure continued operation in case of primary power loss, platform lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five upward and downward trips.

11B-208 Parking spaces

11B-208.1 General. Where parking spaces are provided, parking spaces shall be provided in accordance with Section 11B-208. For the purposes of this section, electric vehicle charging stations are not parking spaces; see Section 11B-228.

Exception: Parking spaces used exclusively for buses, trucks, other delivery vehicles, or vehicular impound shall not be required to comply with *Section 11B-208* provided that lots accessed by the public are provided with a passenger *drop-off and* loading zone complying with *Section 11B-503*.

11B-208.2 Minimum number. Parking spaces complying with Section 11B-502 shall be provided in accordance with Table 11B-208.2 except as required by Sections 11B-208.2.1, 11B-208.2.2, and 11B-208.2.3. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

11B-208.2.1 Hospital outpatient facilities. Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities, and free-standing buildings providing outpatient clinical services of a hospital, shall comply with Section 11B-502.

11B-208.2.2 Rehabilitation facilities and outpatient physical therapy facilities. Twenty percent of patient and visitor parking spaces provided to serve rehabilitation

facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with *Section 11B*-502.

11B-208.2.3 Residential facilities. Parking spaces provided to serve residential facilities shall comply with Section 11B-208.2.3.

11B-208.2.3.1 Parking for residents. Where at least one parking space is provided for each residential dwelling unit, at least one parking space complying with Section 11B-502 shall be provided for each residential dwelling unit required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4. Where fewer than one parking space is provided for each residential dwelling unit, parking spaces complying with Section 11B-502 shall be provided in accordance with Table 11B-208.2.

11B-208.2.3.2 Additional parking spaces for residents. Where the total number of parking spaces provided for each residential dwelling unit exceeds one parking space per residential dwelling unit, 2 percent, but no fewer than one space, of all the parking spaces not covered by Section 11B-208.2.3.1 shall comply with Section 11B-502.

11B-208.2.3.3 Parking for guests, employees, and other non-residents. Where parking spaces are provided for persons other than residents, parking shall be provided in accordance with Table 11B-208.2.

Note: When assigned parking is provided, Chapter 11A indicates designated accessible parking for the adaptable residential dwelling units shall be provided on requests of residents with disabilities on the same terms and with the full range of choices (e.g., off-street parking, carport or garage) that are available to other residents.

TABLE 11B-208.2 PARKING SPACES

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

11B-232.5.2 Partitions. Where solid partitions or security glazing separate visitors from detainees or inmates at least one of each type of cubicle or counter partition shall comply with Section 11B-904.6.

11B-233 Residential facilities

11B-233.1 General. Public housing facilities with residential dwelling units available for public use shall comply with Section 11B-233. See Chapter 2, Section 202 of this code for the definition of Public Housing.

11B-233.2 Reserved.

П

11B-233.3 Public housing facilities. Public housing facilities with residential dwelling units shall comply with Section 11B-233.3.

11B-233.3.1 Minimum number: new construction. Newly constructed *public housing* facilities with residential dwelling units shall comply with *Section 11B-233.3.1*.

Exception: Where facilities contain 15 or fewer residential dwelling units, the requirements of *Sections 11B*-233.3.1.1 and *11B*-233.3.1.3 shall apply to the total number of residential dwelling units that are constructed under a single contract, or are developed as a whole, whether or not located on a common site.

11B-233.3.1.1 Residential dwelling units with mobility features. In public housing facilities with residential dwelling units, at least 5 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide mobility features complying with Sections 11B-809.2 through 11B-809.4 and shall be on an accessible route as required by Section 11B-206.

11B-233.3.1.2 Residential dwelling units with adaptable features. In public housing facilities with residential dwelling units, adaptable residential dwelling units complying with Chapter 11A, Division IV – Dwelling Unit Features shall be provided as required by Sections 11B-233.3.1.2.1 through 11B-233.3.1.2.5. Adaptable residential dwelling units shall be on an accessible route as required by Section 11B-206.

Exception: The number of required adaptable residential dwelling units shall be reduced by the number of units required by Section 11B-233.3.1.1.

11B-233.3.1.2.1 Elevator buildings. Residential dwelling units on floors served by an elevator shall be adaptable.

11B-233.3.1.2.2 Non-elevator buildings. Ground floor residential dwelling units in non-elevator buildings shall be adaptable.

11B-233.3.1.2.3 Ground floors above grade. Where the first floor in a building containing residential dwelling units is a floor above grade, all units on that floor shall be adaptable.

11B-233.3.1.2.4 Multi-story residential dwelling units in buildings with one or more elevators. In elevator buildings, public housing facilities with multi-story residential dwelling units shall comply with the following:

1. The primary entry of the multi-story residential dwelling unit shall be on an accessible route on the floor served by the elevator.

- 2. At least one powder room or bathroom and kitchen shall be located on the primary entry level.
- 3. Rooms or spaces located on the primary entry level shall be served by an accessible route and comply with Chapter 11A, Division IV Dwelling Unit Features.

11B-233.3.1.2.5 Multi-story residential dwelling units in buildings with no elevator. In non-elevator buildings in public housing facilities, a minimum of 10 percent but not less than one of the ground floor multi-story residential dwelling units shall be calculated using the total number of multi-story residential dwelling units in buildings on a site and shall comply with the following:

- 1. The primary entry of the multi-story residential dwelling unit shall be on an accessible route.
- 2. At least one powder room or bathroom shall be located on the primary entry level.
- 3. Rooms or spaces located on the primary entry level shall be served by an accessible route and comply with Chapter 11A, Division IV Dwelling Units features.

11B-233.3.1.2.6 Public housing facility site impracticality. The number of adaptable residential dwelling units required in non-elevator building public housing facilities shall be determined in accordance with Chapter 11A, Section 1150A.1. The remaining ground floor residential dwelling units shall comply with the following requirements:

- 1. Grab bar reinforcement complying with Section 11B-609.
- 2. Doors complying with Section 11B-404.
- 3. Communication features complying with Section 11B-809.5.5.
- 4. Electrical receptacle and switches complying with Section 11B-308.1.
- 5. Toilet and bathing facilities complying with Section 11B-809.4.
- 6. Kitchen sink removable cabinets complying with Section 11B-606.2, Exception 3.

11B-233.3.1.3 Residential dwelling units with communication features. In *public housing* facilities with residential dwelling units, at least 2 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide communication features complying with *Section 11B*-809.5.

11B-233.3.2 Residential dwelling units for sale. Residential dwelling units designed and constructed or altered by public entities that will be offered for sale to individuals shall provide accessible features to the extent required by this chapter.

Exception: Existing residential dwellings or residential dwelling units acquired by public entities that will be offered for resale to individuals without additions or alterations shall not be required to comply with this chapter.

11B-233.3.3 Additions. Where an addition to an existing public housing facility results in an increase in the number of residential dwelling units, the requirements of Section 11B-233.3.1 shall apply only to the residential dwelling units that are added until the total number of residential dwelling units complies with the minimum number required by Section 11B-233.3.1. Residential dwelling units required to comply with Sections 11B-233.3.1.1 and 11B-233.3.1.2 shall be on an accessible route as required by Section 11B-206.

11B-233.3.4 Alterations. Alterations to a public housing facility shall comply with Section 11B-233.3.4.

Exception: Where compliance with Sections 11B-809.2, 11B-809.3, or 11B-809.4 for units with mobility features or Chapter 11A, Division IV for units with adaptable features is technically infeasible, or where it is technically infeasible to provide an accessible route to a residential dwelling unit, the entity shall be permitted to alter or construct a comparable residential dwelling unit to comply with Sections 11B-809.2 through 11B-809.4 or Chapter 11A, Division IV provided that the minimum number of residential dwelling units required by Sections 11B-233.3.1.1, 11B-233.3.1.2 and 11B-233.3.1.3, as applicable, is satisfied.

11B-233.3.4.1 Alterations to vacated buildings. Where a building is vacated for the purposes of alteration for use as public housing, and the altered building contains more than 15 residential dwelling units, at least 5 percent of the residential dwelling units shall comply with Sections 11B-809.2 through 11B-809.4 and shall be on an accessible route as required by Section 11B-206. Residential dwelling units with adaptable features shall be provided in compliance with Section 11B-233.3.1.2. In addition, at least 2 percent of the residential dwelling units shall comply with Section 11B-809.5.

Exception: Where any portion of a building's exterior is preserved, but the interior of the building is removed, including all structural portions of floors and ceilings and a new building intended for use as public housing is constructed behind the existing exterior, the building is considered a new building for determining the application of this chapter.

11B-233.3.4.2 Alterations to individual residential dwelling units. In public housing facilities with individual residential dwelling units, where a bathroom or a kitchen is substantially altered, and at least one other room is altered, the requirements of Section 11B-233.3.1 shall apply to the altered residential dwelling units until the total number of residential dwelling units complies with the minimum number required by Sections 11B-233.3.1.1, 11B-233.3.1.2, and 11B-233.3.1.3. Residential dwelling units required to comply with Sections 11B-233.3.1.1 and 11B-233.3.1.2 shall be on an accessible route as required by Section 11B-206.

Exception: Where *public housing* facilities contain 15 or fewer residential dwelling units, the requirements of *Sections 11B*-233.3.1.1, *11B*-233.3.1.2,

and 11B-233.3.1.3. shall apply to the total number of residential dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site.

11B-233.3.5 Dispersion. In public housing facilities, residential dwelling units required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4 and residential dwelling units required to provide communication features complying with Section 11B-809.5, and adaptable features complying with Chapter 11A, Division IV shall be dispersed among the various types of residential dwelling units in the facility and shall provide choices of residential dwelling units comparable to, and integrated with, those available to other residents.

Exception: In public housing facilities where multistory residential dwelling units are one of the types of residential dwelling units provided, one-story residential dwelling units shall be permitted as a substitute for multi-story residential dwelling units where equivalent spaces and amenities are provided in the one-story residential dwelling unit.

11B-233.3.6 Graduate student and faculty housing at a place of education. Housing facilities that are provided by or on behalf of a place of education, with residential dwelling units leased on a year-round basis exclusively to graduate students or faculty, and that do not contain any public use or common use areas available for educational programming, are not subject to Section 11B-224 and shall comply with Section 11B-233.

11B-234 Amusement rides

11B-234.1 General. Amusement rides shall comply with Section 11B-234.

Exception: Mobile or portable amusement rides shall not be required to comply with *Section 11B*-234.

11B-234.2 Load and unload areas. Load and unload areas serving amusement rides shall comply with Section 11B-1002.3.

11B-234.3 Minimum number. Amusement rides shall provide at least one wheelchair space complying with Section 11B-1002.4, or at least one amusement ride seat designed for transfer complying with Section 11B-1002.5, or at least one transfer device complying with Section 11B-1002.6.

Exceptions:

- Amusement rides that are controlled or operated by the rider shall not be required to comply with Section 11B-234.3.
- 2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, shall not be required to comply with *Section* 11B-234.3.
- 3. Amusement rides that do not provide amusement ride seats shall not be required to comply with *Section 11B-234.3*.

11B-234.4 Existing amusement rides. Where existing amusement rides are altered, the alteration shall comply with Section 11B-234.4.

1009.4; transfer systems complying with *Section 11B*-1009.5; and pool stairs complying with *Section 11B*-1009.6. At least one accessible means of entry provided shall comply with *Sections 11B*-1009.2 or *11B*-1009.3.

Exceptions:

- 1. Where a swimming pool has less than 300 linear feet (91 m) of swimming pool wall, no more than one accessible means of entry shall be required provided that the accessible means of entry is a swimming pool lift complying with *Section 11B*-1009.2 or sloped entry complying with *Section 11B*-1009.3.
- 2. Wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area shall not be required to provide more than one accessible means of entry provided that the accessible means of entry is a swimming pool lift complying with *Section 11B*-1009.2, a sloped entry complying with *Section 11B*-1009.3, or a transfer system complying with *Section 11B*-1009.5.
- 3. Catch pools shall not be required to provide an accessible means of entry provided that the catch pool edge is on an accessible route.

11B-242.3 Wading pools. At least one accessible means of entry shall be provided for wading pools. Accessible means of entry shall comply with sloped entries complying with Section 11B-1009.3.

11B-242.4 Spas. At least one accessible means of entry shall be provided for spas. Accessible means of entry shall comply with swimming pool lifts complying with Section 11B-1009.2; transfer walls complying with Section 11B-1009.4; or transfer systems complying with Section 11B-1009.5.

Exception: Where spas are provided in a cluster, no more than 5 percent, but no fewer than one, spa in each cluster shall be required to comply with *Section 11B-242.4*.

11B-243 Shooting facilities with firing positions

11B-243.1 General. Where shooting facilities with firing positions are designed and constructed at a site, at least 5 percent, but no fewer than one, of each type of firing position shall comply with Section 11B-1010.

11B-244 Religious facilities

11B-244.1 General. Religious facilities shall be accessible in accordance with the provisions of this code. Where specific areas within religious facilities contain more than one use, each portion shall comply with the applicable requirements for that use.

11B-245 Public accommodations located in private residences

11B-245.1 General. Public accommodations located in private residences shall comply with Section 11B-245.

11B-245.2 Application. When a public accommodation is located in a private residence, that portion used exclusively in the operation of the public accommodation or that portion used both for the public accommodation and for residential

purposes is covered by the new construction and alterations requirements of this chapter.

Exception: The portion of the residence used exclusively as a residence is not required to be accessible in accordance with this chapter.

11B-245.3 Accessible elements required. The accessible portion of the residence extends to those elements used to enter the public accommodation, including the front sidewalk, if any, the door or entryway, and hallways; and those portions of the residence, interior or exterior, available to or used by employees or visitors of the public accommodation, including restrooms.

11B-246 Outdoor developed areas

11B-246.1 General. Outdoor developed areas shall comply with Section 11B-246.

Exceptions:

- 1. Where the enforcing agency finds that, in specific areas, the natural environment would be materially damaged by compliance with these regulations, such areas shall be subject to these regulations only to the extent that such material damage would not occur.
- 2. Automobile access or accessible routes are not required when the enforcing agency determines compliance with this chapter would create an unreasonable hardship as defined in Chapter 2, Section 202.

11B-246.2 Camping facilities. In camping facilities where campsites are provided, at least two campsites and one additional campsite for each 100 campsites or fraction thereof, shall be accessed by and connected to sanitary facilities by travel routes with a maximum slope of 1:12. Permanent toilet and bathing facilities serving campsites shall comply with Section 11B-603.

11B-246.3 Beaches. Beaches shall be accessible.

11B-246.4 Day use areas and vista points. Day use areas, vista points, and similar areas shall be accessible.

11B-246.5 Picnic areas. Where picnic tables are provided, at least one picnic table, and one additional table for each 20 tables or fraction thereof, shall be accessible and comply with Section 11B-902.

11B-246.6 Parking lots. Parking lots shall comply with Sections 11B-208 and 11B-502 and shall be provided with curb cuts leading to adjacent walks, paths or trails.

11B-246.7 Trails and paths. Trails, paths and nature walk areas, or portions of them, shall be constructed with gradients permitting at least partial use by wheelchair occupants. Buildings and other functional areas shall be served by paths or walks with firm and stable surfaces.

11B-246.8 Nature trails. Nature trails and similar educational and informational areas shall be accessible to individuals with vision impairments by the provision of rope guidelines, raised Arabic numerals and symbols, or other similar guide and assistance devices.

- 11B-247 Detectable warnings and detectable directional texture
- 11B-247.1 Detectable warnings.
 - 11B-247.1.1 General. Detectable warnings shall be provided in accordance with Section 11B-247.1 and shall comply with Section 11B-705.1.
 - 11B-247.1.2 Where required. Detectable warnings shall be provided where required by Section 11B-247.1.2.
 - 11B-247.1.2.1 Platform edges. Platform boarding edges shall have detectable warnings complying with Sections 11B-705.1.1 and 11B-705.1.2.1.
 - 11B-247.1.2.2 Curb ramps. Curb ramps shall have detectable warnings complying with Sections 11B-705.1.1 and 11B-705.1.2.2.
 - 11B-247.1.2.3 Islands or cut-through medians. Islands or cut-through medians shall have detectable warnings complying with Sections 11B-705.1.1 and 11B-705.1.2.3.
 - 11B-247.1.2.4 Bus stops. Where detectable warnings are provided at bus stop boarding and alighting areas in compliance with Section 11B-810.2.3, detectable warnings shall comply with Sections 11B-705.1.1 and 11B-705.1.2.4.
 - 11B-247.1.2.5 Hazardous vehicular areas. If a walk crosses or adjoins a vehicular way, and the walking surfaces are not separated by curbs, railings or other elements between the pedestrian areas and vehicular areas, the boundary between the areas shall be defined by a continuous detectable warning complying with Sections 11B-705.1.1 and 11B-705.1.2.5.
 - 11B-247.1.2.6 Reflecting pools. The edges of reflecting pools shall be protected by railings, walls, warning curbs or detectable warnings complying with Sections 11B-705.1.1 and 11B-705.1.2.6.
 - 11B-247.1.2.7 Track crossings. Where it is necessary to cross tracks to reach transit boarding platforms, detectable warnings complying with Sections 11B-705.1.1 and 11B-705.1.2.7 shall be provided.
- 11B-247.2 Detectable directional texture. At transit boarding platforms, the pedestrian access shall be identified with a detectable directional texture complying with Section 11B-705.2.

FIGURE 11B-305.7.2
MANEUVERING CLEARANCE IN
AN ALCOVE, PARALLEL APPROACH

11B-306 Knee and toe clearance

11B-306.1 General. Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with Section 11B-306. Additional space shall not be prohibited beneath an element but shall not be considered as part of the clear floor or ground space or turning space.

11B-306.2 Toe clearance

11B-306.2.1 General. Space under an element between the finish floor or ground and 9 inches (229 mm) above the finish floor or ground shall be considered to clearance and shall comply with Section 11B-306.2.

11B-306.2.2 Maximum depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

Exception: Toe clearance shall extend 19 inches (483 mm) maximum under lavatories required to be accessible by Section 11B-213.3.4.

11B-306.2.3 Minimum required depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (432 mm) minimum under the element.

Exceptions:

>

- 1. The toe clearance shall extend 19 inches (483 mm) minimum under sinks required to be accessible by Section 11B-212.3.
- 2. The toe clearance shall extend 19 inches (483 mm) minimum under built-in dining and work surfaces required to be accessible.

11B-306.2.4 Additional clearance. Space extending greater than 6 inches (152 mm) beyond the available knee

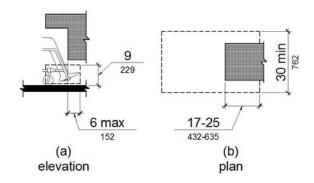


FIGURE 11B-306.2 TOE CLEARANCE

clearance at 9 inches (229 mm) above the finish floor or ground shall not be considered toe clearance.

11B-306.2.5 Width. Toe clearance shall be 30 inches (762 mm) wide minimum.

11B-306.3 Knee clearance.

11B-306.3.1 General. Space under an element between 9 inches (229 mm) and 27 inches (686 mm) above the finish floor or ground shall be considered knee clearance and shall comply with Section 11B-306.3.

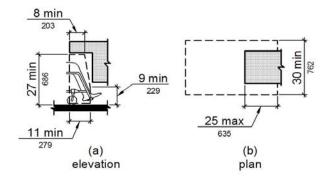
Exception: At lavatories required to be accessible by Section 11B-213.3.4, space between 9 inches (229 mm) and 29 inches (737 mm) above the finish floor or ground, shall be considered knee clearance.

11B-306.3.2 Maximum depth. Knee clearance shall extend 25 inches (635 mm) maximum under an element at 9 inches (229 mm) above the finish floor or ground.

11B-306.3.3 Minimum required depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (279 mm) deep minimum at 9 inches (229 mm) above the finish floor or ground, and 8 inches (203 mm) deep minimum at 27 inches (686 mm) above the finish floor or ground.

Exceptions:

 At lavatories required to be accessible by Section 11B-213.3.4, the knee clearance shall be 27 inches (686 mm) high minimum above the finish floor or ground at a depth of 8 inches (203 mm) minimum increasing to 29 inches (737 mm) high minimum



8 min
203
9 min
229

11 min
279
(c)
elevation @ lavatory

FIGURE 11B-306.3 KNEE CLEARANCE

above the finish floor or ground at the front edge of a counter with a built-in lavatory or at the front edge of a wall-mounted lavatory fixture.

2. At dining and work surfaces required to be accessible, knee clearance shall extend 19 inches (483 mm) deep minimum at 27 inches (686 mm) above the finish floor or ground.

11B-306.3.4 Clearance reduction. Between 9 inches (229 mm) and 27 inches (686 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (152 mm) in height.

Exception: The knee clearance shall not be reduced at built-in dining and work surfaces required to be accessible by Section 11B-226.1.

11B-306.3.5 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

11B-307 Protruding objects

11B-307.1 General. Protruding objects shall comply with Section 11B-307.

11B-307.2 Protrusion limits. Objects with leading edges more than 27 inches (686 mm) and not more than 80 inches (2032 mm) above the finish floor or ground shall protrude 4 inches (102 mm) maximum horizontally into the circulation path.

Exception: Handrails shall be permitted to protrude 4½ inches (114 mm) maximum.

11B-307.3 Post-mounted objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (686 mm) minimum and 80 inches (2032 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (686 mm) maximum or 80 inches (2032 mm) minimum above the finish floor or ground.

Exception: The sloping portions of handrails serving stairs and ramps shall not be required to comply with *Section 11B*-307.3.

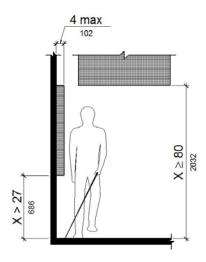


FIGURE 11B-307.2 LIMITS OF PROTRUDING OBJECTS

11B-307.3.1 Edges and corners. Where signs or other objects are mounted on posts or pylons, and their bottom edges are less than 80 inches (2032 mm) above the floor or ground surface, the edges of such signs and objects shall be rounded or eased and the corners shall have a minimum radius of ¹/₈ inch (3.2 mm).

11B-307.4 Vertical clearance. Vertical clearance shall be 80 inches (2032 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2032 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (686 mm) maximum above the finish floor or ground.

Exception: Door closers and door stops shall be permitted to be 78 inches (1981 mm) minimum above the finish floor or ground.

11B-307.4.1 Guy braces. Where a guy support is used within either the width of a circulation path or 24 inches (610 mm) maximum outside of a circulation path, a vertical guy brace, sidewalk guy or similar device shall be used to prevent a hazard or an overhead obstruction.

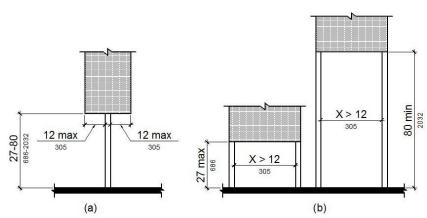


FIGURE 11B-307.3
POST-MOUNTED PROTRUDING OBJECTS

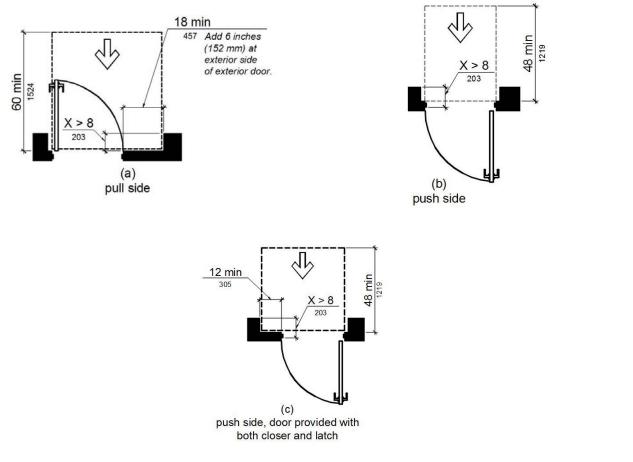


FIGURE 11B-404.2.4.3
MANEUVERING CLEARANCES AT RECESSED DOORS AND GATES

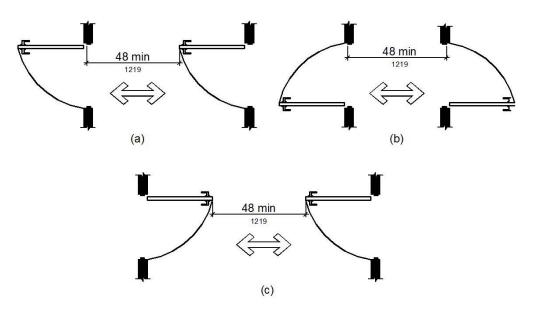


FIGURE 11B-404.2.6
DOORS IN SERIES AND GATES IN SERIES

11B-404.2.9 Door and gate opening force. The force for pushing or pulling open a door or gate shall be as follows:

- 1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.
- 2. Sliding or folding doors: 5 pounds (22.2 N) maximum.
- 3. Required fire doors: the minimum opening force allowable by the appropriate administrative authority, not to exceed 15 pounds (66.7 N).
- 4. Exterior hinged doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

Exception: When, at a single location, one of every eight exterior door leafs, or fraction of eight, is a powered door, other exterior doors at the same location, serving the same interior space, may have a maximum opening force of 8.5 pounds (37.8 N). The powered leaf(s) shall be located closest to the accessible route.

- a. Powered doors shall comply with Section 11B-404.3. Powered doors shall be fully automatic doors complying with Builders Hardware Manufacturers' Association (BHMA) A156.10 or low energy operated doors complying with BHMA A156.19.
- b. Powered doors serving a building or facility with an occupancy of 150 or more shall be provided with a back-up battery or back-up generator. The back-up power source shall be able to cycle the door a minimum of 100 cycles.
- c. Powered doors shall be controlled on both the interior and exterior sides of the doors by sensing devices, push plates, vertical actuation bars or other similar operating devices complying with Sections 11B-304, 11B-305 and 11B-308.

At each location where push plates are provided there shall be two push plates; the centerline of one push plate shall be 7 inches (178 mm) minimum and 8 inches (203 mm) maximum above the floor or ground surface and the centerline of the second push plate shall be 30 inches (762 mm) minimum and 44 inches (1118 mm) maximum above the floor or ground surface. Each push plate shall be a minimum of 4 inches (102 mm) diameter or a minimum of 4 inches by 4 inches (102 mm by 102 mm) square and shall display the International Symbol of Accessibility complying with Section 11B-703.7.

At each location where vertical actuation bars are provided the operable portion shall be located so the bottom is 5 inches (127 mm) maximum above the floor or ground surface and the top is 35 inches (889 mm) minimum above the floor or ground surface. The operable portion of each vertical actuation bar shall be a minimum of 2 inches (51 mm) wide and shall display the

International Symbol of Accessibility complying with Section 11B-703.7.

Where push plates, vertical actuation bars or other similar operating devices are provided, they shall be placed in a conspicuous location. A level and clear floor or ground space for forward or parallel approach complying with Section 11B-305 shall be provided, centered on the operating device. Doors shall not swing into the required clear floor or ground space.

- d. Signs identifying the accessible entrance required by Section 11B-216.6 shall be placed on, or immediately adjacent to, each powered door. Signs shall be provided in compliance with BHMA A156.10 or BHMA A156.19, as applicable.
- e. In addition to the requirements of Item d, where a powered door is provided in buildings or facilities containing assembly occupancies of 300 or more, a sign displaying the International Symbol of Accessibility measuring 6 inches by 6 inches (152 mm by 152 mm), complying with Section 11B-703.7, shall be provided above the door on both the interior and exterior sides of each powered door.

11B-404.2.10 Door and gate surfaces. Swinging door and gate surfaces within 10 inches (254 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within $^{1}/_{16}$ inch (1.6 mm) of the same plane as the other and be free of sharp or abrasive edges. Cavities created by added kick plates shall be capped.

Exceptions:

- 1. Sliding doors shall not be required to comply with *Section 11B*-404.2.10.
- 2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (254 mm) bottom smooth surface height requirement.
- Doors and gates that do not extend to within 10 inches (254 mm) of the finish floor or ground shall not be required to comply with Section 11B-404.2.10.

4. Reserved.

11B-404.2.11 Vision lights. Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1092 mm) maximum above the finish floor.

Exception: Glazing panels with the lowest part more than 66 inches (1676 mm) from the finish floor or ground shall not be required to comply with Section 11B-404.2.11.

11B-404.3 Automatic and power-assisted doors and gates. Automatic doors and automatic gates shall comply with Sec-

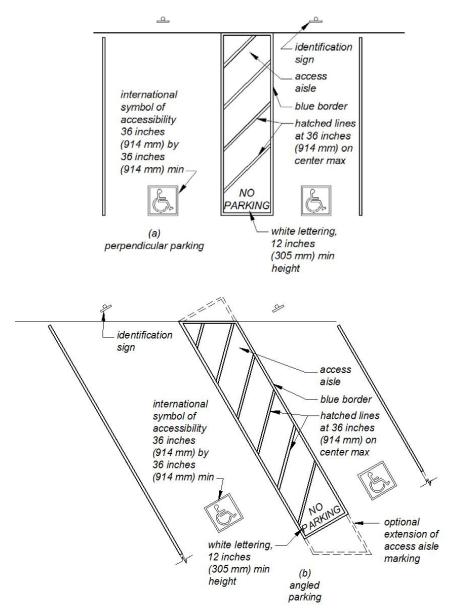


FIGURE 11B-502.3.3
ANGLED AND PERPENDICULAR PARKING IDENTIFICATION

11B-502.4 Floor or ground surfaces. Parking spaces and access aisles serving them shall comply with Section 11B-302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

Exception: Slopes not steeper than 1:48 shall be permitted.

11B-502.5 Vertical clearance. Parking *spaces*, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum.

11B-502.6 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with Section 11B-703.7.2.1 in white on a blue background. Signs identifying van parking spaces shall contain additional language or an additional sign with the designa-

tion "van accessible". Signs shall be 60 inches ($1524~\mathrm{mm}$) minimum above the finish floor or ground surface measured to the bottom of the sign.

Exception: Signs located within a circulation path shall be a minimum of 80 inches (2032 mm) above the finish floor or ground surface measured to the bottom of the sign.

11B-502.6.1 Finish and size. Parking identification signs shall be reflectorized with a minimum area of 70 square inches (45,161 mm²).

11B-502.6.2 Minimum fine. Additional language or an additional sign below the International Symbol of Accessibility shall state "Minimum Fine \$250".

11B-502.6.3 Location. A parking space identification sign shall be visible from each parking space. Signs shall be permanently posted either immediately adjacent to the parking space or within the projected parking space width at the head end of the parking space. Signs may also be permanently posted on a wall at the interior end of the parking space.

11B-502.6.4 Marking. Each accessible car and van space shall have surface identification complying with either Section 11B-502.6.4.1 or 11B-502.6.4.2.

11B-502.6.4.1 The parking space shall be marked with an International Symbol of Accessibility complying with Section 11B-703.7.2.1 in white on a blue background a minimum 36 inches wide by 36 inches high (914 mm by 914 mm). The centerline of the International Symbol of Accessibility shall be a maximum of 6 inches (152 mm) from the centerline of the parking space, its sides parallel to the length of the parking space and its lower corner at, or lower side aligned with, the end of the parking space length.

11B-502.6.4.2 The parking space shall be outlined in blue or painted blue and shall be marked with an International Symbol of Accessibility complying with Section 11B-703.7.2.1 a minimum 36 inches wide by 36 inches high (914 mm by 914 mm) in white or a suitable contrasting color. The centerline of the International Symbol of Accessibility shall be a maximum of 6 inches (152 mm) from the centerline of the parking space, its sides parallel to the length of the parking space and its lower corner at, or lower side aligned with, the end of the parking space.

11B-502.7 Relationship to accessible routes. Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes.

11B-502.7.1 Arrangement. Parking spaces and access aisles shall be designed so that persons using them are not required to travel behind parking spaces other than to pass behind the parking space in which they parked.

11B-502.7.2 Wheel stops. A curb or wheel stop shall be provided if required to prevent encroachment of vehicles over the required clear width of adjacent accessible routes.

11B-502.8 Additional signs. An additional sign shall be posted either; 1) in a conspicuous place at each entrance to an off-street parking facility or 2) immediately adjacent to on-site accessible parking and visible from each parking space.

11B-502.8.1 Size. The additional sign shall not be less than 17 inches (432 mm) wide by 22 inches (559 mm) high.

11B-502.8.2 Lettering. The additional sign shall clearly state in letters with a minimum height of 1 inch (25 mm) the following:

"Unauthorized" vehicles parked in designated accessible spaces not displaying distinguishing placards or special license plates issued for persons with disabilities will be towed away at the owner's expense. Towed vehicles may be reclaimed at: ______ or by telephoning _____."

Blank spaces shall be filled in with appropriate information as a permanent part of the sign.

11B-503 Passenger drop-off and loading zones

11B-503.1 General. Passenger drop-off and loading zones shall comply with Section 11B-503.

11B-503.2 Vehicle pull-up space. Passenger drop-off and loading zones shall provide a vehicular pull-up space 96 inches (2438 mm) wide minimum and 20 feet (6096 mm) long minimum.

11B-503.3 Access aisle. Passenger drop-off and loading zones shall provide access aisles complying with Section 11B-503 adjacent and parallel to the vehicle pull-up space. Access aisles shall adjoin an accessible route and shall not overlap the vehicular way.

11B-503.3.1 Width. Access aisles serving vehicle pull-up spaces shall be 60 inches (1524 mm) wide minimum.

11B-503.3.2 Length. Access aisles shall extend the full length of the vehicle pull-up spaces they serve.

11B-503.3.3 Marking. Access aisless shall be marked with a painted borderline around their perimeter. The area within the borderlines shall be marked with hatched lines a maximum of 36 inches (914 mm) on center in a color contrasting with that of the aisle surface.

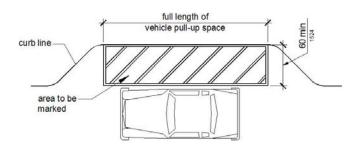


FIGURE 11B-503.3
PASSENGER DROP-OFF AND LOADING ZONE ACCESS AISLE

11B-503.4 Floor and ground surfaces. Vehicle pull-up spaces and access aisles serving them shall comply with Section 11B-302. Access aisles shall be at the same level as the vehicle pull-up space they serve. Changes in level are not permitted.

Exception: Slopes not steeper than 1:48 shall be permitted.

11B-503.5 Vertical clearance. Vehicle pull-up spaces, access aisles serving them, and a vehicular route from an entrance to the passenger *drop-off and* loading zone and from the passenger *drop-off and* loading zone to a vehicular exit shall provide a vertical clearance of 114 inches (2896 mm) minimum.

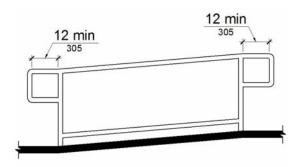


FIGURE 11B-505.10.1
TOP AND BOTTOM HANDRAIL EXTENSION AT RAMPS

11B-505.10.2 Top extension at stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

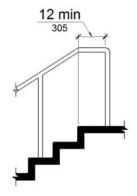


FIGURE 11B-505.10.2
TOP HANDRAIL EXTENSION AT STAIRS

11B-505.10.3 Bottom extension at stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the last riser nosing. The horizontal extension of a handrail shall be 12 inches (305 mm) long minimum and a height equal to that of the sloping portion of the handrail as measured above the stair nosings. Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

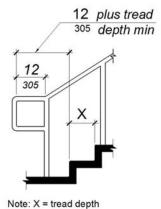


FIGURE 11B-505.10.3
BOTTOM HANDRAIL EXTENSION AT STAIRS

DIVISION 6: PLUMBING ELEMENTS AND FACILITIES

11B-601 General

11B-601.1 Scope. The provisions of *Division* 6 shall apply where required by *Division* 2 or where referenced by a requirement in this *chapter*.

11B-602 Drinking fountains

11B-602.1 General. Drinking fountains shall comply with Sections 11B-307 and 11B-602.

11B-602.2 Clear floor space. Units shall have a clear floor or ground space complying with Section 11B-305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with Section 11B-306 shall be provided.

Exception: A parallel approach complying with *Section 11B*-305 shall be permitted at units for children's use where the spout is 30 inches (762 mm) maximum above the finish floor or ground and is $3^{1}/_{2}$ inches (89 mm) maximum from the front edge of the unit, including bumpers.

11B-602.3 Operable parts. Operable parts shall comply with Section 11B-309. The flow of water shall be activated by a manually operated system that is front mounted or side mounted and located within 6 inches (152 mm) of the front edge of the fountain or an automatic electronically controlled device.

11B-602.4 Spout height. Spout outlets shall be 36 inches (914 mm) maximum above the finish floor or ground.

11B-602.5 Spout location. The spout shall be located 15 inches (381 mm) minimum from the vertical support and 5 inches (127 mm) maximum from the front edge of the unit, including bumpers.

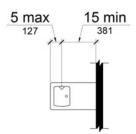


FIGURE 11B-602.5
DRINKING FOUNTAIN SPOUT LOCATION

11B-602.6 Water flow. The spout shall provide a flow of water 4 inches (102 mm) high minimum and shall be located 5 inches (127 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (76 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (76 mm) and 5 inches (127 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum.

11B-602.7 Drinking fountains for standing persons. Spout outlets of drinking fountains for standing persons shall be 38 inches (965 mm) minimum and 43 inches (1092 mm) maximum above the finish floor or ground.

11B-602.8 Depth. Wall- and post-mounted cantilevered drinking fountains shall be 18 inches (457 mm) minimum and 19 inches (483 mm) maximum in depth.

11B-602.9 Pedestrian protection. All drinking fountains shall either be located completely within alcoves, positioned completely between wing walls, or otherwise positioned so as not to encroach into pedestrian ways. The protected area within which a drinking fountain is located shall be 32 inches (813 mm) wide minimum and 18 inches (457 mm) deep minimum, and shall comply with Section 11B-305.7. When used, wing walls or barriers shall project horizontally at least as far as the drinking fountain and to within 6 inches (152 mm) vertically from the floor or ground surface.

11B-603 Toilet and bathing rooms

11B-603.1 General. Toilet and bathing rooms shall comply with Section 11B-603.

11B-603.2 Clearances. Clearances shall comply with Section 11B-603.2.

*11B***-603.2.1 Turning space.** Turning space complying with *Section 11B*-304 shall be provided within the room.

11B-603.2.2 Overlap. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

11B-603.2.3 Door swing. Doors shall not swing into the clear floor space or clearance required for any fixture. Doors to accessible water closet compartments shall be permitted to encroach into the turning space without limitation. Other than doors to accessible water closet compartments, a door, in any position, shall be permitted to encroach into the turning space by 12 inches (305 mm) maximum.

Exceptions:

- 1. Reserved.
- 2. Where the toilet room or bathing room is for individual use and a clear floor space complying with *Section 11B*-305.3 is provided within the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.
- 3. In residential dwelling units complying with Section 11B-233.3.1.1, doors shall be permitted to swing over the turning space without limitation.

11B-603.3 Mirrors. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1016 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (889 mm) maximum above the finish floor or ground.

11B-603.4 Coat hooks, shelves and medicine cabinets. Coat hooks shall be located within one of the reach ranges specified in Section 11B-308. Shelves shall be located 40 inches (1016 mm) minimum and 48 inches (1219 mm) maximum above the finish floor. Medicine cabinets shall be located with a usable shelf no higher than 44 inches (1118 mm) maximum above the finish floor.

11B-603.5 Accessories. Where towel or sanitary napkin dispensers, waste receptacles, or other accessories are provided in toilet facilities, at least one of each type shall be located on an accessible route. All operable parts, including coin slots, shall be 40 inches (1016 mm) maximum above the finish floor.

Exception: Baby changing tables are not required to comply with Section 11B-603.5.

11B-603.6 Guest room toilet and bathing rooms. Toilet and bathing rooms within guest rooms that are not required to provide mobility features complying with Section 11B-806.2 shall provide all toilet and bathing fixtures in a location that allows a person using a wheelchair measuring 30 inches by 48 inches (762 mm by 1219 mm) to touch the wheelchair to any lavatory, urinal, water closet, tub, sauna, shower stall and any other similar sanitary installation, if provided.

11B-604 Water closets and toilet compartments

11B-604.1 General. Water closets and toilet compartments shall comply with Sections 11B-604.2 through 11B-604.8.

Exception: Water closets and toilet compartments for children's use shall be permitted to comply with *Section 11B*-604.9.

11B-604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 17 inches (432 mm) minimum to 18 inches (457 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (432 mm) minimum and 19 inches (483 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in Section 11B-604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.

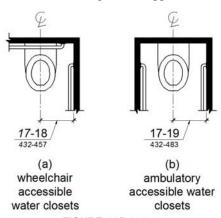


FIGURE 11B-604.2 WATER CLOSET LOCATION

11B-604.3 Clearance. Clearances around water closets and in toilet compartments shall comply with Section 11B-604.3.

11B-604.3.1 Size. Clearance around a water closet shall be 60 inches (1524 mm) minimum measured perpendicular from the side wall and 56 inches (1422 mm) minimum measured perpendicular from the rear wall. A minimum 60 inches (1524 mm) wide and 48 inches (1219 mm) deep maneuvering space shall be provided in front of the water closet.

Exception: In residential dwelling units complying with Section 11B-233.3.1.1, maneuvering space in front of the water closet shall be a minimum 60 inches (1524 mm) wide and 36 inches (914 mm) deep.

11B-604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.

Exception: In residential dwelling units, a lavatory complying with *Section 11B*-606 shall be permitted on the rear wall 18 inches (457 mm) minimum from the water closet centerline where the clearance at the water closet is 66 inches (1676 mm) minimum measured perpendicular from the rear wall.

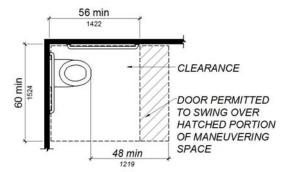


FIGURE 11B-604.3.1
SIZE OF CLEARANCE AT WATER CLOSETS

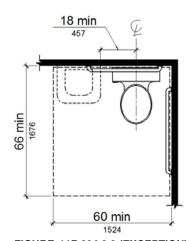


FIGURE 11B-604.3.2 (EXCEPTION)
OVERLAP OF WATER CLOSET
CLEARANCE IN RESIDENTIAL DWELLING UNITS

11B-604.4 Seats. The seat height of a water closet above the finish floor shall be 17 inches (432 mm) minimum and 19 inches (483 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position. Seats shall be 2 inches (51 mm) high maximum.

Exceptions:

- 1. Reserved.
- 2. In residential dwelling units, the height of water closets shall be permitted to be 15 inches (381 mm) minimum and 19 inches (483 mm) maximum above the finish floor measured to the top of the seat.
- 3. A 3-inch (76 mm) high seat shall be permitted only in alterations where the existing fixture is less than 15 inches (381 mm) high.

11B-604.5 Grab bars. Grab bars for water closets shall comply with Section 11B-609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall. Where separate grab bars are required on adjacent walls at a common mounting height, an L-shaped grab bar meeting the dimensional requirements of Sections 11B-604.5.1 and 11B-604.5.2 shall be permitted.

Exceptions:

- 1. Reserved.
- 2. In residential dwelling units, grab bars shall not be required to be installed in toilet or bathrooms provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with *Section 11B*-604.5.
- 3. In detention or correction facilities, grab bars shall not be required to be installed in housing or holding cells that are specially designed without protrusions for purposes of suicide prevention.

11B-604.5.1 Side wall. The side wall grab bar shall be 42 inches (1067 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1372 mm) minimum from the rear wall with the front end positioned 24 inches (610 mm) minimum in front of the water closet.

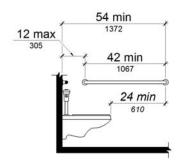


FIGURE 11B-604.5.1 SIDE WALL GRAB BAR AT WATER CLOSETS

11B-604.5.2 Rear wall. The rear wall grab bar shall be 36 inches (914 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

Exceptions:

 The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of a recessed fixture adjacent to the water closet.

Where an administrative authority requires flush

36 inches (914 mm) minimum due to the location of

2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.

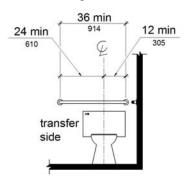


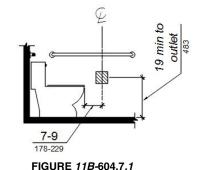
FIGURE 11B-604.5.2
REAR WALL GRAB BAR AT WATER CLOSETS

11B-604.6 Flush controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 11B-309 except they shall be located 44 inches (1118 mm) maximum above the floor. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with Section 11B-604.8.2.

11B-604.7 Dispensers and disposal units. Toilet paper dispensers and sanitary napkin disposal units shall comply with Section 11B-604.7. Combination accessory units are not permitted to encroach into the space required by Section 11B-609.3.

11B-604.7.1 Dispensers. Toilet paper dispensers shall comply with Section 11B-309.4 and shall be 7 inches (178 mm) minimum and 9 inches (229 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be below the grab bar, 19 inches (483 mm) minimum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

11B-604.7.2 Disposal units. Sanitary napkin disposal units, if provided, shall comply with Section 11B-309.4 and shall be wall mounted and located on the sidewall between the rear wall of the toilet and the toilet paper dispenser, adjacent to the toilet paper dispenser. The disposal unit shall be located below the grab bar with the opening of the disposal unit 19 inches minimum (483 mm) above the finish floor.



DISPENSER OUTLET LOCATION

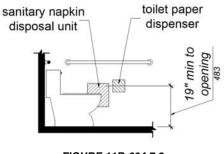


FIGURE 11B-604.7.2 DISPOSAL UNIT LOCATION

- 2. Floor-level exit signs complying with Chapter 10, Section 1013.7 shall not be required to comply with Section 11B-703.5.6.
- 3. Where provided, floor plans providing emergency procedures information in accordance with Title 19 shall not be required to comply with Section 11B-703.5.6.

11B-703.5.7 Stroke thickness. Stroke thickness of the uppercase letter "I" shall be 10 percent minimum and 20 percent maximum of the height of the character.

11B-703.5.8 Character spacing. Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces. Spacing between individual characters shall be 10 percent minimum and 35 percent maximum of character height.

11B-703.5.9 Line spacing. Spacing between the baselines of separate lines of characters within a message shall be 135 percent minimum and 170 percent maximum of the character height.

11B-703.5.10 Format. Text shall be in a horizontal format.

11B-703.6 Pictograms. Pictograms shall comply with Section 11B-703.6.

11B-703.6.1 Pictogram field. Pictograms shall have a field height of 6 inches (152 mm) minimum. Characters and Braille shall not be located in the pictogram field.

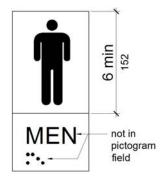


FIGURE 11B-703.6.1 PICTOGRAM FIELD

11B-703.6.2 Finish and contrast. Pictograms and their field shall have a non-glare finish. Pictograms shall contrast with their field with either a light pictogram on a dark field or a dark pictogram on a light field.

11B-703.6.3 Text descriptors. Pictograms shall have text descriptors located directly below the pictogram field. Text descriptors shall comply with Sections 11B-703.2, 11B-703.3 and 11B-703.4.

11B-703.7 Symbols of accessibility. Symbols of accessibility shall comply with Section 11B-703.7.

11B-703.7.1 Finish and contrast. Symbols of accessibility and their background shall have a non-glare finish. Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

11B-703.7.2 Symbols

11B-703.7.2.1 International Symbol of Accessibility. The International Symbol of Accessibility shall comply with Figure 11B-703.7.2.1. The symbol shall consist of a white figure on a blue background. The color blue shall approximate FS 15090 in Federal Standard 595C.

A border may be provided inside or outside of the minimum required International Symbol of Accessibility dimension.

Exceptions:

- 1. The appropriate enforcement agency may approve other colors provided the symbol contrast is light on dark or dark on light.
- 2. On the accessibility function button on hall call consoles in a destination-oriented elevator system the International Symbol of Accessibility shall be a white symbol on a black background.

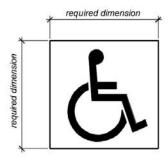


FIGURE 11B-703.7.2.1
INTERNATIONAL SYMBOL OF ACCESSIBILITY

11B-703.7.2.2 International Symbol of TTY. The International Symbol of TTY shall comply with Figure 11B-703.7.2.2.



FIGURE 11B-703.7.2.2 INTERNATIONAL SYMBOL OF TTY

11B-703.7.2.3 Volume control telephones. Telephones with a volume control shall be identified by a pictogram of a telephone handset with radiating sound waves on a square field such as shown in Figure 11B-703.7.2.3.



FIGURE 11B-703.7.2.3 VOLUME CONTROL TELEPHONE

11B-703.7.2.4 Assistive listening systems. Assistive listening systems shall be identified by the International Symbol of Access for Hearing Loss complying with Figure 11B-703.7.2.4.



FIGURE 11B-703.7.2.4 INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS

11B-703.7.2.5 Reserved.

11B-703.7.2.6 Toilet and bathing facilities geometric symbols. Geometric symbols at entrances to toilet and bathing rooms shall be mounted at 58 inches (1473 mm) minimum and 60 inches (1524 mm) maximum above the finish floor or ground surface measured from the centerline of the symbol. Where a door is provided the symbol shall be mounted within 1 inch (25 mm) of the vertical centerline of the door.

11B-703.7.2.6.1 Men's toilet and bathing facilities. A triangle symbol shall be located at entrances to men's toilet and bathing facilities. The triangle symbol shall be an equilateral triangle \(^1/\perp_4\) inch (6.4 mm) thick with edges 12 inches (305 mm) long and a vertex pointing upward. The color of the triangle symbol shall contrast with the color of the door or surface on which the triangle symbol is mounted, either light on a dark background or dark on a light background.

Exception: Within secure perimeter of detention and correctional facilities, geometric symbols shall not be required to be ${}^{1}/_{4}$ inch (6.4 mm) thick.

11B-703.7.2.6.2 Women's toilet and bathing facilities. A circle symbol shall be located at entrances to women's toilet and bathing facilities. The circle symbol shall be ${}^{1}/_{4}$ inch (6.4 mm) thick and 12 inches (305 mm) in diameter. The color of the circle symbol shall contrast with the color of the door or surface on which the circle symbol is mounted, either light on a dark background or dark on a light background.

Exception: Within secure perimeter of detention and correctional facilities, geometric symbols shall not be required to be $\frac{1}{4}$ inch (6.4 mm) thick.

11B-703.7.2.6.3 Unisex toilet and bathing facilities. A combined circle and triangle symbol shall be located at entrances to unisex toilet and bathing facilities. The combined circle and triangle symbol shall consist of a circle symbol \(^1/_4\) inch (6.4 mm) thick and 12 inches (305 mm) in diameter with a \(^1/_4\) inch (6.4 mm) thick equilateral triangle symbol superimposed on and geometrically inscribed within the 12-inch (305 mm) diameter of the circle symbol. The vertices of the triangle symbol shall be located \(^1/_4\) inch (6.4 mm) maximum from the edge of the circle symbol with a vertex pointing upward. The color

of the triangle symbol shall contrast with the color of the circle symbol, either light on a dark background or dark on a light background. The color of the circle symbol shall contrast with the color of the door or surface on which the combined circle and triangle symbol is mounted, either light on a dark background or dark on a light background.

Exception: Within secure perimeter of detention and correctional facilities, geometric symbols shall not be required to be $\frac{1}{4}$ inch (6.4 mm) thick.

11B-703.7.2.6.4 Edges and vertices on geometric symbols. Edges shall be eased or rounded at $^{1}/_{16}$ inch (1.59 mm) minimum, or chamfered at $^{1}/_{8}$ inch (3.2 mm) maximum. Vertices shall be radiused between $^{1}/_{8}$ inch (3.2 mm) minimum and $^{1}/_{4}$ inch (6.4 mm) maximum.

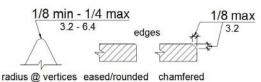


FIGURE 11B-703.7.2.6.4 EDGES AND VERTICES ON GEOMETRIC SYMBOLS

11B-703.7.2.7 Pedestrian traffic-control buttons. Polesupported pedestrian traffic-control buttons shall be identified with color coding consisting of a textured horizontal yellow band 2 inches (51 mm) in width encircling the pole, and a 1-inch-wide (25 mm) dark border band above and below this yellow band. Color coding shall be placed immediately above the control button. Control buttons shall be located no higher than 48 inches (1219 mm) above the ground surface adjacent to the pole.

11B-703.8 Variable message signs.

11B-703.8.1 General. High resolution variable message sign (VMS) characters shall comply with Sections 11B-703.5 and 11B-703.8.12 through 11B-703.8.14. Low resolution variable message sign (VMS) characters shall comply with Section 11B-703.8.

11B-703.8.2 Case. Low resolution VMS characters shall be uppercase.

11B-703.8.3 Style. Low resolution VMS characters shall be conventional in form, shall be sans serif, and shall not be italic, oblique, script, highly decorative, or of other unusual forms.

11B-703.8.4 Character height. The uppercase letter "I" shall be used to determine the allowable height of all low resolution VMS characters of a font. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. The uppercase letter "I" of the font shall have a minimum height complying with Table 11B-703.8.4.

Exception: In assembly seating where the maximum viewing distance is 100 feet (30.5 m) or greater, the height of the uppercase "I" of low resolution VMS fonts shall be permitted to be 1 inch (25 mm) for every 30 feet (9144 mm) of viewing distance, provided the

of 0.9 inch (22.9 mm) minimum and 0.92 inch (23.4 mm) maximum, a top diameter of 0.45 inch (11.4 mm) minimum and 0.47 inch (11.9 mm) maximum, and a height of 0.2 inch (5.1 mm).

11B-705.1.1.2 Dome spacing. Truncated domes in a detectable warning surface shall have a center-to-center spacing of 2.3 inches (58 mm) minimum and 2.4 inches (61 mm) maximum, and a base-to-base spacing of 0.65 inch (16.5 mm) minimum, measured between the most adjacent domes on a square grid.

Exception: Where installed in a radial pattern, truncated domes shall have a center-to-center spacing of 1.6 inches (41 mm) minimum to 2.4 inches (61 mm) maximum.

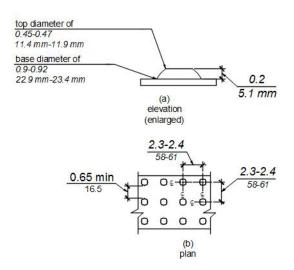


FIGURE 11B-705.1 SIZE AND SPACING OF TRUNCATED DOMES

11B-705.1.1.3 Color and contrast. Detectable warning surfaces at transit boarding platform edges, bus stops, hazardous vehicular areas, reflecting pools, and track crossings shall comply with Section 11B-705.1.1.3.1. Detectable warnings at other locations shall comply with either Section 11B-705.1.1.3.1 or Section 11B-705.1.1.3.2. The material used to provide visual contrast shall be an integral part of the surface.

11B-705.1.1.3.1 Detectable warning surfaces shall be yellow and approximate FS 33538 of Federal Standard 595C.

11B-705.1.1.3.2 Detectable warning surfaces shall provide a 70 percent minimum visual contrast with adjacent walking surfaces. Contrast in percent shall be determined by:

Contrast percent = $[(B1-B2)/B1] \times 100$ where

B1 = light reflectance value (LRV) of the lighter area and

 $B2 = light \ reflectance \ value \ (LRV) \ of \ the \ darker \ area.$

Exception: Where the detectable warning surface does not provide a 70 percent minimum con-

trast with adjacent walking surfaces, a 1-inch (25 mm) wide minimum visually contrasting surface shall separate the detectable warning from adjacent walking surfaces. The visually contrasting surface shall contrast with both the detectable warning and adjacent walking surfaces either light-on-dark, or dark-on-light.

11B-705.1.1.4 Resiliency. Detectable warning surfaces shall differ from adjoining surfaces in resiliency or sound-on-cane contact.

Exception: Detectable warning surfaces at curb ramps, islands or cut-through medians shall not be required to comply with Section 11B-705.1.1.4.

11B-705.1.2 Locations. Detectable warnings at the following locations shall comply with Section 11B-705.1.

11B-705.1.2.1 Platform edges. Detectable warning surfaces at platform boarding edges shall be 24 inches (610 mm) wide and shall extend the full length of the public use areas of the platform.

11B-705.1.2.2 Curb ramps. Detectable warnings at curb ramps shall extend 36 inches (914 mm) in the direction of travel. Detectable warnings shall extend the full width of the ramp run less 2 inches (51 mm) maximum on each side, excluding any flared sides. Detectable warnings shall be located so the edge nearest the curb is 6 inches (152 mm) minimum and 8 inches (203 mm) maximum from the line at the face of the curb marking the transition between the curb and the gutter, street or highway.

Exception: On parallel curb ramps, detectable warnings shall be placed on the turning space at the flush transition between the street and sidewalk. Detectable warnings shall extend the full width of the turning space at the flush transition between the street and the sidewalk less 2 inches (51 mm) maximum on each side.

11B-705.1.2.3 Islands or cut-through medians. Detectable warnings at pedestrian islands or cut-through medians shall be 36 inches (914 mm) minimum in depth extending the full width of the pedestrian path or cut-through less 2 inches (51 mm) maximum on each side, placed at the edges of the pedestrian island or cut-through median, and shall be separated by 24 inches (610 mm) minimum of walking surface without detectable warnings.

Exception: Detectable warnings shall be 24 inches (610 mm) minimum in depth at pedestrian islands or cut-through medians that are less than 96 inches (2438 mm) in length in the direction of pedestrian travel.

11B-705.1.2.4 Bus stops. When detectable warnings are provided at bus stop boarding and alighting areas, the detectable warnings shall extend the full width of the boarding/alighting area and shall be 36 inches (914 mm) minimum in depth.

11B-705.1.2.5 Hazardous vehicular areas. Detectable warnings at hazardous vehicular areas shall be 36 inches (914 mm) in width.

11B-705.1.2.6 Reflecting pools. When detectable warnings are provided at reflecting pools, it shall be 24

inches (610 mm) minimum and 36 inches (914 mm) maximum in width.

11B-705.1.2.7 Track crossings. Detectable warnings at track crossings shall be 36 inches (914 mm) in the direction of pedestrian travel and extend the full width of the circulation path.

11B-705.2 Detectable directional texture. Detectable directional texture at transit boarding platforms shall comply with Figure 11B-705.2 and shall be 0.1 inch (2.5 mm) in height that tapers off to 0.04 inch (1.0 mm), with bars raised 0.2 inch (5.1 mm) from the surface. The raised bars shall be 1.3 inches (33 mm) wide and 3 inches (76 mm) from center-to-center of each bar. This surface shall differ from adjoining walking surfaces in resiliency or sound-on-cane contact. The color shall be yellow and approximate FS 33538 of Federal Standard 595C. This surface will be placed directly behind the yellow detectable warning texture specified in Section 11B-705.1.2.1, aligning with all doors of the transit vehicles where passengers will embark. The width of the directional texture shall be equal to the width of the transit vehicle's door opening. The depth of the texture shall not be less than 36 inches (914 mm).

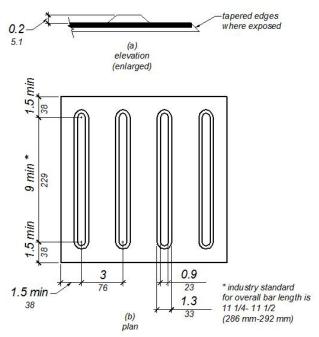


FIGURE 11B-705.2
DETECTABLE DIRECTIONAL TEXTURE

11B-705.3 Product approval. Only approved DSA-AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Chapter 5, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 11B, Section 12-11B.205 for building and facility access specifications for product approval for detectable warning products and directional surfaces.

11B-706 Assistive listening systems

11B-706.1 General. Assistive listening systems required in assembly areas, conference and meeting rooms shall comply with Section 11B-706.

11B-706.2 Receiver jacks. Receivers required for use with an assistive listening system shall include a ¹/₈ inch (3.2 mm) standard mono jack.

11B-706.3 Receiver hearing-aid compatibility. Receivers required to be hearing-aid compatible shall interface with telecoils in hearing aids through the provision of neckloops.

11B-706.4 Sound pressure level. Assistive listening systems shall be capable of providing a sound pressure level of 110 dB minimum and 118 dB maximum with a dynamic range on the volume control of 50 dB.

11B-706.5 Signal-to-noise ratio. The signal-to-noise ratio for internally generated noise in assistive listening systems shall be 18 dB minimum.

11B-706.6 Peak clipping level. Peak clipping shall not exceed 18 dB of clipping relative to the peaks of speech.

11B-707 Automatic teller machines, fare machines and point-of-sale devices

11B-707.1 General. Automatic teller machines, fare machines and point-of-sale devices shall comply with Section 11B-707.

11B-707.2 Clear floor or ground space. A clear floor or ground space complying with Section 11B-305 shall be provided.

Exception: Clear floor or ground space shall not be required at drive-up only automatic teller machines and fare machines.

11B-707.3 Operable parts. Operable parts shall comply with Section 11B-309. Unless a clear or correct key is provided, each operable part shall be able to be differentiated by sound or touch, without activation.

Exceptions:

- Drive-up only automatic teller machines and fare machines shall not be required to comply with Sections 11B-309.2 and 11B-309.3.
- 2. Where automatic teller machines and fare machines do not require compliance with Section 11B-707.2, compliance with Sections 11B-309.2 and 11B-309.3 shall not be required.
- 3. Where point-of-sale devices do not require compliance with Section 11B-707.2, compliance with Sections 11B-309.2 and 11B-309.3 shall not be required.

11B-707.4 Privacy. Automatic teller machines shall provide the opportunity for the same degree of privacy of input and output available to all individuals.

11B-707.5 Speech output. Machines shall be speech enabled. Operating instructions and orientation, visible transaction prompts, user input verification, error messages, and all displayed information for full use shall be accessible to and independently usable by individuals with vision impairments. Speech shall be delivered through a mechanism that is readily available to all users, including but not limited to, an industry standard connector or a telephone handset. Speech shall be recorded or digitized human, or synthesized.

Exceptions:

 Audible tones shall be permitted instead of speech for visible output that is not displayed for security 11B-812.2 Operable parts. Operable parts shall comply with Section 11B-309.

11B-812.3 Floor or ground surfaces. Vehicle spaces and access aisles serving them shall comply with Section 11B-302. Access aisles shall be at the same level as the vehicle space they serve. Changes in level, slopes exceeding 1:48, and detectable warnings shall not be permitted in vehicle spaces and access aisles.

11B-812.4 Vertical clearance. Vehicle spaces, access aisles serving them, and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum. Where provided, overhead cable management systems shall not obstruct required vertical clearance.

11B-812.5 Accessible routes

11B-812.5.1 Accessible route to building or facility. EVCS complying with Section 11B-812 that serve a particular building or facility shall be located on an accessible route to an entrance complying with Section 11B-206.4. Where EVCS do not serve a particular building or facility, EVCS complying with Section 11B-812 shall be located on an accessible route to an accessible pedestrian entrance of the EV charging facility.

Exception: EVCS complying with Section 11B-812 shall be permitted to be located in different EV charging facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, charging fee, and user convenience.

11B-812.5.2 Accessible route to EV charger. An accessible route complying with Section 11B-402 shall connect the vehicle space and the EV charger which serves it.

11B-812.5.3 Relationship to accessible routes. Vehicle spaces and access aisles shall be designed so that when the vehicle space is occupied the required clear width of adjacent accessible routes is not obstructed. A curb, wheel stop, bollards, or other barrier shall be provided if required to prevent encroachment of vehicles over the required clear width of adjacent accessible routes.

11B-812.5.4 Arrangement. Vehicle spaces and access aisles shall be designed so that persons using them are not required to travel behind vehicle spaces or parking spaces other than the vehicle space in which their vehicle has been left to charge.

Exceptions:

- 1. Ambulatory EVCS shall not be required to comply with Section 11B-812.5.4.
- 2. Vehicle spaces installed in existing facilities shall comply with Section 11B-812.5.4 to the maximum extent feasible.

11B-812.5.5 Obstructions. EVCS shall be designed so accessible routes are not obstructed by cables or other elements.

11B-812.6 Vehicle spaces. Vehicle spaces serving van accessible, standard accessible, ambulatory and drive-up EVCS shall be 216 inches (5486 mm) long minimum and shall comply with Sections 11B-812.6.1 through 11B-812.6.4 as appli-

cable. All vehicle spaces shall be marked to define their width.

Exceptions:

- 1. Where the long dimension of vehicle spaces is parallel to the traffic flow in the adjacent vehicular way, the length of vehicle spaces shall be 240 inches (6096 mm) minimum.
- 2. Vehicle spaces at drive-up EVCS shall be 240 inches (6096 mm) long minimum and shall not be required to be marked to define their width.

11B-812.6.1 Van accessible. Vehicle spaces serving van accessible EVCS shall be 144 inches (3658 mm) wide minimum and shall have an adjacent access aisle complying with Section 11B-812.7.

11B-812.6.2 Standard accessible. Vehicle spaces serving standard accessible EVCS shall be 108 inches (2743 mm) wide minimum and shall have an adjacent access aisle complying with Section 11B-812.7.

11B-812.6.3 Ambulatory. Vehicle spaces serving ambulatory EVCS shall be 120 inches (3048 mm) wide minimum and shall not be required to have an adjacent access aisle.

11B-812.6.4 Drive-up. Vehicle spaces serving drive-up EVCS shall be 204 inches (5182 mm) wide minimum and shall not be required to have an adjacent access aisle.

11B-812.7 Access aisle. Access aisles shall adjoin an accessible route. Two vehicle spaces shall be permitted to share a common access aisle. Access aisles shall be 60 inches (1524 mm) wide minimum and shall extend the full required length of the vehicle spaces they serve.

11B-812.7.1 Location. Access aisles at vehicle spaces shall not overlap the vehicular way and may be placed on either side of the vehicle space they serve except for van accessible spaces which shall have access aisles located on the passenger side of the vehicle spaces.

11B-812.7.2 Marking. Access aisles at vehicle spaces shall be marked with a painted borderline around their perimeter. The area within the borderlines shall be marked with hatched lines a maximum of 36 inches (914 mm) on center. The color of the borderlines, hatched lines, and letters shall contrast with that of the surface of the access aisle. The blue color required for identification of access aisles for accessible parking shall not be used. Access aisle markings may extend beyond the minimum required length.

11B-812.7.3 Lettering. The words "NO PARKING" shall be painted on the surface within each access aisle in letters a minimum of 12 inches (305 mm) in height and located to be visible from the adjacent vehicular way.

11B-812.8 Identification signs. EVCS identification signs shall be provided in compliance with Section 11B-812.8.

11B-812.8.1 Four or fewer. Where four or fewer total EVCS are provided, identification with an International Symbol of Accessibility (ISA) and signs identifying van accessible spaces shall not be required.

11B-812.8.2 Five to twenty-five. Where five to twenty-five total EVCS are provided, one van accessible EVCS shall be identified by an ISA complying with Section 11B-703.7.2.1. The required standard accessible EVCS shall not be required to be identified with an ISA.

11B-812.8.3 Twenty-six or more. Where twenty-six or more total EVCS are provided, all required van accessible and all required standard accessible EVCS shall be identified by an ISA complying with Section 11B-703.7.2.1.

11B-812.8.4 Ambulatory. Ambulatory EVCS shall not be required to be identified by an ISA.

11B-812.8.5 Drive-up. Drive-up EVCS shall not be required to be identified by an ISA.

11B-812.8.6 Finish and size. Identification signs shall be reflectorized with a minimum area of 70 square inches (45 161 mm²).

11B-812.8.7 Location. Required identification signs shall be visible from the EVCS it serves. Signs shall be permanently posted either immediately adjacent to the vehicle space or within the projected vehicle space width at the head end of the vehicle space. Signs identifying van accessible vehicle spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign. Signs located within an accessible route shall be 80 inches (2032 mm) minimum above the finish floor or ground surface measured to the bottom of the sign. Signs may also be permanently posted on a wall at the interior end of the vehicle space.

11B-812.9 Surface marking. EVCS vehicle spaces shall provide surface marking stating "EV CHARGING ONLY" in letters 12 inches (305 mm) high minimum. The centerline of the text shall be a maximum of 6 inches (152 mm) from the cen-

terline of the vehicle space and its lower corner at, or lower side aligned with, the end of the parking space length.

11B-812.10 Electric vehicle chargers

11B-812.10.1 General. EV chargers shall comply with Section 11B-812.10.

11B-812.10.2 Operable parts. Operable parts and charging cord storage shall comply with Section 11B-309.

11B-812.10.3 Point-of-sale devices. Where provided, point-of-sale devices shall comply with Sections 11B-707.2, 11B-707.3, 11B-707.7.2, and 11B-707.9.

11B-812.10.4 Location. EV chargers shall be adjacent to, and within the projected width of, the vehicle space being served.

Exceptions:

- 1. EV chargers serving more than one EVCS shall be adjacent to, and within the combined projected width of, the vehicle spaces being served.
- 2. For alterations at existing facilities where an accessible route or general circulation path is not provided adjacent to the head end of the vehicle space or access aisle, the EV charger may be located within the projected width of the access aisle 36 inches (914 mm) maximum from the head end of the space.
- 3. Where the long dimension of a vehicle space is parallel to the vehicular way, the EV charger shall be adjacent to, and 48 inches (1219 mm) maximum from the head end or foot end of the vehicle space or access aisle being served.

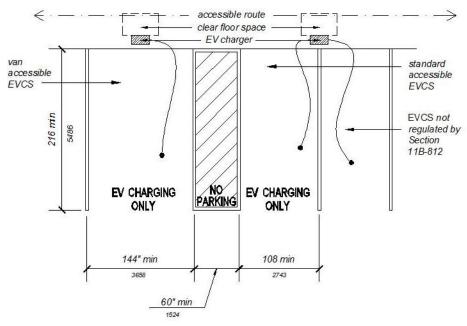


FIGURE 11B-812.9. SURFACE MARKING

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 12 – INTERIOR ENVIRONMENT

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building applications.)

	BSC	BSC-	SFM		HC			DS			OSI			BSCC	DPH	ΔGR	DWR	CEC	CA	SL	SLC	
Adopting agency		CG	0	1	2	1/AC	AC		SS/CC	1	2	3	4	2000	J	L				لـــّــا		
Adopt entire chapter								Х	Х													
Adopt entire chapter as amended (amended sec-	х			х	v					Х	Х	Х	х									
tions listed below)	^			^	X					^	^	^	^									
Adopt only those																						ł
sections that are		х	X											X	Х	Х			X			
listed below																						
Chapter / Section																						1
1203.1				Х	Х																	1
1203.2				Х	Х																	1
1203.3				Х	Х																	
Table 1203.3				Х	Х																	
1203.4.1.1																			Χ			
1203.4.2																			Χ			
1203.5				Х																		
1203.5.2.1				Х	Х																	
1203.6			Χ																			
1204.1, Exceptions 2 & 4				Х						Χ	Χ	Χ	Χ									
1205.1				Х																		1
1205.6		Х																				1
1205.7	Χ																					1
1205.7.1	Χ																					
1206			Χ																			1
1207.3, Exception				Х	Х																	1
1207.4				Х	Х																	•
1207.5		Х																				1
1208			Х																			1
1208.1				Х																		ł
1208.2										Х	Х	Х	Х									
1208.4				Х						^	^	^	^									-
1209.4			Х	^																		-
1209.1.1			^																Χ			
1210.2										Χ	V	V	Х						^			<
1211				Х	Х					^	Х	Χ	^									-
1212				X	^																	
1224				^						V												
1225										Х	_											
1226											Х	Χ										
1227												^	Х									-
1228										Х			^									۱,
1230										^				Х								
1231														X								-
1235														^	Х							-
1236															X							
1237															X							-
1240															^	Х						
1241			-		-		-	-	-				<u> </u>	-		X	-					1
1242			-		-		-	-	-				<u> </u>	-		X	-					1
1243					-									1		X	-					1
1250					-									1		<u> </u>	-	Х				1
1251							-	-	1					1				X				1
1252							-	-	1					1				X				1
·		ļ	1	 			-						 	-	 			X		-		1
1253																						

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 12

INTERIOR ENVIRONMENT

SECTION 1201 GENERAL

1201.1 Scope. The provisions of this chapter shall govern ventilation, temperature control, lighting, yards and courts, sound transmission, room dimensions, surrounding materials and rodent proofing associated with the interior spaces of buildings.

SECTION 1202 DEFINITIONS

1202.1 General. The following terms are defined in Chapter 2:

SUNROOM.

THERMAL ISOLATION.

SECTION 1203 VENTILATION

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the *California Mechanical Code*.

1203.2 Ventilation required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof framing members shall have cross ventilation for each separate space by ventilation openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. An airspace of not less than 1 inch (25 mm) shall be provided between the insulation and the roof sheathing. The net free ventilating area shall be not less than $\frac{1}{1_{150}}$ of the area of the space ventilated. Ventilators shall be installed in accordance with manufacturer's installation instructions.

Exception: The net free cross-ventilation area shall be permitted to be reduced to $^{1}/_{300}$ provided both of the following conditions are met:

- 1. In Climate Zones 14 and 16, a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
- 2. At least 40 percent and not more than 50 percent of the required venting area is provided by ventilators located in the upper portion of the attic or rafter space. Upper ventilators shall be located not more than 3 feet (914 mm) below the ridge or highest point of the space, measured vertically, with the balance of the ventilation provided by eave or cornice vents. Where the location of wall or roof framing members conflicts with the installation of upper ventilators, installation more than 3 feet (914 mm) below the ridge or highest point of the space shall be permitted.

1203.2.1 Openings into attic. Exterior openings into the attic space of any building intended for human occupancy shall be protected to prevent the entry of birds, squirrels, rodents, snakes and other similar creatures. Openings for ventilation having a least dimension of not less than $^{1}/_{16}$ inch (1.6 mm) and not more than $^{1}/_{4}$ inch (6.4 mm) shall be permitted. Openings for ventilation having a least dimension larger than $^{1}/_{4}$ inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material with openings having a least dimension of not less than $^{1}/_{16}$ inch (1.6 mm) and not more than $^{1}/_{4}$ inch (6.4 mm). Where combustion air is obtained from an *attic* area, it shall be in accordance with Chapter 7 of the *California Mechanical Code*.

1203.3 Unvented attic and unvented enclosed rafter assemblies. Unvented attics and unvented enclosed roof framing assemblies created by ceilings applied directly to the underside of the roof framing members/rafters and the structural roof sheathing at the top of the roof framing members shall be permitted where all the following conditions are met:

- 1. The unvented attic space is completely within the building thermal envelope.
- No interior Class I vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly or on the ceiling side of the unvented enclosed roof framing assembly.
- Where wood shingles or shakes are used, a minimum ¹/₄inch (6.4 mm) vented airspace separates the shingles or
 shakes and the roofing underlayment above the structural sheathing.
- 4. In Climate Zones *14 and 16*, any air-impermeable insulation shall be a Class II vapor retarder or shall have a Class III vapor retarder coating or covering in direct contact with the underside of the insulation.

See the California Energy Code, Figure 100.1-A — California Climate Zones.

- 4.1. (HCD 1 & HCD 2) In Climate Zones 14 and 16, a Class I or Class II vapor retarder shall be installed on the indirectly conditioned space side of all insulation in an unvented attic with air-permeable insulation, for condensation control.
- 5. Insulation shall be located in accordance with the following:
 - 5.1. Item 5.1.1, 5.1.2, 5.1.3 or 5.1.4 shall be met, depending on the air permeability of the insulation directly under the structural roof sheathing. No insulation shall be required when roof tiles, wood shingles or wood shakes, or any other roofing system using battens and no continuous underlayment is installed. A continuous under-

layment shall be considered to exist if sheathing, roofing paper or any continuous layer having a perm rate of no more than one perm under the dry cup method is present.

- 5.1.1. Where only air-impermeable insulation is provided, it shall be applied in direct contact with the underside of the structural roof sheathing.
- 5.1.2. Where air-permeable insulation is provided inside the building thermal envelope, it shall be installed in accordance with Item 5.1. In addition to the air-permeable insulation installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing in accordance with the *R*-values in Table 1203.3 for condensation control.
- 5.1.3. Where both air-impermeable and air-permeable insulation are provided, the air-impermeable insulation shall be applied in direct contact with the underside of the structural roof sheathing and shall be in accordance with the *R*-values in Table 1203.3 for condensation control. The air-permeable insulation shall be installed directly under the air-impermeable insulation.
- 5.1.4. Alternatively, sufficient rigid board or sheet insulation shall be installed directly above the structural roof sheathing to maintain the monthly average temperature of the underside of the structural roof sheathing above 45°F (7°C). For calculation purposes, an interior air temperature of 68°F (20°C) is assumed and the exterior air temperature is assumed to be the monthly average outside air temperature of the three coldest months.
- 5.2. Where preformed insulation board is used as the *air-impermeable* insulation layer, it shall be sealed at the perimeter of each individual sheet interior surface to form a continuous layer.

Exceptions:

- 1. Section 1203.3 does not apply to special use structures or enclosures such as swimming pool enclosures, data processing centers, hospitals or art galleries.
- 2. Section 1203.3 does not apply to enclosures in Climate Zones *14 and 16* that are humidified beyond 35 percent during the three coldest months.

TABLE 1203.3
INSULATION FOR CONDENSATION CONTROL

CLIMATE ZONE	MINIMUM R-VALUE OF AIR- IMPERMEABLE INSULATION ^a
6-15 tile roof only	0 (none required)
3-15	R-5
1 & 2	R-10
16	R-15

a. Contributes to, but does not supersede, thermal resistance requirements for attic and roof assemblies in the *California Energy Code*.

1203.4 Under-floor ventilation. The space between the bottom of the floor joists and the earth under any building except spaces occupied by basements or cellars shall be provided with ventilation openings through foundation walls or exterior walls. Such openings shall be placed so as to provide cross ventilation of the under-floor space.

1203.4.1 Openings for under-floor ventilation. The net area of ventilation openings shall be not less than 1 square foot for each 150 square feet (0.67 m² for each 100 m²) of crawl-space area. Ventilation openings shall be covered for their height and width with any of the following materials, provided that the least dimension of the covering shall be not greater than $\frac{1}{4}$ inch (6.4 mm):

- 1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
- 2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
- 3. Cast-iron grilles or gratings.
- 4. Extruded load-bearing vents.
- Hardware cloth of 0.035-inch (0.89 mm) wire or heavier.
- 6. Corrosion-resistant wire mesh, with the least dimension not greater than $\frac{1}{8}$ inch (3.2 mm).

1203.4.1.1 [SPCB] Openings for under-floor ventilation shall be not less than $1^{-1}/_{2}$ square feet (0.135 m^{2}) for each 25 linear feet (7620 linear mm) of exterior wall. They shall be covered with corrosion-resistant wire mesh with mesh openings not less than $1^{-1}/_{4}$ inch (6.4 mm) nor more than $1^{-1}/_{2}$ inch (13 mm) in any dimension.

1203.4.2 Exceptions. The following are exceptions to Sections 1203.4 and 1203.4.1:

- 1. Where warranted by climatic conditions, ventilation openings to the outdoors are not required if ventilation openings to the interior are provided.
- 2. The total area of ventilation openings is permitted to be reduced to ¹/_{1,500} of the under-floor area where the ground surface is covered with a Class I vapor retarder material and the required openings are placed so as to provide cross ventilation of the space. The installation of operable louvers shall not be prohibited.
- 3. Ventilation openings are not required where continuously operated mechanical ventilation is provided at a rate of 1.0 cubic foot per minute (cfm) for each

- 50 square feet (1.02 L/s for each 10 m²) of crawl-space floor area and the ground surface is covered with a Class I vapor retarder.
- 4. Ventilation openings are not required where the ground surface is covered with a Class I vapor retarder, the perimeter walls are insulated and the space is conditioned in accordance with the *California Energy Code*.
- 5. For buildings in flood hazard areas as established in Section 1612.3, the openings for under-floor ventilation shall be deemed as meeting the flood opening requirements of ASCE 24 provided that the ventilation openings are designed and installed in accordance with ASCE 24.
- 6. **[SPCB]** For purposes of structural pest control inspections, ventilation shall be considered inadequate when the lack thereof has contributed to the growth of wood-destroying pests or organisms.
- **1203.5 Natural ventilation.** Natural ventilation of an occupied space shall be through windows, doors, louvers or other openings to the outdoors. The operating mechanism for such openings shall be provided with ready access so that the openings are readily controllable by the building occupants.
- [HCD 1] In employee housing, all openable windows in rooms used for living, dining, cooking or sleeping purposes, and toilet and bath buildings, shall be provided and maintained with insect screening.
- [HCD 1] Door openings of rooms used for dining, cooking, toilet and bathing facilities in employee housing shall be provided and maintained with insect screening or with solid doors equipped with self-closing devices in lieu thereof, when approved by the enforcement agency.
- [HCD 1] The windows, doors, louvers or other approved closeable openings not required by Section 1029 may open into a passive solar energy collector for ventilation required by this section. The area of ventilation openings to the outside of the passive solar energy collector shall be increased to compensate for the openings required by the interior space.
 - **1203.5.1 Ventilation area required.** The openable area of the openings to the outdoors shall be not less than 4 percent of the floor area being ventilated.
 - **1203.5.1.1 Adjoining spaces.** Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the opening to the adjoining room shall be unobstructed and shall have an area of not less than 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.3 m²). The openable area of the openings to the outdoors shall be based on the total floor area being ventilated.
 - **Exception:** Exterior openings required for ventilation shall be permitted to open into a sunroom with thermal isolation or a patio cover provided that the openable area between the sunroom addition or patio cover and the interior room shall have an area of not less than 8 percent of the floor area of the interior room or space, but not less than 20 square feet (1.86 m²). The openable area of the openings to

the outdoors shall be based on the total floor area being ventilated.

- **1203.5.1.2 Openings below grade.** Where openings below grade provide required natural ventilation, the outside horizontal clear space measured perpendicular to the opening shall be one and one-half times the depth of the opening. The depth of the opening shall be measured from the average adjoining ground level to the bottom of the opening.
- **1203.5.2 Contaminants exhausted.** Contaminant sources in naturally ventilated spaces shall be removed in accordance with the *California Mechanical Code* and the *California Fire Code*.
 - **1203.5.2.1 Bathrooms.** Rooms containing bathtubs, showers, spas and similar bathing fixtures shall be mechanically ventilated in accordance with the *California Mechanical Code*.

The minimum exhaust rate shall not be less than that established by Table 403.7 "Minimum Exhaust Rates." See California Mechanical Code, Chapter 5, for additional provisions related to environmental air ducts.

- [HCD 1] In addition to the requirements in this section and in the California Mechanical Code, bathrooms in Group R occupancies shall be mechanically ventilated in accordance with the California Green Building Standards Code (CALGreen), Chapter 4, Division 4.5.
- **1203.5.3 Openings on yards or courts.** Where natural ventilation is to be provided by openings onto yards or courts, such yards or courts shall comply with Section 1206.
- **1203.6** Other ventilation and exhaust systems. Ventilation and exhaust systems for occupancies and operations involving flammable or combustible hazards or other contaminant sources as covered in the *California Mechanical Code* or the *California Fire Code* shall be provided as required by both codes.

SECTION 1204 TEMPERATURE CONTROL

1204.1 Equipment and systems. Interior spaces intended for human occupancy shall be provided with active or passive space heating systems capable of maintaining an indoor temperature of not less than 68°F (20°C) at a point 3 feet (914 mm) above the floor on the design heating day.

Exceptions:

- 1. Space heating systems are not required for:
 - 1.1. Interior spaces where the primary purpose of the space is not associated with human comfort.
 - 1.2. Group F, H, S or U occupancies.
- 2. [HCD 1] For limited-density owner-built rural dwellings, a heating facility or appliance shall be installed in each dwelling subject to the provisions of Subchapter 1, Chapter 1, Title 25, California Code of Regulations, commencing with Section 74; however, there shall be no specified requirement for heating capacity or temperature maintenance. The use of solid-fuel or

632

- solar-heating devices shall be deemed as complying with the requirements of this section. If nonrenewable fuel is used in these dwellings, rooms so heated shall meet current installation standards.
- 3. [OSHPD 1, 2, 3 & 4] Space heating systems shall comply with the requirements of the California Mechanical Code.
- 4. [HCD 1] When a passive solar energy collector is designed as a conditioned area it shall comply with the California Energy Code. Nonconditioned passive solar energy collectors are exempt from compliance with the California Energy Code.

SECTION 1205 LIGHTING

- **1205.1 General.** Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section 1205.2 or shall be provided with artificial light in accordance with Section 1205.3. Exterior glazed openings shall open directly onto a public way or onto a yard or court in accordance with Section 1206.
- [HCD 1] Glazed openings may open into a passive solar energy collector provided the area of exterior glazed openings in the passive solar energy collector is increased to compensate for the area required by the interior space.
- **1205.2 Natural light.** The minimum net glazed area shall be not less than 8 percent of the floor area of the room served.
 - **1205.2.1 Adjoining spaces.** For the purpose of natural lighting, any room is permitted to be considered as a portion of an adjoining room where one-half of the area of the common wall is open and unobstructed and provides an opening of not less than one-tenth of the floor area of the interior room or 25 square feet (2.32 m²), whichever is greater.

Exception: Openings required for natural light shall be permitted to open into a sunroom with thermal isolation or a patio cover where the common wall provides a glazed area of not less than one-tenth of the floor area of the interior room or 20 square feet (1.86 m²), whichever is greater.

1205.2.2 Exterior openings. Exterior openings required by Section 1205.2 for natural light shall open directly onto a public way, yard or court, as set forth in Section 1206.

Exceptions:

- 1. Required exterior openings are permitted to open into a roofed porch where the porch meets all of the following criteria:
 - 1.1. Abuts a public way, yard or court.
 - 1.2. Has a ceiling height of not less than 7 feet (2134 mm).
 - 1.3. Has a longer side at least 65 percent open and unobstructed.
- 2. Skylights are not required to open directly onto a public way, yard or court.

- **1205.3 Artificial light.** Artificial light shall be provided that is adequate to provide an average illumination of 10 footcandles (107 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.
- **1205.4 Stairway illumination.** Stairways within dwelling units and exterior stairways serving a dwelling unit shall have an illumination level on tread runs of not less than 1 footcandle (11 lux). Stairways in other occupancies shall be governed by Chapter 10.
 - **1205.4.1 Controls.** The control for activation of the required stairway lighting shall be in accordance with *the California Electrical Code*.
- **1205.5** Emergency egress lighting. The means of egress shall be illuminated in accordance with Section 1008.1.
- 1205.6 Light pollution reduction. [BSC-CG] See California Green Building Standards Code, Chapter 5, Division 5.1 for additional light pollution reduction requirements.
- 1205.7 Campus lighting for parking facilities and primary walkways at california state universities, colleges and community colleges. [BSC] Artificial light shall be provided for parking facilities and primary walkways at California State Universities, colleges and community colleges in accordance with provisions of this subsection. This subsection shall not apply to the University of California unless the Regents of the University of California, by resolution, make it applicable.
 - 1205.7.1 Lighting requirements. Based on the recommendations of the most current edition of the Illumination Engineering Society lighting handbook, the following lighting standards shall be used for all new construction of open parking facilities, covered parking facilities and primary walkways:
 - 1. Open and covered parking facilities.
 - 1.1. Medium-level activity usage when medium usage is present.
 - 1.2. High-level activity usage when high usage is present.
 - 2. Primary campus walkways.
 - 2.1. Medium-level activity usage when medium usage is present.
 - 2.2. High-level activity usage when high usage is present.

SECTION 1206 YARDS OR COURTS

- **1206.1 General.** This section shall apply to yards and courts adjacent to exterior openings that provide natural light or ventilation. Such yards and courts shall be on the same lot as the building.
- **1206.2 Yards.** Yards shall be not less than 3 feet (914 mm) in width for buildings two stories or less above grade plane. For buildings more than two stories above grade plane, the minimum width of the yard shall be increased at the rate of 1 foot (305 mm) for each additional story. For buildings exceeding 14 stories above grade plane, the required width of the yard shall be computed on the basis of 14 stories above grade plane.

1206.3 Courts. Courts shall be not less than 3 feet (914 mm) in width. Courts having windows opening on opposite sides shall be not less than 6 feet (1829 mm) in width. Courts shall be not less than 10 feet (3048 mm) in length unless bounded on one end by a public way or yard. For buildings more than two stories above grade plane, the court shall be increased 1 foot (305 mm) in width and 2 feet (610 mm) in length for each additional story. For buildings exceeding 14 stories above grade plane, the required dimensions shall be computed on the basis of 14 stories above grade plane.

1206.3.1 Court access. Access shall be provided to the bottom of courts for cleaning purposes.

1206.3.2 Air intake. Courts more than two stories in height shall be provided with a horizontal air intake at the bottom not less than 10 square feet (0.93 m²) in area and leading to the exterior of the building unless abutting a yard or public way.

1206.3.3 Court drainage. The bottom of every court shall be properly graded and drained to a public sewer or other approved disposal system complying with the *California Plumbing Code*.

SECTION 1207 SOUND TRANSMISSION

1207.1 Scope. This section shall apply to common interior walls, partitions and floor/ceiling assemblies between adjacent dwelling units and sleeping units or between dwelling units and sleeping units and adjacent public areas such as halls, corridors, stairways or service areas.

1207.2 Air-borne sound. Walls, partitions and floor/ceiling assemblies separating dwelling units and sleeping units from each other or from public or service areas shall have a sound transmission class of not less than 50, or not less than 45 if field tested, for air-borne noise when tested in accordance with ASTM E90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. This requirement shall not apply to entrance doors; however, such doors shall be tight fitting to the frame and sill.

1207.2.1 Masonry. The sound transmission class of concrete masonry and clay masonry assemblies shall be calculated in accordance with TMS 0302 or determined through testing in accordance with ASTM E90.

1207.3 Structure-borne sound. Floor/ceiling assemblies between dwelling units and sleeping units or between a dwelling unit or sleeping unit and a public or service area within the structure shall have an impact insulation class rating of not less than 50, or not less than 45 if field tested, when tested in accordance with ASTM E492.

Exception: Impact sound insulation is not required for floor-ceiling assemblies over nonhabitable rooms or spaces not designed to be occupied, such as garages, mechanical rooms or storage areas.

1207.4 Allowable interior noise levels. Interior noise levels attributable to exterior sources shall not exceed 45 dB in any

habitable room. The noise metric shall be either the day-night average sound level (Ldn) or the community noise equivalent level (CNEL), consistent with the noise element of the local general plan.

1207.5 Acoustical control. [BSC-CG] See California Green Building Standards Code, Chapter 5, Division 5.5 for additional sound transmission requirements.

SECTION 1208 INTERIOR SPACE DIMENSIONS

1208.1 Minimum room widths. Habitable spaces, other than a kitchen, shall be not less than 7 feet (2134 mm) in any plan dimension. Kitchens shall have a clear passageway of not less than 3 feet (914 mm) between counter fronts and appliances or counter fronts and walls.

[HCD 1] For limited-density owner-built rural dwellings, there shall be no requirements for room dimensions, provided there is adequate light and ventilation and adequate means of egress.

1208.2 Minimum ceiling heights. Occupiable spaces, habitable spaces and corridors shall have a ceiling height of not less than 7 feet 6 inches (2286 mm). Bathrooms, toilet rooms, kitchens, storage rooms and laundry rooms shall have a ceiling height of not less than 7 feet (2134 mm).

Exceptions:

- 1. In one- and two-family dwellings, beams or girders spaced not less than 4 feet (1219 mm) on center shall be permitted to project not more than 6 inches (152 mm) below the required ceiling height.
- 2. If any room in a building has a sloped ceiling, the prescribed ceiling height for the room is required in one-half the area thereof. Any portion of the room measuring less than 5 feet (1524 mm) from the finished floor to the ceiling shall not be included in any computation of the minimum area thereof.
- 3. The height of mezzanines and spaces below mezzanines shall be in accordance with Section 505.1.
- 4. Corridors contained within a dwelling unit or sleeping unit in a Group R occupancy shall have a ceiling height of not less than 7 feet (2134 mm).
- 5. [OSHPD 1, 2 & 3] Minimum ceiling heights shall comply with Section 1224.4.10.
- 6. [OSHPD 4] Minimum ceiling heights shall comply with Section 1227.8

1208.2.1 Furred ceiling. Any room with a furred ceiling shall be required to have the minimum ceiling height in two-thirds of the area thereof, but in no case shall the height of the furred ceiling be less than 7 feet (2134 mm).

1208.3 Room area. Every dwelling unit shall have no fewer than one room that shall have not less than 120 square feet (13.9 m^2) of net floor area. Other habitable rooms shall have a net floor area of not less than 70 square feet (6.5 m^2) .

Exception: Kitchens are not required to be of a minimum floor area.

1208.4 Efficiency dwelling units. [HCD 1] Unless modified by local ordinance pursuant to Health and Safety Code Section 17958.1, efficiency dwelling units shall comply with the following:

- 1. The unit shall have a living room of not less than 220 square feet (20.4 m²) of floor area. An additional 100 square feet (9.3 m²) of floor area shall be provided for each occupant of such unit in excess of two.
- 2. The unit shall be provided with a separate closet.
- 3. The unit shall be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a clear working space of not less than 30 inches (762 mm) in front. Light and ventilation conforming to this code shall be provided.
- 4. The unit shall be provided with a separate bathroom containing a water closet, lavatory and bathtub or shower.

SECTION 1209 ACCESS TO UNOCCUPIED SPACES

1209.1 Crawl spaces. Crawl spaces shall be provided with no fewer than one access opening which shall be not less than 18 inches by 24 inches (457 mm by 610 mm).

1209.1.1 [SPCB] Accessible under-floor areas shall be provided with an 18-inch by 24-inch (457 mm by 610 mm) access crawl hole. Pipes, ducts and other nonstructural construction shall not interfere with the accessibility to or within under-floor areas.

1209.2 Attic spaces. An opening not less than 20 inches by 30 inches (559 mm by 762 mm) shall be provided to any attic area having a clear height of over 30 inches (762 mm). Clear headroom of not less than 30 inches (762 mm) shall be provided in the attic space at or above the access opening.

1209.3 Mechanical appliances. Access to mechanical appliances installed in under-floor areas, in attic spaces and on roofs or elevated structures shall be in accordance with the *California Mechanical Code*.

SECTION 1210 TOILET AND BATHROOM REQUIREMENTS

[P] 1210.1 Required fixtures. The number and type of plumbing fixtures provided in any occupancy shall comply with the *California Plumbing Code*.

1210.2 Finish materials. Walls, floors and partitions in toilet and bathrooms shall comply with Sections 1210.2.1 through 1210.2.4.

[OSHPD 1, 2 & 3] Facilities subject to OSHPD 1, 2, & 3 shall also comply with Section 1224.4.11.

[OSHPD 4] Facilities subject to OSHPD 4 shall also comply with Section 1227.9.

1210.2.1 Floors and wall bases. In other than dwelling units, toilet, bathing and shower room floor finish materials shall have a smooth, hard, nonabsorbent surface. The intersections of such floors with walls shall have a smooth, hard, nonabsorbent vertical base that extends upward onto the walls not less than 4 inches (102 mm).

1210.2.2 Walls and partitions. Walls and partitions within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

Exception: This section does not apply to the following buildings and spaces:

- 1. Dwelling units and sleeping units.
- 2. Toilet rooms that are not accessible to the public and which have not more than one water closet.

Accessories such as grab bars, towel bars, paper dispensers and soap dishes, provided on or within walls, shall be installed and sealed to protect structural elements from moisture

1210.2.3 Showers. Shower compartments and walls above bathtubs with installed shower heads shall be finished with a smooth, nonabsorbent surface to a height not less than 72 inches (1829 mm) above the drain inlet.

1210.2.4 Waterproof joints. Built-in tubs with showers shall have waterproof joints between the tub and adjacent wall.

[P] 1210.3 Privacy. Privacy at water closets and urinals shall be provided in accordance with Sections 1210.3.1 and 1210.3.2.

[P] 1210.3.1 Water closet compartment. Each water closet utilized by the public or employees shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy.

Exceptions:

- Water closet compartments shall not be required in a single-occupant toilet room with a lockable door.
- Toilet rooms located in child day care facilities and containing two or more water closets shall be permitted to have one water closet without an enclosing compartment.
- 3. This provision is not applicable to toilet areas located within Group I-3 occupancy housing areas.

[P] 1210.3.2 Urinal partitions. Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy. The walls or partitions shall begin at a height not more than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than 6 inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

Exceptions:

- 1. Urinal partitions shall not be required in a singleoccupant or family or assisted-use toilet room with a lockable door.
- 2. Toilet rooms located in child day care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

635

SECTION 1211 [HCD 1 & HCD 2] GARAGE DOOR SPRINGS

1211.1 General. This section shall apply to applications listed in Sections 1.8.2.1.1 and 1.8.2.1.3 regulated by the Department of Housing and Community Development.

1211.1.1 Extension garage door springs. Every extension garage door spring sold or offered for sale, whether new or as a replacement, or installed in any garage or carport which is accessory to an apartment house, hotel, motel or dwelling shall conform to the following requirements:

Hard-drawn spring wire shall conform to ASTM A227 06 (2011) or a more current version, and shall be made by the steel processes described therein, conforming to the chemical composition requirements listed and meeting the standards of steel heat as set forth by the ladle analysis. Wire tensile strength and dimension variations shall meet the prescribed properties of established standards.

Oil-tempered wire shall conform to ASTM A229-12 or a more current version, and shall be made by the steel processes described therein, conforming to the chemical composition requirements listed and meeting the standards of steel heat as set forth by the ladle analysis. Wire tensile strength and dimension variations shall meet the prescribed properties of established standards.

Extension springs shall be fabricated from either hard-drawn spring wire or oil-tempered wire as specified above.

1211.2 Design standards. Minimum design standard shall be 9,000 cycles. (One cycle is equal to door opening plus door closing at maximum working load.)

1211.3 Certification.

Mill certification of wire physical tests and chemical properties shall be kept on file by the spring manufacturer.

Physical cycling tests shall be performed for each extension spring design and shall be certified by an approved testing agency acceptable to the department and reports kept on file by the manufacturer.

Containment devices shall be physically tested for each extension spring design by installing the device on the spring and by destroying the spring at maximum recommended stretch. Containment tests shall be certified by an approved testing agency acceptable to the department and reports kept on file by the manufacturer.

1211.4 Containment devices. Each extension spring shall be equipped with an approved device capable of restraining the spring or any part thereof in the event it breaks.

1211.5 Identification. Extension springs shall be permanently identified as to manufacturer and also to indicate maximum recommended stretch. Both extension springs and containment devices shall bear information stating that they have been manufactured in accordance with requirements of the California Department of Housing and Community Development.

1211.6 Installation. Installation of extension springs, containment devices and hardware shall be in accordance with the manufacturer's installation instructions. Instructions shall be provided by the manufacturer and shall specify the approved method of restraint and maximum recommended

stretch. Unless otherwise permitted by the manufacturer's installation instructions, the hardware and extension springs shall be mounted to nominal 12 by 6 framing members, conforming to the applicable provisions of Section 2303.

SECTION 1212 [HCD 1] POLLUTANT CONTROL

1212.1 Finish material pollutant control. Finish materials, including adhesives, sealants, caulks, paints and coatings, aerosol paints and coatings, carpet systems, carpet cushion, carpet adhesive, resilient flooring systems, and composite wood products shall meet the volatile organic compound (VOC) emission limits in accordance with the California Green Building Standards Code (CALGreen), Chapter 4, Division 4.5.

SECTION 1213 Reserved

SECTION 1214 Reserved

SECTION 1215 Reserved

SECTION 1216 Reserved

SECTION 1217 Reserved

SECTION 1218 Reserved

SECTION 1219 Reserved

SECTION 1220 Reserved

SECTION 1221 Reserved

SECTION 1222 Reserved

SECTION 1223 Reserved

SECTION 1224 [OSHPD 1] HOSPITALS

1224.1 Scope. The provisions of this section shall apply to general acute-care hospitals and general acute-care hospitals < providing only acute medical rehabilitation center services. The provisions of Section 1225 shall apply to distinct part skilled nursing and intermediate-care services on a general acute-care hospital license, provided either in a separate unit < or a freestanding building.

1224.2 Application. New buildings and additions, alterations or repairs to existing buildings subject to licensure shall comply with applicable provisions of the California Electri-

cal Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code (Parts 3, 4, 5, 6 and 9 of Title 24) and this section.

Exceptions:

Ш

- 1. Facilities licensed and in operation prior to the effective date of this section shall not be required to institute corrective alterations or construction to comply with any new requirements imposed thereby or subsequently, except where specifically required or where the enforcing agency determines that a definite hazard to health and safety exists. Facilities for which preliminary drawings have been submitted to the enforcing agency prior to the effective date of this change shall not be required to comply with such new requirements, provided working drawings are submitted within one year of the effective date of such new requirements.
- 2. A change in function shall require compliance with all the functional requirements for new construction in this code, including requirements in Sections 1224, 1225, 1226, 1227 and 1228.
- 3. The provisions of this section do not prohibit the use of alternate space utilization, new concepts of design, treatment techniques, equipment and alternate finish materials provided the intent of this section is accommodated and written approval for such alternative is granted by the enforcing agency. Written substantiating evidence in support of the alternate and a written request for consideration shall be submitted to the enforcing agency.
- 4. Nothing in this section shall prohibit the provisions of required services from a centralized service facility serving two or more licensed facilities when approved in writing by the licensing agency. Buildings and required spaces for services provided in a separate centralized services facility shall comply with all applicable provisions of these regulations and applicable local codes and ordinances for the services so provided.
- 5. Acute psychiatric hospitals and general acute-care hospitals providing only acute medical rehabilitation center services may provide for surgical and anesthesia services to be provided by an outside licensed facility when approved by the licensing agency.
- 6. When the Corrections Standards Authority, the Department of Corrections or the Department of Youth Authority determines that a particular requirement for hospitals located in a correctional facility may compromise the safety, security or protection of staff, inmates or property, the enforcement agency shall consider an alternate design.
- 1224.3 Definitions. Specific terms and definitions are provided to facilitate consistency in the interpretation and application of these requirements. Some of these terms may have a broader definition in other contexts, but the definitions provided here reflect the use of the terms for OSHPD requirements.
- AIR CONDITIONING. The process or system by which simultaneously the temperature, humidity, air motion and quality are maintained within required limits.

AIRBORNE INFECTION ISOLATION ROOM. A single-occupancy patient room where environmental factors are controlled in an effort to minimize the transmission of those infectious agents usually spread from person to person by droplet nuclei associated with coughing and inhalation.

AMBULATORY CARE. A defined health care encounter(s) of less than 24 hours in duration that requires direct professional health care support within a specific facility.

AMBULATORY SURGICAL FACILITY. Any surgical facility organized for the purpose of providing procedural, invasive surgical care to patients with the expectation that they will be recovered sufficiently to be discharged in less than a 24-hour period.

ANGIOGRAPHY. The radiographic visualization of blood vessels following introduction of contrast material for purposes of diagnosis.

BASIC SERVICES. Those essential services required for licensure as a hospital, including medical, nursing, surgical, anesthesia, laboratory, radiology, pharmacy, dietary services and support services. See "SUPPLEMENTAL SERVICES."

BIOTERRORISM. The use, or threat of use, of biological agents to intimidate a political entity or population group.

CENTRAL AIR-HANDLING SYSTEMS. Any units requiring ductwork on the supply or inlet side and serving more than one room.

CHANGE IN FUNCTION. A change in function is a change in activity, service or licensed service provided, within the project limits, that does not necessarily change the use, specific use, and/or occupancy. Conversion of a space that results in a change in activity such that the space will be required to satisfy the functional space requirements under a different code sub-section than that of the prior use is considered a change in function.

CLEAR DIMENSION. An unobstructed room dimension exclusive of built-in casework and equipment and available for functional use.

COURT. An open exterior space bounded on three or more sides by the walls of a structure.

ENVIRONMENT OF CARE. Those features in a built health care entity that are created, structured, and maintained to support quality health care.

EXAM ROOM. A room with a bed, stretcher, or examination table and capability for periodic monitoring (e.g., measurement of blood pressure or pulse oximetry) in which procedures that do not require a specialized suite can be performed (e.g., pelvic examination, blood transfusion).

FLOOR AREA, CLEAR. The actual occupied area exclusive of fixed or wall-mounted cabinets, fixed beds and furnishings, built-in shelves, toilet rooms, closets, lockers, wardrobes, alcoves, anterooms or vestibules.

GENERAL ACUTE-CARE HOSPITAL. A hospital, licensed by the California Department of Public Health, having a duly constituted governing body with overall administrative and professional responsibility and an organized medical staff which provides 24-hour inpatient care, including the basic services.

HANDWASHING STATION. An area that provides a hand-washing fixture, cleansing agents and means for drying hands. Refer to the California Plumbing Code, Section 210.0 for the definition of handwashing fixture.

HOSPITAL. A general acute-care hospital, including those providing only acute medical rehabilitation center services and acute psychiatric hospitals.

HOUSEKEEPING. Services anywhere within a health care facility that include general cleaning and tidying and the provision and positioning of identified materials, e.g., soaps, towels, etc. (While routine disinfection protocols can be included in such a definition, the definition is not intended to include complex, nonroutine disinfection procedures nor the nonroutine disposition of hazardous materials such as potentially toxic drugs or other chemicals and radioactive wastes.)

LDR. Labor, Delivery, Recovery (an unlicensed patient bed)

LDRP. Labor, Delivery, Recovery, Postpartum (a licensed patient bed)

LICENSING AGENCY. The Department of Public Health, Licensing and Certification.

LOCATION TERMINOLOGY (terms for relationship to an area or room)

ADJACENT. Located next to but not necessarily connected to the identified area or room.

DIRECTLY ACCESSIBLE. Connected to the identified area or room through a doorway, pass-through, or other opening without going through an intervening room or public space.

IMMEDIATELY ACCESSIBLE. Available either in or adjacent to the identified area or room.

IN. Located within the identified area or room.

READILY ACCESSIBLE. Available on the same floor as the identified area or room.

MONOLITHIC. A surface free of fissures, cracks, perforations, and crevices.

MONOLITHIC CEILING. A ceiling constructed with a surface free of fissures, cracks, and crevices. Any penetrations such as lights, diffusers, and access panels shall be sealed or gasketed. Lay-in ceilings are not considered "monolithic."

NURSING UNIT. A designated patient care area of the hospital which is planned, organized, operated and maintained to function as a unit. It includes patient rooms with adequate support facilities, services and personnel providing nursing care and necessary management of patients.

OPERATING ROOM. A room specifically designed for the performance of surgical procedures. (In common understanding, this means most types of surgical procedures, especially those involving the administration of anesthesia, multiple personnel, recovery room access, and a fully controlled environment.)

HYBRID OPERATING ROOM. A room that meets the definition of an operating room and is also equipped to enable diagnostic imaging before, during, and after surgical procedures. Imaging equipment is permanently installed in the room and may include MRI, fixed single-

plane and bi-plane tomographic imaging systems, and computed tomographic equipment.

Note: Use of portable imaging technology does not make an operating room a hybrid operating room.

OUTPATIENT SERVICE. An organizational unit of the hospital, which provides nonemergency healthcare services to patients.

PATIENT CARE LOCATIONS

BAY (patient). A space for human occupancy with one hard wall at the headwall and three soft walls (e.g., cubicle curtains or portable privacy screen).

CUBICLE. A space intended for human occupancy that has at least one opening and no door and is enclosed on three sides with full-height or partial-height partitions.

PATIENT CARE STATION. A designated space for a specific patient care function. This term does not imply any structural requirement (e.g., a Post-anesthesia Care Unit (PACU) can have 10 patient care stations of which three are rooms, three are cubicles, and four are bays).

PATIENT ROOM. Licensed patient bed rooms.

PERIOPERATIVE. Patient care and other related supportive activities before, during or after the operative event.

PROTECTIVE ENVIRONMENT. A bedded unit or patient room where severely immunosuppressed patients are cared for.

RESTRICTED AREA. A designated space with limited access eligibility. Such space has one or more of the following attributes: specific signage, physical barriers, security controls and protocols that delineate requirements for monitoring, maintenance, attire, and use. The term is often applied to specialized procedure suites, such as operating rooms and suites, interventional imaging, cardiac catheterization labs, angiography suites, etc.

ROOM. A space enclosed by hard walls and having a door. Where the word "room" or "office" is used, a separate, enclosed space for the one named function is intended. Otherwise, the described area may be a specific space in another room or common area.

SCRUB SINK. A sink used to wash and scrub the hands and arms during the aseptic preparation for surgery, and equipped with a supply spout and controls as required for a handwashing fixture. Refer to the California Plumbing Code Sections 210.0 and 221.0.

SERVICE SINK. A sink located in a housekeeping room and designed for the purpose of cleaning mops and the disposal of waste water.

SUB-ACUTE CARE. A segment within a continuum of levels of care determined by patient acuity, clinical stability, and resource needs.

SUPPLEMENTAL SERVICE. An inpatient or outpatient service which is not required to be provided by law or regulation for licensure. A supplemental service, when provided, must accommodate the provisions of this section.

Note: See "BASIC SERVICES."

SURGICAL SERVICE SPACE. A space that includes the operating room(s) and service areas.

1224.4 GENERAL CONSTRUCTION.

1224.4.1 Services/systems and utilities. See Section 3416A.

1224.4.2 Environmental engineering and support service spaces. Spaces for dietary, laundry, morgue, ambulance entrance, receiving areas, power plants, mechanical equipment, incinerator, garbage can cleaning, automobile parking and storage areas for garbage, trash and medical gases shall be located and constructed to minimize noise, steam, odors, hazards and unsightliness in patient-care areas and bedrooms.

1224.4.3 Treatment spaces. Radiology, laboratory, pharmacy, physical therapy and service spaces serving only outpatients and similar outpatient service departments shall not be located in nursing units, surgical units, perinatal units, nursery areas, central sterilization rooms, food-service' areas, power plants, mechanical equipment rooms, maintenance shops, general storage, laundry, employees' dressing or housekeeping facilities.

Exception: Physical and occupational therapy spaces of a rehabilitation service may serve both outpatients and inpatients.

1224.4.4 Support areas for patient care. Identifiable spaces shall be provided for each function indicated in all Basic and applicable Supplemental Service Space sections with requirements for support areas. The following rooms and spaces are common to most types of health care facilities and the requirements associated with each, as listed below, shall be used unless modified under a specific Service Space section.

1224.4.4.1 Examination and treatment rooms.

1224.4.4.1.1 Examination room. Unless specified elsewhere, if an exam room is provided, it shall have a minimum clear floor area of 80 square feet (7.4 m²), the least dimension of which shall be 8 feet (2438mm). The room shall contain a handwashing fixture and accommodations for written or electronic documentation shall be provided.

1224.4.4.1.2 Treatment room. Unless specified elsewhere, if a treatment room is provided, it shall have a minimum clear floor area of 120 square feet (11.15 m²), the least dimension of which shall be 10 feet (3048 mm). A minimum of 3 feet (914 mm) is required between the sides and foot of the bed/gurney/table and any wall or other fixed obstruction. The room shall contain an examination light, a work counter for medical equipment, a handwashing fixture, cabinets, medication storage and counter space for writing or electronic documentation. Multi-bed treatment rooms shall have separate patient cubicles with a minimum clear floor area of 80 square feet (7.4 m^2) per cubicle. Each cubicle shall contain an examination light, counter and storage facilities, In multi-bed treatment rooms, a handwashing fixture shall be provided in the room for each three or fewer cubicles.

1224.4.4.1.3 Airborne infection isolation exam/ treatment room. When provided, the airborne infection isolation room shall be an exam/treatment room, shall be labeled with the words "Airborne Infection Room", and provide the following:

- 1. Capacity. Each airborne infection isolation exam/treatment room shall contain only one examination table or recliner.
- 2. Handwashing station. A handwashing station shall be located in each airborne infection isolation exam/treatment room.
- 3. Gowning and storage area. An area for gowning and storage of clean and soiled materials shall be located directly outside or inside the entry door to the airborne infection isolation exam/treatment room.
- 4. Doors. Room doors shall be self-closing and include latching devices.
- 5. Sealed-tight room. Room perimeter walls, ceiling, floors, doors and penetration shall be sealed tightly to minimize air infiltration from the outside or from other spaces.
- 6. Ventilation. The ventilation shall be provided as required by the California Mechanical Code for airborne infection isolation room.

1224.4.4.1.3.1 Airborne infection isolation exam/treatment anteroom. An airborne infection isolation anteroom is not required; however, when an anteroom is provided, it shall meet the following requirements:

- 1. The anteroom shall provide space for persons to don personal protective equipment before entering the patient room.
- 2. All doors to the anteroom shall have self-closing devices.
- 3. The anteroom shall provide storage of personal protective equipment (e.g. respirators, gowns, gloves) and clean equipment.
- 4. Ventilation shall be provided in the anteroom as required by the California Mechanical Code for airborne infection isolation anteroom.

1224.4.4.1.4 Seclusion room. Where provided, seclusion rooms shall comply with the following requirements:

1224.4.4.1.4.1 General.

- 1. Capacity. Each room shall accommodate only one patient.
- 2. Layout and access. Seclusion rooms shall be accessed through an anteroom or vestibule that also provides access to a toilet room. The door openings to the anteroom and the toilet room shall have a minimum clear width of 3 feet 8 inches (1118 mm).
- 3. The room(s) shall be located to permit observation from the nurse station.
- 4. Seclusion rooms shall be permitted to be grouped together and may share a common vestibule/anteroom.

639

1224.4.4.1.4.2 Space requirements. Seclusion rooms shall have a minimum clear floor area of 60 square feet (5.57 m^2) with a minimum wall length of 7 feet (2134 mm) and a maximum wall length of 11 feet (3353 mm).

Exception: Where a room for restraining patients is authorized by the California Department of Public Health, it shall have a minimum clear floor area of 80 square feet (7.43 m²) with a minimum wall length of 7 feet (2134 mm) and a maximum wall length of 11 feet (3353 mm).

1224.4.4.1.4.3 Special design elements. Seclusion rooms shall be designed and constructed in compliance with the following requirements:

- 1. The walls, ceiling, and floor of the seclusion room shall be designed to withstand direct and forceful impact. If padded materials are used inside the room, they shall meet the interior finish requirements in Chapter 8, Interior Finishes, of this code.
- 2. Minimum ceiling height shall be 9 feet (2743 mm).
- 3. Doors.
 - 3.1. Door hardware shall be ligature resistant.
 - 3.2. The entrance door to the seclusion room shall swing outward.
 - 3.3. Doors shall permit staff observation of the patient through a view panel while also maintaining provisions for patient privacy. The maximum sill height shall be 36 inches (914 mm) above the finish floor. The view panel shall be fixed glazing with polycarbonate or laminate on the inside of the glazing.
- 4. Seclusion rooms shall not contain outside corners or edges.
- 5. All items in the room (e.g., lighting fixtures, sprinkler heads, HVAC grilles, and surveillance cameras, etc.) shall be tamper resistant.
- 6. Electrical switches and receptacles are prohibited in the seclusion room.

1224.4.4.2 Administrative center(s) or nurse station(s). This area shall have space for counters and storage and at least one hand-washing station shall be located in, adjacent to, or directly accessible to the administrative center or nurse station. It may be combined with or include centers for reception, charting and communication.

1224.4.4.3 Specimen and blood collection facilities.

1224.4.4.3.1 Specimen collection facilities. When provided, specimen collection facilities shall comply with the following requirements:

1. Urine collection rooms shall be equipped with a water closet and handwashing station.

Exception: The handwashing station may be located immediately outside the collection room when the specimen is used for drug testing.

2. Use of the toilet room provided within the examination and treatment room shall be permitted for specimen collection.

1224.4.4.3.2 Blood collection facilities. When provided, blood collection facilities shall comply with the following requirements:

- 1. Space for a chair and work counter shall be provided.
- 2. A handwashing station shall be provided.

1224.4.4.4 Medication station. Provision shall be made for distribution of medications. This shall be done from a medication preparation room or from a self-contained dispensing unit.

1224.4.4.4.1 Medication preparation room. If provided, this room shall be directly accessible from the nursing station. When a medicine preparation room is to be used to store one or more self-contained medicine dispensing units, the room shall be designed with adequate space to prepare medicines with the self-contained medicine dispensing unit(s) present. Medicine preparation rooms shall include:

- 1. Work counter.
- 2. Handwashing station.
- 3. Refrigerator.
- 4. Locked storage for controlled drugs.

1224.4.4.2 Self-contained medication dispensing unit. If provided, a self-contained medicine dispensing unit shall be located at the nurses' station, in the clean utility room, or in an alcove.

1224.4.4.5 Nourishment area or room. Nourishment areas or rooms required in patient care areas shall include the following:

- 1. Sink
- 2. Work counter
- 3. Refrigerator
- 4. Storage cabinets
- 5. Equipment for hot and cold nourishment between scheduled meals.
- 6. The nourishment shall include space for trays and dishes used for nonscheduled meal service.
- 7. Provisions and space shall be included for separate temporary storage of unused and soiled dietary trays not picked up at mealtime.
- 8. Handwashing fixtures separate from the nourishment sink shall be in or adjacent to the nourishment area.

1224.4.4.6 Clean utility/workroom. The clean workroom or clean supply room shall be separate from and have no connection with the soiled workroom or soiled holding room. If the room is used for preparing patient care items, it shall contain the following:

- 1. Work counter
- 2. Handwashing station
- 3. Storage facilities for clean and sterile supplies

1224.4.4.6.1 Clean supply room. If the room is used only for storage and holding as part of a system for distribution of clean and sterile materials, the work counter or a handwashing station may be omitted.

1224.4.4.7 Soiled utility/workroom. The soiled workroom or soiled holding room shall be separate from and have no connection with either clean workrooms or clean supply rooms. The soiled utility/workroom shall contain:

- 1. Clinical sink (or equivalent flushing-rim fixture).
- 2. Handwashing station
- 3. Work counter
- 4. Space for separate covered containers for soiled linen and/or waste

1224.4.4.7.1 Soiled holding room. Rooms used only for temporary holding soiled material may omit the clinical sink and work counter. If the flushing-rim clinical sink is eliminated, facilities for cleaning bedpans shall be provided elsewhere.

1224.4.4.8 Toilet rooms. Separate toilet rooms shall be provided for the use of patients, staff, and public. When provided, single-user toilets shall include a doormounted geometric symbol, as identified in Section 11B-703.7.2.6.3, Unisex toilet and bathing facilities, and wall signage designating use for patients, staff or public. When existing toilet rooms are not compliant with Section 11B-603, Toilet and bathing rooms, directional signage in compliance with Section 11B-216.8, Toilet rooms and bathing rooms, shall also be provided.

Exception: Patient toilet rooms accessed directly from patient bedrooms are not required to include signage.

1224.4.5 Outpatient waiting rooms. Waiting rooms for outpatients shall provide a seating area and space for wheelchairs and have public corridor access. Public toilets, drinking fountains and telephones shall be readily accessible.

Note: One waiting area may serve more than one department or service.

1224.4.5.1 Outpatient access. If x-ray examinations are to be performed on outpatients, outpatient access to the radiological spaces shall not traverse a nursing unit.

Exception: Satellite radiology, laboratory, pharmacy, and physical and occupational therapy space serving inpatients may be located in nursing units and inpatient treatment areas.

1224.4.6 Miscellaneous requirements.

1224.4.6.1 Station outlets. Station outlets for oxygen, vacuum, and medical air shall comply with Table 1224.4.6.1.

1224.4.6.2 Gas and vacuum systems. The design, installation and testing of medical gas and vacuum systems shall conform to Table 1224.4.6.1 and NFPA 99.

1224.4.6.3 Hyperbaric facilities. The design and construction of hyperbaric facilities shall conform to NFPA 99; Health Care Facilities and Section 1224.39.5.

1224.4.6.4 Laboratories. The design and construction of hospital laboratories shall conform to NFPA 99.

1224.4.6.5 Nurse call systems. The location of nurse call devices shall comply with Table 1224.4.6.5. The design of call systems shall comply with the California Electrical Code, Part 3 of Title 24.

1224.4.7 Corridors.

1224.4.7.1 Width. The minimum width of corridors and hallways shall be 8 feet (2438 mm).

Exception: Patient-care corridors and hallways in hospitals for psychiatric care of patients who are not bedridden shall have a minimum clear and unobstructed width of 6 feet (1829 mm). For the purposes of this section, bedridden patients shall be defined as patients confined to beds who would be transported or evacuated in beds or litters.

1224.4.7.2 Light traffic. Service corridors and hall-ways with anticipated light traffic volume for nonpatient use may be reduced to a width of 5 feet (1524 mm) if approved by the enforcing agency.

Exception: Corridors and hallways in administrative and business areas may be reduced to a width of 44 inches (1118 mm).

1224.4.7.3 Outpatient services. Outpatient clinics or outpatient departments which contain facilities for outpatient use only, such as laboratory, x-ray, physical therapy or occupational therapy, shall have a minimum corridor or hallway width of 5 feet (1524 mm). Outpatient clinics and outpatient departments consisting only of waiting rooms, business offices, doctor's offices, and examining rooms, where there is no traffic through such area to other services or to exits from the building, shall have a minimum corridor or hallway width of 44 inches (1118 mm).

1224.4.7.4 Handrails. Corridors for patient traffic in areas providing skilled nursing, intermediate care or rehabilitation services shall be furnished with a handrail on both sides at a height not less than 30 inches (762 mm) or greater than 36 inches (914 mm).

1224.4.7.5 Connections. Corridor systems shall connect all patient rooms and basic services.

Exception: Covered pedestrian walkways connecting separate buildings are permitted for ambulatory, psychiatric or chemical dependency patients.

1224.4.7.6 Departmental boundaries. Department/service space areas shall be contiguous and include internal circulation to access each of the rooms/spaces associated with it, as identified under the specific Service Space requirements.

1224.4.8 Doors and door openings.

1224.4.8.1 Toilet room doors. Doors to toilet rooms shall have an opening of not less than 32 inches (813 mm) clear in width and shall be equipped with hardware which will permit the door to swing outward or in a manner to negate the need to push against a patient who may have collapsed within the toilet room.

641

TABLE 1224.4.6.1 STATION OUTLETS FOR OXYGEN, VACUUM (SUCTION), AND MEDICAL AIR SYSTEMS^{1, 6}

	LOCATIONS	OXYGEN	VACUUM	MEDICAL AIR	WAGD ³
1	Patient rooms (medical/surgical unit)	1/bed	1/bed	_	_
2	Examination or treatment (medical/surgical unit and postpartum care)	1/room	1/room	_	_
3	Airborne infection isolation or protective environment rooms (medical/surgical unit)	1/bed	1/bed	_	_
4	Seclusion room (medical/surgical unit and postpartum care)	1/bed	1/bed	_	_
5	Intensive care (general)	3/bed	3/bed	1/bed	_
6	Airborne infection isolation	3/bed	3/bed	1/bed	_
7	Coronary-care service space	3/bed	2/bed	1/bed	_
8	Pediatric intensive care	3/bed	3/bed	1/bed	_
9	Newborn intensive care	3/bassinet	3/bassinet	3/bassinet	_
10	Newborn nursery (full term)	1/4 bassinets ²	1/4 bassinets ²	1/4 bassinets ²	
11	Pediatric and adolescent	1/bed	1/bed	1/bed	_
12	Pediatric nursery	1/bassinet	1/bassinet	1/bassinet	_
13	Psychiatric patient room	_	_	_	
14	Seclusion treatment room (psychiatric unit)	_		_	_
15	General operating room	2/room	5/room	1/room	1/room
16	Cardio and special procedures	2/room	5/room	1/room	1/room
17	Orthopedic surgery	2/room	5/room	1/room	1/room
18	Surgical cystoscopic and other endo-urologic procedures	1/room	3/room	_	
19	Post-anesthesia care unit	2/bed	3/bed	1/bed	_
20	Anesthesia workroom	1/workstation	_	1/workstation	_
21	Endoscopy procedure room	1/room	3/room	_	
22	Postpartum bedroom	1/bed	1/bed	_	_
23	Cesarean operating/delivery room	2/room	4/room	1/room	1/room
24	Recovery space for cesarean delivery	1/bed	3/bed	1/bed	
25	Infant resuscitation space ⁴	3/bassinet	3/bassinet	3/bassinet	_
26	Labor room	1/room	1/room	_	
27	OB recovery room	1/bed	3/bed	_	
28	Labor/delivery/recovery (LDR) ⁵	1/bed	1/bed	_	_
29	Labor/deliver/recovery/postpartum (LDRP) ⁵	1/bed	1/bed	_	
30	Initial emergency management	1/bed	1/bed	1/bed	
31	Triage area (definitive emergency care)	1/station	1/station	_	_
32	Definitive emergency care examination or treatment rooms	1/bed	1/bed	1/bed	
33	Observation unit	1/bed	1/bed	_	
34	Trauma/cardiac room(s)	2/bed	3/bed	1/bed	
35	Orthopedic and cast room	1/room	1/room	_	_
36	Cardiac catheterization lab	2/bed	2/bed	2/bed	_
37	Autopsy room	_	1/workstation	_	_
38	MRI	1/room	1/room	1/room	
39	Interventional imaging procedure room	2/room	2/room	1/room	
40	Hyperbaric suite pre-procedure/patient holding area	2/station	2/station	_	_
41	Electroconvulsive therapy procedure room	1/room ⁷	1/room ⁷		_

- 1. For any area or room not described above, the facility clinical staff shall determine outlet requirements after consultation with the enforcing agency.
- 2. Four bassinets may share one outlet that is accessible to each bassinet.
- 3. WAGD stands for "waste anesthesia gas disposal" system.
- 4. When infant resuscitation takes place in a room such as cesarean section/delivery or LDRP, then the infant resuscitation services shall be provided in that room in addition to the minimum service required for the mother.
- 5. One outlet for mother and one for each bassinet.
- 6. Renovation projects of existing spaces where the existing function is not changed, are not required to comply with the requirements of this table.
- 7. Use of portable equipment shall be permitted.

TABLE 1224.4.6.5 [OSHPD 1, 2, 3 & 4] LOCATION OF NURSE CALL DEVICES KEY: • Required

AREA DESIGNATION	PATIENT STATION	BATH STATION	STAFF EMERGENCY STATION	CODE CALL STATION	NURSE MASTER STATION	DUTY STATION	NOTES
Nursing Units	•					•	
Nursing Unit bed location	•						1, 2, 3, 4
Patient toilets		•					2
Patient showers and baths		•					2
Critical care bed locations, including NICU	•		•	•			1, 2, 4, 5
LDR/LDRP rooms	•		•	•			1, 2, 3, 4
Newborn and special care nurseries			•	•			
Examination/treatment room			•			•	
Support Areas							
Nurse/control station					•		
Clean workroom						•	
Soiled workroom						•	
Medication preparation room						•	
Staff lounge						•	
Diagnostic and Treatment Areas	1			1		1	
Psychiatric seclusion ante/exam rooms			•				
Cesarean delivery rooms			•				2
Emergency exam, treatment, triage rooms	•		•	•			1, 2, 4
Observation unit patient station			•				
Operating rooms			•				2
Preoperative patient care area	•		•				1, 2
Recovery—PACU			•	•			2, 4
MRI, CT, stress testing areas			•	•			2, 4
Diagnostic radiology, fluoroscopy and ultrasound procedure rooms			•				2
Cardiac catheterization, interventional imaging, angiography			•	•			
Nuclear medicine procedure room			•				2
Endoscopy procedure room			•				2
Electroconvulsive therapy procedure room			•				

Notes:

- 1. One device shall be permitted to accommodate both patient station and emergency staff assistance station functionality.
- 2. A visible signal shall be activated in the corridor at the patient's door, at the nurse/control station, and at all duty stations. In multicorridor nursing units, additional visible signals shall be installed at corridor intersections.
- 3. Two-way voice communication shall be provided with the nurse/control station.

Exception: Skilled nursing facilities.

- 4. One device shall be permitted to accommodate both emergency staff assistance and code call station functionality.
- 5. A patient station shall not be required in the NICU.

1224.4.8.2 Pocket doors. Pocket sliding doors are not permitted.

Exception: Administration and business areas.

1224.4.9 Windows and screens.

1224.4.9.1 Windows. Rooms approved for the housing of patients shall be provided with natural light by means of exterior glazed openings excluding clerestory windows, obscure glass and skylights, with an area not less than one tenth of the total floor area.

1224.4.9.2 Operation and sills. Patient room windows shall have sills not more than 36 inches (914 mm) above the floor. If operable windows are provided that require the use of tools or keys for operation, the tools or keys shall be located at the nurses' station.

Exception: Window sills in intensive-care units may be 60 inches (1524 mm) above the floor.

1224.4.9.2.1 Airborne infection isolation or protective environment rooms. If operable windows are provided in airborne infection isolation or protective environment rooms, they shall only be operable by the use of tools or keys which shall be located at the nurses' station.

1224.4.9.3 Psychiatric unit windows. Safety glass or plastic glazing materials shall be used in windows in psychiatric patient areas.

1224.4.9.4 Screens. Windows which may be frequently left in an open position shall be provided with insect screens of 16 meshes to the inch.

1224.4.9.5 Light and ventilation. All portions of a building used by patients, personnel or other persons shall be provided with artificial light and a mechanically operated ventilating system as specified in the California Electrical Code and the California Mechanical Code.

1224.4.10 Ceiling heights.

1224.4.10.1 Minimum height. The minimum height of ceilings shall be 8 feet (2438 mm).

Exception: Closet, toilet room and bathroom minimum ceiling heights shall not be less than 7 feet (2134 mm).

1224.4.10.2 Minimum height with fixed ceiling equipment. Operating rooms, emergency rooms, delivery rooms, radiographic rooms and other rooms containing ceiling-mounted, major fixed equipment or ceiling-mounted surgical light fixtures shall have ceiling heights to accommodate the equipment or fixtures and their normal movement. Suspended tracks, rails and pipes located in the traffic path for patients in beds and/or on stretchers, including those in inpatient service areas, shall be not less than 7 feet (2134 mm) above the floor.

Exception: Mobile suspended tracks such as traverse rails for overhead patient lifts that may be moved out of the traffic path shall provide a clearance of not less than 6 feet, 8 inches (2032mm) above the floor when in use.

1224.4.11 Interior finishes.

1224.4.11.1 Floor finishes. Floor finishes shall be smooth, waterproof and durable. Flooring surfaces shall provide smooth transitions between different floor materials. Slip-resistant flooring products shall be used for flooring surfaces in wet areas (e.g., kitchens, shower and bath areas), ramps, stairways, entries from exterior to interior space, and other areas as determined by the functional program. Joints for floor openings for pipes, ducts and conduits shall be tightly sealed. Joints of structural elements shall be similarly sealed.

Exception: Upon written appropriate documented requests, the licensing agency may grant approval of the installation of carpets. See Table 1224.4.11.

1224.4.11.1.1 Coved base. Resilient flooring, if used in toilet and bathing rooms, shall be continuous and extend upward onto the wall at least 5 inches (127 mm) to minimize moisture infiltration. Wood bases are prohibited except in waiting areas and administration departments.

1224.4.11.1.2 Food preparation areas. Floors in areas used for food preparation and assembly shall be water-resistant. Floor surfaces, including tile joints, shall be resistant to food acids. Floor construction in dietary and food preparation areas shall be free of spaces that can harbor pests.

1224.4.11.1.3 Wet cleaning. In all areas subject to frequent wet-cleaning methods, flooring materials

shall not be physically affected by germicidal or other types of cleaning solutions.

1224.4.11.1.4 Airborne infection isolation, airborne infection isolation exam/treatment and protective environment rooms. These rooms and anterooms shall have seamless flooring with integral coved base.

1224.4.11.2 Wall bases.

1224.4.11.2.1 Material. The material and textures of bases and the installation thereof shall be such as to minimize dust-catching surfaces, moisture, infiltration and the harboring of vermin.

Exception: In locations where carpet is permitted as a floor finish material, the use of carpeted base (coved or strip base) up to a maximum height of 5 inches (127 mm) is also permissible.

1224.4.11.2.2 Wet cleaning. Floor and wall base assemblies in the following rooms shall be monolithic and have an integral coved wall base that is carried up the wall a minimum of 6 inches (150 mm) and is tightly sealed to the wall:

- 1. Operating rooms
- 2. Interventional imaging rooms, including cardiac catheterization labs
- 3. Cesarean delivery rooms
- 4. Cystoscopy, urology, and minor surgical procedure rooms
- 5. Endoscopy procedure rooms
- 6. Endoscopy instrument processing rooms
- 7. IV and chemotherapy preparation rooms
- 8. Airborne infection isolation (AII) rooms
- 9. Protective environment (PE) rooms
- 10. Anterooms to AII and PE rooms, where provided
- 11. Cast rooms

The floors and wall bases of kitchens, soiled and clean utility rooms, housekeeping rooms with mop sinks, patient, public and staff sanitary facilities and other areas subject to frequent wet cleaning, shall also be homogeneous, nonabsorbent, smooth, easily cleaned and not physically affected by germicidal cleaning solutions, but may have tightly sealed joints and shall be constructed without voids at the intersection of floor and wall surfaces.

1224.4.11.3 Wall finishes. Wall finishes shall comply with the following requirements:

- 1. Wall finishes shall be washable. In the vicinity of plumbing fixtures, wall finishes shall be smooth, scrubbable and water-resistant.
- 2. Wall finishes in areas such as operating rooms, delivery rooms and trauma rooms shall be monolithic, scrubbable and able to withstand cleaning with chemicals.
- 3. Wall finishes in operating rooms, cesarean delivery rooms, isolation rooms and sterile processing rooms shall be free of fissures,

TABLE 1224.4.11 ACCEPTABLE CEILING AND CARPET LOCATIONS

AREAS/ROOMS 3,4 GENERAL ACUTE CARE HOSPITAL CEILING/CARPE			ACUTE PSYCHIATRIC - HOSPITAL CEILING/ CARPET		SKILLED NURSING AND INTERMEDIATE-CARE FACILITIES CEILING/CARPET		CLINIC CEILING/ CARPET	
Patient bedrooms	3	*	3	*	3	*	_	_
Patient corridors/hallways	3	*	3	*	3	*	3	*
Airborne infection isolation rooms	2	N	2	N	2	N	2	N
Protective environment rooms	1	N	1	N	1	N	-	-
Nurses' or administration station	3	Y	3	Y	3	Y	3	Y
Utility rooms	2	N	2	N	2	N	2	N
Surgical units ²	2	N		_	_	_	2	N
Operation rooms Surgical corridors/hallways	1 2	N N			_	_	1 2	N N
				_	_			- '
Recovery	3	N *		*	_	_	3	N
Radiological unit ² X-ray rooms ¹	3 3	N N	<i>3</i> <i>3</i>	N N		_	3 3	N
Treatment rooms ²	2	N	3	N	2	N	2	N
Examination rooms	3	*	3	*	3	*	3	*
Administration	4	Y	4	Y	4	Y	4	Y
Central sterile supply	2	N	2	N	2	N	2	N
Clinical laboratories	3	N	3	N	_	_	3	N
Pharmacy	3	*	3	*	3	*	3	*
Morgue and autopsy	3	N		_	_		_	
General storage rooms	3	N	3	N	3	N	3	N
Housekeeping rooms	2	N	2	N	2	N	2	N
Laundry	15	N	1^{5}	N	I^5	N	_	_
Soiled linen	2	N	3	N	3	N	3	N
Clean linen	3	N	3	N	3	N	3	N
Kitchens	15	N	15	N	15	N	15	N
Dining rooms	3	*	3	*	3	*	3	*
Dishwasher rooms	2	N	2	N	2	N	2	N
Dietary day storage	2	N	2	N	2	N	_	
Catheterization laboratory	1	N	_	_	_	_	_	_
Chronic dialysis	3	*	_	_	_	—	3	*
Coronary care	3	*	_	_	_	_	_	_
Dental	3	*	_	_	_	_	3	*
Hydrotherapy	2	N	2	N	2	N	2	N
Intensive-care nursery	3	*	_	_	_	_	_	_
Intensive care	3	*	_	_	_	_	_	_
Occupational therapy	3	*	3	*	3	*	3	*
Obstetrical unit ²	3	*	_	_	_	_	_	_
Delivery rooms	1	N	_		_	_	_	
Labor rooms, LDRP and LDR	3	N		_	_	_		
Nurseries	3	N	_		—	_		
Physical therapy	3	*	3	*	3	*	3	*
Radiation therapy	3	*		_	_	_	3	*
Speech pathology and audiology	3	Y	3	Y	3	Y	3	Y

Ceilings:

- $1-Continuous\ monolithic\ surface\ equal\ in\ smoothness\ to\ enamel\ plaster.$
- 2 Smooth and easily cleanable without perforations or fissures.
- 3 Pin perforated, fine fissured, or lightly textured.
- 4 Any finish meeting code requirements.

Carpets:

Yes = Y

No = N

* Upon approval by the licensing agency with adequate maintenance procedure. However, should the carpet not be maintained adequately, the licensing agency has the right to have it removed and replaced with another acceptable material.

Footnotes:

- 1. Carpet permitted in mammography.
- 2. Except those rooms specified otherwise.
- 3. For rooms not listed, contact the Office of Statewide Health Planning and Development (OSHPD).
- 4. Table applies to new construction, additions, remodels, and conversions. The patching and replacement of existing materials will be permitted.
- 5. Lay-in ceiling meeting the requirements of Section 1224.4.11.4.1.7 may be substituted in laundry and kitchens.

- open joints or crevices that may retain or permit passage of dirt particles.
- 4. Wall finishes in areas such as clean corridors, central sterile supply spaces, specialized radiographic rooms and minor surgical procedure rooms shall be washable, smooth and able to withstand cleaning with chemicals.
- 5. Wall areas penetrated by pipes, ducts and conduits shall be tightly sealed to minimize entry of rodents and insects. Joints of structural elements shall be similarly sealed.
- 6. Wall finish requirements of Section 1224.4.11.3 do not apply to boiler rooms, mechanical equipment rooms, administration departments, other offices, enclosed stairways, maintenance shops and similar spaces.

1224.4.11.3.1 Dietary and food preparation areas. Dietary and food preparation areas shall comply with the following requirements:

- 1. In dietary and food preparation areas, wall construction, finish, and trim, including the joints between the walls and the floors, shall be free of spaces that can harbor insects and rodents.
- Wall surfaces in wet areas (e.g., kitchens, environmental services closets) shall be monolithic and all seams shall be covered and/or sealed.

1224.4.11.4 Ceilings. Ceilings in areas occupied by patients and the public shall be cleanable with the use of routine housekeeping equipment. Acoustic and lay-in ceiling, where used, shall not create ledges or crevices.

1224.4.11.4.1 Ceiling finishes. Ceiling finishes shall comply with Table 1224.4.11 and the following requirements:

Semirestricted areas:

- Ceiling finishes in semirestricted areas such as airborne infection isolation exam/treatment rooms, surgical corridors, central sterile supply spaces and minor surgical procedure rooms, shall be nonabsorptive, nonperforated, capable of withstanding cleaning with chemicals, and without crevices that can harbor mold and bacterial growth.
- 2. If a lay-in ceiling is provided in semirestricted areas, it shall be gasketed or each ceiling tile shall weigh at least one pound per square foot to prevent the passage of particles from the cavity above the ceiling plane into the semirestricted environment. Perforated, tegular, serrated cut or highly textured tiles are not acceptable.

Restricted areas:

- 3. Ceilings in restricted areas shall be monolithic with no cracks or perforations.
- 4. Ceilings in restricted areas shall be scrubbable and able to withstand cleaning and/ or disinfecting chemicals.

5. All access openings in restricted area ceilings shall be gasketed.

Dietary and laundry areas:

- 6. Provide either a sealed monolithic and scrubbable gypsum board ceiling or a layin ceiling.
- 7. If a lay-in ceiling is provided, it shall include the following:
 - a) A rust-free grid.
 - b) Ceiling tiles that weigh at least one pound per square foot and are smooth, scrubbable, nonabsorptive, nonperforated and able to withstand cleaning with chemicals.
- 8. Ceiling finish requirements of Section 1224.4.11.4.1 do not apply to boiler rooms, mechanical equipment rooms, administration departments, other offices, enclosed stairways, maintenance shops and similar spaces.
- 1224.4.12 Courts. Where one or more walls of a court contain a door or window of one or more patients' bedrooms, the least dimension of the court shall be 20 feet (6096 mm) between facing structures.

1224.4.13 Elevators.

- 1224.4.13.1 Patient. Patient elevators shall have minimum inside platform dimensions of 5 feet by 8 feet (1524 mm by 2438 mm), and a minimum clear door opening of 4 feet 0 inches (1219 mm).
- 1224.4.13.2 Passenger. Passenger elevators shall have minimum inside platform dimensions of 4 feet 8 inches by 7 feet 4 inches (1422 mm by 2236 mm).
- 1224.4.13.3 Patient services. Buildings over one story in height with accommodations or services for patients on floors without grade-level entrance shall provide at least one patient elevator.
- 1224.4.13.4 Low patient capacity. If bed patients are accommodated on one or more floors, other than the main entrance floor or where operating rooms or delivery rooms are above or below the main entrance floor, at least one patient elevator shall be provided.
- 1224.4.13.5 Medium patient capacity. At least one patient elevator and one service elevator shall be provided in hospitals with a capacity of from 60 to 149 beds on floors other than the main entrance floor.
- 1224.4.13.6 High patient capacity. At least one patient elevator, one passenger elevator and one service elevator shall be provided in hospitals with a capacity of 150 or more beds on floors other than the main entrance floor.
- 1224.4.14 Garbage, solid waste and trash storage. Rooms or screening enclosures shall be provided for the washing and cleaning of garbage containers and for the storage of garbage, trash and other solid wastes. Such rooms or screening enclosures shall include the following:
 - A concrete floor with a curb and with a drain connected to the sewer.

- 2. Steam or hot-water and cold-water supply.
- 3. A minimum floor area of ½ square foot (0.046 m²) per bed, but not less than 25 square feet (2.3 m²), the least dimension of which shall be 4 feet (1219 mm).
- 4. A method of limiting access to the material except by authorized persons.

1224.4.15 Housekeeping room. This room shall be a minimum floor area of 15 square feet (1.4 m²). It shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment.

1224.4.16 Laundry and trash chutes. Gravity-type laundry and trash chutes shall have a minimum diameter of 2 feet (610 mm) and shall be designed to prevent distribution of airborne contaminating elements to all floors served.

1224.4.17 Telephone. Each floor accommodating patients shall have a telephone installed for patient use. Such telephones shall be readily accessible to patients who are limited to wheel chairs and stretchers. This may not be required in separate buildings having six or fewer beds which are restricted to occupancy by ambulatory patients.

1224.4.18 Grab bars. Each toilet, bathtub and shower serving patients shall have conveniently placed grab bars that shall comply with Chapter 11B.

Exception: Excluding facilities designed for use by persons with disabilities, grab bars may be deleted from those facilities serving chemical dependency recovery and psychiatric patients.

1224.4.19 Noise control.

1224.19.1 Impact noises. Recreation rooms, exercise rooms, equipment rooms and similar spaces where impact noises may be generated, shall not be located directly over patient bed areas or delivery and operating suites, unless special provisions are made to minimize such noise.

1224.19.2 Noise reduction. The noise reduction criteria shown in Table 1224.4.19 shall apply to partitions, floors, and ceiling construction in patient areas.

1224.5 Communications Systems. Technology and medical communication rooms shall comply with the California Electrical Code, California Mechanical Code, California Plumbing Code and the requirements of this section.

1224.5.1 Telecommunications service entrance room. The telecommunications service entrance room houses the point at which outside carrier data and voice circuits and services enter the facility and outdoor cabling interfaces with the building's internal cabling infrastructure. Each hospital facility shall have at least one telecommunications service entrance room, and each room that is provided shall be dedicated to the telecommunications function with related support facilities and meet the requirements of this section.

1224.5.2 Technology equipment center.

1224.5.2.1 Number. Each hospital shall have at least one technology equipment center space that is not used for any purpose other than electronic data storage, processing, and networking.

TABLE 1224.4.19 SOUND TRANSMISSION LIMITATIONS IN HOSPITALS

NEW CONSTRUCTION	AIRBORNE SOUND TRANSMISSION CLASS (STC) ¹			
	Partitions	Floors		
Patient room to patient room	45	40		
Public space to patient room ³	55	40		
Service areas to patient room ⁴	65	45		
Patient room access corridor ⁵	45	45		
Exam room to exam room	45			
Exam room to public space	45			
Toilet room to public space	45			
Consultation rooms/conference rooms to public space	45			
Consultation rooms/conference rooms to patient rooms	45			
Staff lounges to patient rooms	45			

- 1. Sound Transmission Class (STC) shall be determined by tests in accordance with methods set forth in ASTM 90 and ASTM 413. Where partitions do not extend to the structure above, sound transmission through ceilings and composite STC performance shall be considered.
- 2. Treatment rooms shall be treated the same as patient rooms.
- 3. Public space includes corridors (except patient room access corridors), lobbies, dining rooms, recreation rooms, and similar space.
- 4. Service areas for the purposes of this table include kitchens, elevators, elevator machine rooms, laundries, garages, maintenance rooms, boiler and mechanical equipment rooms, and similar spaces of high noise. Mechanical equipment located on the same floor or above patient rooms, offices, nurses stations, and similar occupied space shall be effectively isolated from the floor.
- Patient room access corridors contain composite walls with doors/ windows and have direct access to patient rooms.
- 6. Renovation projects of existing spaces where the existing function is not changed, are not required to comply with the requirements of Table 1224.5.

1224.5.2.2 Size. The technology equipment center shall be sized to provide space to meet the service requirements for the required equipment.

1224.5.2.3 Location. The technology equipment center shall be located to minimize the risk of water damage, both from internal and external sources. The technology equipment center shall be located above any floodways or flood hazard areas as described in the National Flood Insurance Program.

1224.5.3 Technology distribution room.

1224.5.3.1 Number. There shall be a minimum of one technology distribution room on each floor of the facility.

Exception: For existing facilities not undergoing major renovation, a technology distribution room may serve adjacent floors.

1224.5.3.2 Size.

1. Technology distribution rooms shall be sized based on the area of the floor being served, with minimum clear dimensions as follows:

Area Served in Square Feet (m²)	Minimum Technology Distribution Room Size		
$\leq 8,000 \text{ square feet}$ (740 m^2)	10 feet by 10 feet (3.05 m by 3.05 m)		
$8,001 - 15,000$ square feet (1400 m^2)	10 feet by 12 feet (3.05 m by 3.66 m)		
15,001 – 25,000 square feet (2325 m²)	10 feet by 14 feet (3.05 m by 4.27 m)		
> 25,000 square feet (2325 m²)	12 feet by 14 feet (3.66 m by 4.27 m)		

2. Where ceilings are provided, the minimum clear height shall be 9 feet (2.75 m).

Exception: Existing buildings shall be permitted to have a minimum clear height of 8 feet (2.44 m).

1224.5.3.3 Location. Technology distribution rooms shall be provided throughout the facility as necessary to meet the maximum cable distance requirement for the cabling system specified.

1224.5.4 SPC/NPC compliance. The location of spaces required by this section shall meet the requirements of California Building Code, Section 3416A Compliance Alternatives for Services/Systems and Utilities.

1224.5.5 Access. Access to the spaces required by this section shall be controlled and not require passage through patient-care or sterile space.

1224.5.6 Combining spaces. The combining of the telecommunications service entrance room, technology equipment center and technology distribution room shall be permitted, provided that the requirements for each of the individual spaces are met.

BASIC SERVICES

1224.6 Reserved

1224.7 Reserved

1224.8 Reserved

1224.9 Reserved

1224.10 Reserved

1224.11 Reserved

1224.12 Reserved

1224.13 Reserved

1224.14 NURSING SERVICE SPACE.

1224.14.1 Patient rooms.

1224.14.1.1 Capacity. No patient room shall be designed to accommodate more than four beds.

Exception: Where renovation of existing individual patient rooms is undertaken in facilities built under the 2013, or prior, California Building Code, maximum room capacity shall be no more than the pres-

ent capacity, to a maximum of eight patients per patient room. Placement of beds shall not be more than three deep from the exterior window.

1224.14.1.2 Space requirements. In new construction, patient rooms shall have a minimum of 100 square feet (9.29 m²) of clear floor area per bed in multiple-bed rooms and 120 square feet (11.15 m²) of clear floor area for single-bed rooms. The dimensions and arrangement of rooms shall be such that there is a minimum of 3 feet (914 mm) between the sides and foot of the bed and any wall or any other fixed obstruction. In multiple-bed rooms, a minimum clearance of 3 feet (914 mm) shall be provided between beds and a clearance of 4 feet (1219 mm) shall be available at the foot of each bed to permit the passage of equipment and beds.

Exception: Where renovation of existing patient rooms is undertaken in facilities built under the 2001 or prior California Building Code, patient rooms shall have no less than 80 square feet (7.43 m²) of clear floor area per bed in multiple-bed rooms and 110 square feet. (10.22 m²) of clear floor area in single-bed rooms.

1224.14.1.3 Windows. Each patient room shall have a window in accordance with Section 1224.4.9.

1224.14.1.4 Arrangement. Patient rooms shall not be designed to permit the placement of beds more than three deep from the exterior window, but shall be of such shape and dimensions to allow for the performance of routine functions, including the easy transfer of patients to and from bed to wheelchair or wheeled gurney.

1224.14.1.5 Outside exposure. All patient bedrooms shall have an outside exposure and shall not be below ground level.

1224.14.1.6 Handwashing stations. A handwashing station shall be provided in the patient room. This handwashing station shall be located at or adjacent to the entrance to the patient room with unobstructed access for use by health care personnel and others entering and leaving the room. Water spouts used shall have clearances adequate to avoid contaminating utensils and the contents of carafes, etc. In multiple-bed rooms the handwashing station shall be located outside of the patient's cubicle curtain so that it is immediately accessible to staff. Where renovation of patient rooms is undertaken a handwashing station shall be located in the patient toilet room or patient room.

1224.14.1.7 Toilet room. Each patient shall have access to a toilet room without having to enter the general corridor area. One toilet room shall serve no more than four beds and no more than two patient rooms. The toilet room shall contain a water closet and a lavatory and the door shall swing outward or be double acting. Unless located in a toilet room, bedpan-washing fixtures shall be installed in dedicated rooms, separate from patient care areas.

- 1224.14.1.8 Patient storage. Each patient shall have within his or her room a separate wardrobe, locker, or closet suitable for hanging full-length garments and for storing personal effects.
- 1224.14.1.9 Privacy. A method of assuring visual privacy for each patient shall be maintained in patient rooms and in tub, shower and toilet rooms. Windows or doors within a normal sightline that would permit observation into the room shall be arranged or curtained as necessary for patient privacy. In multiple-bed rooms, visual privacy from casual observation by other patients and visitors shall be provided for each patient. The design for privacy shall not restrict patient access to the entrance, lavatory, or toilet room.
- 1224.14.1.10 Grab bars. Grab bars shall be installed in accordance with Section 1224.4.18.
- **1224.14.1.11 Room identification.** Each patient room shall be labeled with an identification number, letter or combination of the two.
- 1224.14.2 Service areas. Unless otherwise indicated, provision for the services listed below shall be in or immediately accessible to each nursing unit. The size and location of each service area will depend upon the numbers and types of beds served. Identifiable spaces are required for each of the indicated functions. Each service area may be arranged and located to serve more than one nursing unit but, unless noted otherwise, at least one such service area shall be provided on each nursing floor. Where the words "room" or "offices" are used, a separate, enclosed space for the one named function is intended; otherwise, the described area may be specific space in another room or common area.
 - 1224.14.2.1 Administrative center(s) or nurse station(s). Administrative center(s) or nurse station shall be provided in accordance with Section 1224.4.4.2.
 - 1224.14.2.2 Nurse or supervisor office.
 - 1224.14.2.3 Toilet room(s) conveniently located for staff use.
 - 1224.14.2.4 Multipurpose room(s) Multipurpose rooms shall be provided for staff, patients, patients' families for patient conferences, reports, education, training sessions, and consultation. These rooms must be readily accessible to each nursing unit. One such room may serve several nursing units and/or departments.
 - 1224.14.2.5 Examination or treatment room(s). Examination or treatment rooms are optional. If provided, provision shall be made to preserve patient privacy from observation from outside the exam room though an open door.
 - 1224.14.2.6 Clean utility/workroom. Clean utility/workroom shall be provided in accordance with to Section 1224.4.4.6.
 - 1224.14.2.7 Soiled workroom or soiled holding room. Soiled workroom or soiled holding room shall be provided in accordance with Section 1224.4.4.7.

- 1224.14.2.8 Medication station. Medication station shall be provided in accordance with Section 1224.4.4.4.
- 1224.14.2.9 Clean linen storage. Each nursing unit shall contain a designated area for clean linen storage. This may be within the clean utility room or a separate closet.
- 1224.14.2.10 Nourishment area. A nourishment area or room shall be provided in accordance with Section 1224.4.4.5.
- 1224.14.2.11 Ice machine. Each nursing unit shall have equipment to provide ice for treatments and nourishment. Ice making equipment may be in the clean utility room/holding room or at the nourishment station. Ice intended for human consumption shall be from self-dispensing icemakers.
- 1224.14.2.12 Equipment storage room. Appropriate room(s) shall be provided for storage of equipment necessary for patient care. Each unit shall provide not less than 10 square feet (0.93 m²) per patient bed.
- 1224.14.2.13 Gurneys and wheelchairs. Provide a storage room or alcove for gurneys and wheelchairs which shall be a minimum of 15 square feet (1.39 m^2) .
- 1224.14.2.14 Showers and bathtubs. When individual bathing facilities are not provided in patient rooms, there shall be at least one shower and/or bathtub for each 12 beds without such facilities. Each bathtub or shower shall be in an individual room or enclosure that provides privacy for bathing, drying, and dressing.
 - 1224.14.2.14.1 Special bathing facilities. Special bathing facilities, including space for attendant, shall be provided for patients on gurneys, carts, and wheelchairs at the ratio of one per 100 beds or a fraction thereof. The special bathing facility may be located in a nursing unit on a separate floor.
- 1224.14.2.15 Patient toilet room(s). Common patient toilet room(s), in addition to those serving bed areas, shall be located adjacent to multipurpose room(s) and within, or directly accessible to each central bathing facility.
- 1224.14.2.16 Emergency equipment storage. Space shall be provided for emergency equipment that is under direct control of the nursing staff, such as a cardiopulmonary resuscitation (CPR) cart. This space shall be directly accessible from the nursing station, but out of normal traffic.
- 1224.14.2.17 Housekeeping room.
- 1224.14.2.18 Grab bars. Grab bars shall be installed in accordance with Section 1224.4.18.
- 1224.14.3 Airborne infection isolation rooms.
 - 1224.14.3.1 General. Single rooms shall be provided for the isolation of patients with airborne communicable disease at a ratio of one room for each 35 licensed beds, and for each major fraction thereof. At least one airborne infection isolation room shall be provided.

Airborne infection isolation rooms shall be labeled with the words "Airborne Infection Room" on or adjacent to the anteroom side of the door between the isolation room and the anteroom.

Exceptions:

- 1. Acute psychiatric hospitals shall provide airborne infection isolation rooms at the ratio of one room for each 50 beds, or major fraction thereof.
- Airborne infection isolation rooms are not required for chemical dependency recovery services.

1224.14.3.2 Anteroom doors. Airborne infection isolation room(s) shall have self-closing and latching devices on all anteroom doors.

1224.14.3.3 Anteroom. A separate anteroom shall be provided between the airborne infection isolation room and the corridor, which shall constitute the primary entrance to the airborne infection isolation room. This anteroom shall have a handwashing fixture, work counter at least 3 feet (914 mm) long, cabinets and space to gown and to store clean and soiled materials. There shall be a view window from the anteroom to the isolation room and means to allow for airflow from the anteroom into the airborne infection isolation room. Doors shall be aligned to allow large equipment to be wheeled into the airborne infection isolation room unless a secondary door complying with Section 1224.14.3.2 is provided. One anteroom may serve no more than two airborne infection isolation rooms.

1224.14.3.4 Secondary entry. When a secondary entry is provided, the secondary doors shall be provided with locking devices which are readily operable from the room side and which are readily operable by the facility staff on the other side. When key locks are used on isolation rooms, keys shall be located at the nurses' station in a prominent readily accessible location.

1224.14.3.5 Sealed-tight room. Airborne infection isolation room perimeter walls, ceilings, floors, doors, and penetrations shall be sealed tightly to minimize air infiltration from the outside or from other spaces.

1224.14.3.6 Adjoining toilet room. Each isolation room shall have its own directly accessible toilet room with an emergency nurse call system, a lavatory, a shower providing a seat or a space for a shower chair and a toilet equipped with a bedpan flushing attachment with a vacuum breaker.

1224.14.4 Protective environment room(s).

1224.14.4.1 General. Protective environment rooms for the protection of certain immunosuppressed patients may be provided by the facility. Protective environment rooms shall be labeled "Protective Environment Room" on or adjacent to the anteroom side of the door between the isolation room and the anteroom. Protective environment rooms shall contain only one bed. 1224.14.4.2 Anteroom doors. Protective environment room (s) shall have self-closing and latching devices on all anteroom doors.

1224.14.4.3 Anteroom. A separate anteroom shall be provided between the protective environment room and the corridor, hallway or adjoining space which shall constitute the only entrance to the protective environment room. This anteroom shall have a handwashing fixture, work counter at least 3 feet (914 mm) long, cabinets and space to gown and to store clean and soiled materials. There shall be a view window from the anteroom to the protective environment room. There shall be means to allow for airflow from the protective environment room into the anteroom. Anteroom doors shall be aligned so that large equipment can be wheeled into the protective environment room. One anteroom may serve no more than one protective environment room.

Exception: Alternate designs for protective environment rooms, without individual anterooms, may be approved by the enforcement agency when it can be demonstrated that the alternate design meets the requirements of the California Mechanical Code and does not compromise or alter any health or fire protection component, assembly or system.

1224.14.4.4 Adjoining toilet room. Room shall meet the requirements of Section 1224.14.3.6.

1224.14.4.5 Sealed-tight room. Protective environment room perimeter walls, ceiling, floors, doors, and penetrations shall be sealed tightly to minimize air infiltration from the outside or from other spaces.

1224.14.5 Seclusion room(s). If provided, the hospital shall provide one or more single bedrooms for patients needing close supervision for medical and/or psychiatric care. This may be part of the psychiatric unit described in Section 1224.31. If the single bedroom(s) is part of the acute-care nursing unit, the provisions of Section 1224.14.1 shall apply, with the following exceptions: each room shall be for single occupancy; each shall be located to permit staff observation of the entrance, preferably adjacent to the nurses' station; and each shall be designed to minimize the potential for escape, hiding, injury or suicide. If vision panels are used for observation of patients, the arrangement shall insure patient privacy and prevent casual observation by visitors and other patients.

1224.15 SURGICAL SERVICE SPACE.

1224.15.1 General. The surgical service space shall be divided into two designated areas: 1) semi-restricted areas (e.g. storage areas for clean and sterile supplies, sterile processing rooms, scrub stations, and corridors leading to restricted areas of the surgical suite, etc.); and 2) restricted areas (e.g. operating rooms, hybrid operating rooms, sterile procedure rooms, cardiac catheterization labs, etc.) that can be reached only through a semi-restricted area. The surgical service space shall be located and arranged to provide direct support from the

anesthesia/recovery service space with a common door to prevent nonrelated traffic through the surgical service space.

An operating room suite design with a sterile core shall provide for no cross traffic of staff and supplies from the decontaminated/soiled areas to the sterile/clean areas. The use of facilities outside the operating room for soiled/decontaminated processing and clean assembly and sterile processing shall be designed to move the flow of goods and personnel from dirty to clean/sterile without compromising universal precautions or aseptic techniques in either department.

The number of operating rooms and recovery beds, and the sizes of the support areas, shall be based on the expected surgical workload. Hospitals shall maintain at least the number of operating rooms in ratio to licensed bed capacity as follows:

Licensed Bed Capacity	Number of Operating Rooms
Less than 25	One
25 to 99	Two
100 or more	Three

For each additional 100 beds, and for each major fraction thereof, at least one additional operating room shall be maintained, unless approved to the contrary by the Department of Public Health. Required operating rooms are in addition to special operating rooms, cystoscopy rooms and fracture rooms which are provided by the hospital. Beds in a distinct-part skilled nursing service, intermediate care service or psychiatric unit shall be excluded from calculating the number of operating rooms required.

Exception: Surgical service space is not required in a rural general acute care hospital, if the hospital maintains written transfer agreements with one or more general acute care hospitals that provide surgical and anesthesia services. Written transfer agreements shall be approved by the Department of Public Health, Licensing and Certification.

1224.15.2 Surgery.

1224.15.2.1 General operating room(s). Each room shall have a minimum clear floor area of 400 square feet (37.16 m²) with a minimum of 20 feet (6096 mm) clear dimension between fixed cabinets and built-in shelves; and a system for emergency communication with the surgical service space control station. X-ray or imaging viewing capabilities shall be provided.

Exception: Where renovation of existing operating rooms is undertaken in facilities built under the 2001 or prior California Building Code, each operating room shall have a minimum clear floor area of 324 square feet (30.10 m²) with a minimum of 18 feet (5486 mm) clear dimension between fixed cabinets and built-in shelves.

1224.15.2.2 Surgical cystoscopic and other endo-urologic procedures. Each room shall have a minimum clear floor area of 250 square feet (23.23 m²) with a minimum of 15 feet (4572 mm) clear dimension between fixed cabinets and built-in shelves. X-ray viewing and/or other imaging modality capabilities shall be provided

Exception: Where renovation of operating rooms is undertaken in facilities built under the 2001 or prior California Building Code rooms for surgical cystoscopy shall have a minimum clear floor area of 180 square feet (16.72 m²). Cast rooms for open reductions, if provided, shall have a minimum clear floor area of 180 square feet (16.72 m²), no dimension of which shall be less than 11 feet (3353 mm).

1224.15.3 Service areas. Services, except for the enclosed soiled workroom referenced in Section 1224.15.3.7 and the housekeeping room referenced in Section 1224.15.3.12, may be shared with the obstetrical facilities. Service areas, when shared with delivery rooms, shall be designed to avoid the passing of patients or staff between the operating room and the delivery room areas. The following shall be provided in support of the surgical service space:

1224.15.3.1 Control station. Control stations shall be located to permit visual observation of all traffic into the surgical service space.

1224.15.3.2 Supervisor's office or station.

1224.15.3.3 Sub-sterile areas. If provided within the surgery suite, a sub-sterile area(s) shall be equipped with a flash sterilizer, warming cabinet, countertop, and handwashing station. If a sterilizing facility(ies) with high-speed sterilizer(s) or other sterilizing equipment for immediate or emergency use are provided, they shall be directly accessible from the operating room(s) it serves or shall be located inside the clean core if the clean core is directly accessible from the operating room(s). This room shall be accessible without traveling through any operating room. Other facilities for processing and sterilizing reusable instruments, etc., may be located in another hospital department such as central sterile supply.

1224.15.3.4 Medication station. A medication station shall be provided in accordance with Section 1224.4.4.4.

1224.15.3.5 Scrub facilities. Scrub sinks shall be located outside of sterile areas. A minimum of two scrub sinks shall be provided in a surgical unit containing one operating room. Four scrub sinks shall be provided in surgical units containing two operating rooms. One additional scrub sink shall be provided for each additional operating room. Scrub sinks shall have water supply controls not requiring direct contact of the hands for operation.

1224.15.3.6 Clock. A direct-wired or battery-operated clock or other equivalent timing device shall be visible from the scrub-up sinks.

1224.15.3.7 Soiled workroom. An enclosed soiled workroom (or soiled holding room that is part of a

system for the collection and disposal of soiled material) for the exclusive use of the surgical service space shall be provided. The soiled workroom shall contain a flushing-rim clinical sink or equivalent flushing-rim fixture, a handwashing fixture, a work counter, and space for waste receptacles and soiled linen receptacles. Rooms used only for temporary holding of soiled material may omit the flushing-rim clinical sink and work counters. However, if the flushing-rim clinical sink is omitted, other provisions for disposal of liquid waste shall be provided. The room shall not have direct connection with operating rooms. Soiled and clean utility room or holding rooms shall be separated. The soiled workroom shall provide 24 square feet (2.23 m^2) per operating room up to eight operating rooms and shall have a minimum area of 48 square feet (4.46 m²), with no dimension less than 6 feet (1829 mm).

1224.15.3.8 Clean utility room. This room shall not be used for food preparation.

A clean utility room is required when clean materials are assembled within the surgical service space prior to use or following the decontamination cycle. It shall contain a work counter, a handwashing fixture, storage facilities for clean supplies, and a space to package reusable items. The storage for sterile supplies must be separated from this space. If the room is used only for storage and holding as part of a system for distribution of clean supply materials, the work counter and handwashing fixture may be omitted. Soiled and clean utility rooms or holding rooms shall be separated.

1224.15.3.9 Anesthesia workroom. Provide an anesthesia workroom for cleaning, testing and storing anesthesia equipment. This room shall contain work counter(s) and sink(s) and racks for cylinders.

1224.15.3.10 Equipment storage room(s) for equipment and supplies used in surgical service space. Each surgical service space shall provide sufficient storage area to keep its required corridor width free of equipment and supplies, but not less than 150 square feet (13.94 m²) or 50 square feet (4.65 m²) per operating room, whichever is greater.

1224.15.3.11 Staff clothing change areas. Appropriate areas shall be provided for male and female personnel (orderlies, technicians, nurses and doctors) working within the surgical service space. The areas shall contain lockers, showers, toilets, lavatories equipped for handwashing, and space for donning surgical attire. These areas shall be arranged to encourage a one-way traffic pattern so that personnel entering from outside the surgical service space can change and move directly into the surgical service space.

1224.15.3.12 Housekeeping room. Shall be provided for the exclusive use of the surgical service space. It shall be directly accessible from the service space.

1224.16 ANESTHESIA/RECOVERY SERVICE SPACE.

1224.16.1 General. The anesthesia/recovery service space shall provide perioperative support services to the surgical service space as required under this section. Perioperative services shall include preoperative patient care and post-operative recovery with a Post-Anesthesia Care Unit (PACU). The anesthesia/recovery service space shall be located adjacent to the surgical service space with direct access to the surgical suite's semi-restricted corridor.

Exception: In a rural general acute care hospital, when the surgical service space is not provided, the anesthesia service space is not required. The hospital must maintain written transfer agreements with one or more general acute care hospitals that provide surgical and anesthesia services. Written transfer agreements shall be approved by the Department of Public Health, Licensing and Certification.

1224.16.2 Preoperative patient holding area(s). In facilities with two or more operating rooms, area(s) with patient care stations shall be provided to accommodate gurney patients or sitting space for ambulatory patients not requiring gurneys. The preoperative area is an unrestricted area and shall be under the direct visual control of the nursing staff and may be part of the recovery space. If the preoperative patient care area will serve other purposes, such as overflow PACU or holding area, applicable requirements in Section 1224.16.3 PACU shall be met.

1224.16.2.1 Space requirements. Each station shall have a minimum clear floor area of 80 square feet (7.43 m²) and a minimum clearance of 3 feet (914 mm) shall be provided between the sides and foot of patient lounge chairs/gurneys and adjacent walls, partitions or fixed elements.

1224.16.2.2 Patient privacy. Provisions for patient privacy such as cubicle curtains shall be made.

1224.16.2.3 Handwashing stations. Handwashing station(s) shall be provided in the preoperative service area at a ratio of one for each 4 stations, and for each major fraction thereof, in open bay areas. A handwashing station shall be provided in each single care station room.

1224.16.3 Recovery and Post-Anesthetia Care Unit (PACU). The recovery area and Post-Anesthesia Care Unit is an unrestricted area and located such that at least one door to the recovery room shall provide access directly from the surgical service space without crossing unrestricted corridors. A minimum of 1.5, or major fraction thereof, post-anesthesia care stations per operating room shall be provided. If pediatric surgery is provided, pediatric recovery stations shall be provided. They shall be separate from adult stations, and shall include space for family or visitors and be visible from the nurse station.

1224.16.3.1 Space requirements. A minimum of 4 feet (1218 mm) clearance shall be provided between the sides and the foot of patient gurneys, or beds, and adjacent walls or other fixed elements. A minimum clear floor area of 80 square feet (7.43 m²) shall be provided for each station in an open-bay plan. A minimum clear-

ance of 5 feet (1524 mm) shall be provided between patient gurneys or beds, and a minimum of 3 feet (914 mm) clearance shall be provided between the foot of the gurney or bed, to a closed cubicle curtain.

1224.16.3.2 Patient privacy. Provisions for patient privacy such as cubicle curtains shall be made.

1224.16.3.3 Handwashing stations. Handwashing stations shall be provided in the post-anesthesia care unit with at least one for every four patient positions, and for each major fraction thereof, uniformly distributed to provide equal access from each patient station. A handwashing station shall be provided in each single care station room.

1224.16.4 Reserved.

1224.16.5 Support areas for patient care.

1224.16.5.1 Administrative area/nurse station. A nurse station shall be provided in postoperative patient care areas, and shall allow direct observation of the patients and charting facilities. The nurse station shall comply with the requirements of Section 1224.4.4.2.

1224.16.5.2 Clinical sink. A clinical sink shall be provided in postoperative patient care areas with provisions for bedpan cleaning.

1224.16.5.3 Medication station. Each Post-Anesthesia Care Unit shall contain a medication station. The medication station shall comply with the requirements of Section 1224.4.4.4.

1224.16.5.4 Ice-making. Ice-making equipment shall be provided in the perioperative service space. Ice-making equipment is permitted to be located in preoperative or postoperative patient care areas, however, it shall not be located in semi-restricted areas.

1224.16.5.5 Storage. Storage shall be provided for gurneys, supplies and equipment.

1224.16.6 Support areas for staff. Staff toilet rooms shall be immediately accessible to the postoperative patient care area(s) to maintain staff availability to patients.

1224.16.7 Support areas for patients, families, and visitors.

1224.16.7.1 Waiting area. A waiting area, in compliance with Section 1224.4.5, shall be provided.

1224.16.7.2 Patient change area. A changing area shall be provided for outpatient use in perioperative areas in support of surgical suites that provide outpatient procedures. The changing area shall include space for changing or gowning, provisions for storing patients' belongings during the procedure, and access to patient toilet(s).

1224.17 CLINICAL LABORATORY SERVICE SPACE.

1224.17.1 General requirements. All hospitals shall provide space and equipment to perform urinalysis, complete blood counts, hemoglobin blood typing and cross matching. If laboratory facilities for bacteriological, serological, pathological and additional hematological procedures are

not available in the community, then space, equipment and supplies for such procedures shall be provided. The following physical facilities shall be provided:

- 1. Laboratory work space.
- 2. Refrigerated blood storage facilities for transfusions shall be provided. Blood storage refrigerator shall be equipped with temperature-monitoring and alarm signals that are monitored continuously.
- 3. Handwashing fixture.

1224.18 RADIOLOGICAL/DIAGNOSTIC IMAGING SER-VICE SPACE. Space and equipment shall be provided to accommodate all required elements, and any additional imaging modalities included in the service space, as required in this section. If interventional or image-guided procedures are performed in the imaging services area, additional provisions shall be as described in Section 1224.28 Supplemental Surgery and other Special Procedure Services. If nuclear medicine is provided in the imaging services area, spaces shall also comply with the requirements described in Section 1224.34 Nuclear Medicine.

1224.18.1 Minimum requirements. Hospital shall provide a minimum of:

- 1. One fluoroscopy room, which can also provide x-ray examination services.
- 2. Space for processing images.
- 3. A toilet room shall adjoin and be directly accessible to each fluoroscopy room. In addition to the fluoroscopy toilet rooms, common patient toilet room facilities shall be located in the radiological/diagnostic imaging service space.
- 4. An office or other suitable area for viewing and reporting radiographic examination.
- 5. Storage spaces for all image equipment, supplies and copies of reports.
- 6. Handwashing stations located within the unit.
- 7. Dressing room facilities.

1224.18.1.1 Radiation protection. A certified physicist or other qualified expert shall specify the type, location, and amount of radiation protection to be installed in accordance with the final approved department layout and equipment selections. Where protected alcoves with view windows are required, a minimum of 1'-6" (0.45 meter) between the view window and the outside partition edge shall be provided. Radiation protection requirements shall be incorporated into the construction documents and comply with Chapter 31C and the requirements of California Radiation Control Regulations, California Code of Regulations, Title 17, Division 1, Chapter 5, and Subchapter 4.

1224.18.2 Angiography. If provided, diagnostic angiography space shall accommodate the following:

- 1. A control room with a view window to permit full view of the patient.
- 2. A scrub sink located outside the staff entry to the procedure room.

- 3. Patient holding area shall accommodate at least one patient gurney with a minimum of 3-foot (914 mm) clearance on the long side.
- 4. Storage for portable equipment and catheters shall be provided.
- 1224.18.2.1 Interventional angiography procedures. If interventional angiography procedures are to be performed in the angiography room, the suite shall comply with interventional imaging requirements in Section 1224.28.4. If cardiac catheterization procedures are performed refer to Section 1224.28.2.
- 1224.18.3 Computerized tomography (CT) scanning. If provided, CT space shall accommodate the following:
 - 1224.18.3.1 Spaces required. If provided, CT scan spaces shall accommodate the equipment with a minimum of 3 feet (914 mm) on all sides of the equipment, together with the following:
 - 1. A control room shall be provided that is designed to accommodate the computer and other controls for the equipment. A view window shall be provided to permit view of the patient.
 - 2. A patient toilet room convenient to the procedure room.
 - 1224.18.3.2 Intraoperative computerized tomography. If provided, intraoperative CT scanning spaces shall comply with Section 1224.28.5.
- 1224.18.4 Magnetic resonance imaging (MRI). If provided, the MRI room shall accommodate the equipment with a minimum of 3 feet (914 mm) on all sides of the equipment, together with the following:
 - 1. A control room shall be provided with full view of the patient in the MRI scanner. The control console shall be positioned so the operator has a full view of the approach and entrance to the MRI scanner room.
 - 2. An anteroom or area visible from the control room shall be located outside the MRI scanner room so that patients, health care personnel, and other employees must pass through it before entering the scanning area and control room. The room or area shall be outside the restricted areas of the MRI's magnetic field.
 - 3. A computer room shall be provided.
 - 1224.18.4.1 Handwashing station. Handwashing station(s) shall be immediately accessible to the MRI scanner room.
 - 1224.18.4.2 Wall, floor, and ceiling assemblies. Wall, floor, and ceiling assemblies shall accommodate the installation of required radio frequency (RF)-shielded assemblies. All doors, windows, and penetrations into the RF-shielded enclosure shall be RF-shielded. As well as RF shielding, individual sites may also require magnetic shielding on some or all surfaces to contain portions of the magnetic field not contained by the RF shield.
 - 1224.18.4.3 Lighted sign. MRI rooms shall be clearly marked with a red light and lighted sign stating, "The Magnet Is On". This light and sign are to be lighted at

- all times and have a backup energy source to remain illuminated for at least 24 hours in the event of a loss of power.
- 1224.18.4.4 Magnetic field strength identification. Facilities shall use finishes or markings to identify the critical values of the magnetic field surrounding the MRI scanner, including the 5-gauss exclusion zone or other magnetic field strength values that may impair the operation of equipment.
- 1224.18.4.5 Special ventilation requirements. Where superconducting MRI scanners are installed, an insulated cryogen quench exhaust pipe as well as room exhaust and pressure equalization shall be provided to protect occupants in the event of a cryogen breach.
- 1224.18.4.6 Intraoperative magnetic resonance imaging. If provided, the intraoperative magnetic resonance imaging (iMRI) suite shall comply with Section 1224.28.5.
- **1224.18.5** *Ultrasound.* When provided, the ultrasound room shall comply with the following:

1224.18.5.1 Space requirements.

- 1. Area. Rooms used for ultrasound examination/ treatment shall have a minimum clear floor area of 120 square feet (11.15 m²).
- 2. Clearances. A minimum clear dimension of 3 feet (914 mm) shall be provided on three sides of the table/stretcher.
- 1224.18.5.2 Handwashing fixture. A handwashing fixture shall be provided within the procedure room.
- 1224.18.5.3 Patient toilet(s). A patient toilet shall be directly accessible to the ultrasound procedure room. The patient toilet may be permitted to serve more than one ultrasound procedure room.
- **1224.18.6** *Mammography.* When provided, the mammography room shall comply with the following:

1224.18.6.1 Space requirements.

- Area. Mammography rooms shall be a minimum of 100 square feet (9.3 m²).
- 2. Shielded alcove. Each x-ray room shall include a shielded control alcove. For mammography machines with built-in shielding for the operator, omission of the alcove shall be permitted when approved by the certified physicist.
- **1224.18.6.2 Handwashing fixture**. A handwashing fixture shall be provided within the procedure room.
- 1224.18.7 Support spaces. The following spaces are common to the imaging service area and are minimum requirements unless stated otherwise:
 - 1224.18.7.1 Patient's toilet room(s). In service spaces with procedure rooms that do not have dedicated patient toilets, provide a minimum of one patient toilet room within the service space.
 - 1224.18.7.2 Patient dressing areas. Dressing areas shall be provided adjacent to the imaging rooms.

1224.18.7.3 Staff facilities. In service space of three or more procedure rooms, staff toilet room(s) internal to the service space shall be provided.

1224.18.7.4 Film storage (active). If film systems are used, provide the following:

- 1. A room with cabinet or shelves for filing patient film for immediate retrieval shall be provided.
- 2. Storage facilities for unexposed film which shall include protection of film against exposure or damage.

1224.18.7.5 Locked storage. Provision shall be made for locked storage of medications and drugs.

1224.19 PHARMACEUTICAL SERVICE SPACE

1224.19.1 Licensed pharmacy. All hospitals having a licensed capacity of 100 or more beds shall have a pharmacy on the premises licensed by the California Board of Pharmacy.

Note: See General Acute Care Hospitals §70263(a), Article 3, Chapter 1, Division 5, Title 22, California Code of Regulations, for requirements concerning hospitals with fewer than 100 beds. The pharmacy room or service space shall conform to the requirements of § 1751, Article 7, Division 17, Title 16, California Code of Regulations as enforced by the California Board of Pharmacy.

1224.19.1.1 Handwashing fixture. Handwashing fixture(s) shall be provided within each separate room where open medication is handled, or in an anteroom, or immediately outside the room where open medication is handled, still within the pharmaceutical service space.

Exception: ISO Class 5 sterile preparation areas (e.g., chemotherapy and intravenous solutions) and their ISO Class 7 buffer area(s) shall not contain sources of water (sinks) or floor drains. However the anteroom to the buffer area shall have a handwashing fixture regardless of its intended ISO Classification (i.e. Class 7 or Class 8). Reference: U.S. Pharmacopeia (USP) 797 Pharmaceutical Compounding – Sterile Preparations.

1224.19.1.2 Location. Provide for immediate accessibility to staff toilet rooms and lockers.

1224.20 DIETETIC SERVICE SPACE

1224.20.1 General. Food service facilities and equipment shall conform to these standards, the standards of the National Sanitation Foundation and the requirements of the local public health agency.

1224.20.2 Functional elements. On-site conventional food service preparation shall be provided as follows in the size and number appropriate for the type of food service selected:

1224.20.2.1 Location. Patient food preparation areas shall be directly accessible to the entry for food supply deliveries and for the removal of kitchen wastes, interior transportation, storage, etc., without traversing patient or public circulation. Food preparation, service

and storage shall be inaccessible to nondietetic service staff.

1224.20.2.2 Receiving/control stations. Provide an area for the receiving and control of incoming dietary supplies.

1224.20.2.3 Storage.

1. Food storage space shall be readily accessible to the receiving area and shall be located to exclude traffic through the food preparation area to reach them. Storage spaces for bulk, refrigerated, and frozen foods shall be provided. At least one week's (7 days) supply of staple foods and at least two (2) days' supply of frozen, and two (2) days' supply of perishable foods shall be maintained on the premises. Food storage components shall be grouped for convenient access from receiving and to the food preparation areas. All food shall be stored clear of the floor. Lowest shelf shall be not less than 12 inches (305 mm) above the floor or shall be closed in and sealed tight for ease of cleaning.

As a minimum, dietary storage space shall be provided in accordance with the following schedule:

Licensed Bed Capacity Storage Space 1 to 99 beds 2 square feet (0.19 m^2) per bed 100 to 199 beds 200 square feet $(18.58 \text{ m}^2) \text{ plus}$ 1 square foot $0.0929 \, m^2$) per bed in excess of 100 beds 300 square feet 200 beds and over $(27.99 m^2)$, plus ¹/₂ square foot (0.0465 m^2) per bed in excess of 200 beds

Space to allow refrigeration for the storage of frozen and chilled foods shall be provided at a minimum of 2 cubic feet (0.057 m³) of usable space per bed.

- 2. Additional storage space for dietetic service supplies, such as paper products, equipment, tray delivery carts, etc., shall be provided.
- Storage areas and sanitizing facilities for cans, carts and mobile-tray conveyors shall be provided.
- 4. Waste storage and recycling facilities (per local requirements) shall be located in a separate room immediately accessible to the outside for direct pickup or disposal.

1224.20.2.4 Cleaning supplies storage. Provide a separate storage room for the storage of nonfood items such as cleaning supplies that might contaminate edibles.

1224.20.2.5 Food preparation workspaces. Provide workspaces for food preparation, cooking, and baking. These areas shall be as close as possible to the user (i.e. tray assembly and dining). Provide additional spaces for thawing and portioning.

1224.20.2.6 Assembly and distribution. The patient tray assembly area shall be immediately accessible to the food preparation and distribution areas.

1224.20.2.7 Food service carts. A cart distribution system shall be provided with spaces for storage, loading, distribution, receiving, and sanitizing of the food service carts. The cart traffic shall be designed to eliminate any danger of cross-circulation between outgoing food carts and incoming soiled carts, and the cleaning and sanitizing process. Cart circulation shall not be through food preparation areas.

1224.20.2.8 Dining area. Provide dining space(s) for ambulatory patients, staff, and visitors. These spaces shall be separate from the food preparation and distribution areas.

1224.20.2.9 Vending services. If vending devices are used for unscheduled meals, provide a separate room that can be accessed without having to enter the main dining area.

1224.20.2.10 Ware-washing facilities. Ware-washing space shall be provided in a room separate from food preparation and serving areas. It shall be designed to prevent contamination of clean wares with soiled wares through cross-traffic. The clean wares shall be transferred for storage or use in the dining room area without having to pass through food preparation areas.

- 1. Commercial-type ware-washing equipment shall be provided.
- 2. Space shall be provided for receiving, scraping, sorting and stacking soiled tableware separate from food preparation areas.
- 3. Handwashing stations shall be provided in the ware-washing space.

1224.20.2.11 Pot washing facilities. Pot washing shall include multi-compartmented sinks.

1224.20.2.12 Waste storage room. A food waste storage room shall be readily accessible to the food preparation and ware washing areas but not within the food preparation area. It shall have direct access to the hospital's waste collection and disposal facilities.

1224.20.2.13 Handwashing fixtures. Handwashing fixtures shall be located conveniently accessible at locations throughout the unit.

1224.20.2.14 Office space. Office or other space shall be provided for the dietician or dietetic service supervisor.

1224.20.2.15 Toilet room(s) and locker spaces. Toilet rooms shall be provided for the exclusive use of the dietary staff. They shall not open directly into the food preparation areas, but shall be readily accessible to

them. An enclosed, separate locker area shall be provided for dietetic service employee's clothing and personal belongings.

1224.20.2.16 Housekeeping room. A housekeeping room, meeting the requirements of Section 1224.4.15, shall be provided within the dietary department for the exclusive use of the dietary department.

1224.20.3 Outside service. On approval of the Licensing Agency, when food is provided by an outside food service, all applicable licensing and certification requirements shall be met. The facility shall maintain adequate space, equipment and food supplies to accommodate required functional elements listed in Section 1224.20.2, as required to provide patient food service in the event that outside food service is interrupted.

SUPPORT SERVICES

1224.21 ADMINISTRATIVE SPACE.

1224.21.1 Administration. An administration area shall be provided which shall provide for the following functions:

- 1. A lobby with reception and information counter or desk, waiting space, men's and women's public toilet room facilities, telephones and drinking fountain.
- 2. Offices for administrator and admitting.

1224.21.2 Records. Hospitals shall provide a health record service which shall accommodate the following functions:

- 1. Work area for sorting and recording records for either paper or electronic media.
- 2. Storage area for records for either paper or electronic media.

1224.22 CENTRAL STERILE SUPPLY.

1224.22.1 Minimum requirements. A central supply and sterilizing area shall be provided. Rooms and spaces shall accommodate the following services and equipment:

- Soiled work area. A receiving and gross cleaning area which shall contain work space and equipment for cleaning medical and surgical equipment and for disposal of or processing of soiled material.
- 2. Clean work area. A clean work area which shall contain work space and equipment for sterilizing medical and surgical equipment and supplies.
- 3. Sterilizing space.
- 4. **Storage.** Provide storage space for sterile supplies and unsterile supplies.

Exception: Section 1224.22.1 does not apply to hospitals which serve psychiatric or alcoholism patients exclusively.

1224.22.2 All sterilizers and autoclaves which emit steam exhaust shall be vented to the outside of the building. Such vents shall be independent from the plumbing vent system.

Exception: Small instrument sterilizers.

1224.23 STORAGE.

1224.23.1 General storage. Hospitals shall provide general storage space of at least 20 square feet (1.86 m²) per bed in addition to specialized storage spaces. All storage spaces shall be located within the hospital building and readily accessible to the connecting corridor required under Section 1224.4.7.5.

1224.23.2 Specialized storage. Specialized storage spaces shall include the following:

1224.23.2.1 Linen. Provide separate and enclosed facilities for clean and soiled linen in each nursing unit. The clean linen storage space shall have a minimum area of 10 square feet (0.93 m^2) and may be within the clean utility room. The soiled linen collection space shall have an area of no less than 10 square feet (0.93 m^2) , except where linen chutes are provided, and may be within the soiled utility room.

1224.23.2.2 Supply. One supply storage space having a minimum area of 15 square feet (1.39 m^2) shall be provided in each nursing unit. Supply storage may be within the clean utility room used only as part of a system for distributing clean and sterile supplies.

1224.23.2.3 Wheelchairs. A room or space shall be provided in each nursing unit for wheelchairs and gurneys. The wheelchair and gurney space shall have a minimum area of 15 square feet (1.39 m^2) .

1224.23.2.4 Sterile and unsterile supplies shall be stored separately.

1224.23.2.5 Food storage shall be as described in Section 1224.20.

1224.24 MORGUE AND AUTOPSY FACILITIES.

1224.24.1 General acute-care hospitals with a licensed bed capacity of 50 or more beds shall provide a morgue with autopsy facilities.

Exception: This may not be required if it can be demonstrated to the licensing agency that morgue and autopsy facilities are available locally.

1224.24.2 Minimum requirements. The morgue and autopsy space shall have a minimum of 250 square feet (23.23 m^2) of floor area, no dimension of which shall be less than 10 feet (3048 mm), and provide for:

- 1. Handwashing fixture.
- 2. Space for refrigerated compartments if human remains are held unembalmed. Refrigerated rooms and prefabricated body refrigerator temperatures shall not be higher than 45°F (25°C).

1224.25 EMPLOYEE DRESSING ROOMS AND LOCKERS.

1224.25.1 Minimum facilities. Hospitals shall provide the following:

1. Separate dressing rooms for male and female personnel with lockers, lavatory and toilet.

2. Additional dressing rooms for the surgical service and as required within any of the supplemental services

1224.26 HOUSEKEEPING ROOMS. Shall be provided to serve each department and nursing unit, and may be shared by compatible departments, except when specifically required by other sections.

1224.27 LAUNDRY.

1224.27.1 If a laundry is to be provided, the following is required in addition to the laundry room:

- 1. A separate soiled linen receiving, holding and sorting room with handwashing fixture.
- 2. A separate clean linen storage, issuing and holding room.
- 3. Storage for laundry supplies.

1224.27.2 Outside service. If linen is processed off site, the following shall be provided within the hospital:

- 1. Soiled linen holding room.
- 2. Clean linen receiving room.
- 3. Clean linen storage room.

SUPPLEMENTAL SERVICES

1224.28 SUPPLEMENTAL SURGERY AND SPECIAL PROCEDURE SERVICES. When provided, the following supplemental surgery and special procedure services shall meet the requirements below:

1224.28.1 Cardiovascular and other special procedures. When provided, the cardiovascular room shall have a minimum clear floor area of 650 square feet (60.39 m²), with a minimum of 20 feet (6096 mm) clear dimension. Orthopedic surgical and other special procedure rooms shall have a minimum clear floor area of 600 square feet (55.74 m²), with a minimum of 20 feet (6096 mm) clear dimension. When open-heart surgery is performed, an additional room in the restricted area of the surgical service space, that is directly accessible to this operating room, shall be designated as a pump room where extra corporeal pump(s), supplies and accessories are stored and serviced. Appropriate plumbing and electrical connections shall be provided in the cardiovascular, pump, and storage rooms.

1224.28.1.1 Service areas. Shall be provided in accordance with Section 1224.15.3.

Exception: Where renovation work is undertaken in facilities built under the 2001 or prior California Building Code, existing rooms for cardiovascular, and other special procedures may have a minimum clear floor area of 500 square feet (46.45 m²). Orthopedic surgical rooms shall have a minimum clear floor area of 360 square feet (33.44 m²) and a minimum dimension of 18 feet (5486 mm).

1224.28.2 Cardiac catheterization.

1224.28.2.1 Procedure room. A procedure room with a minimum clear floor area of 400 square feet (37.16 m²) for the procedure room in addition to spaces for con-

trol, monitoring and recording equipment, and x-ray power and controls, and a minimum of one scrub sink for each catheterization laboratory. This space does not include the control room.

- 1224.28.2.1.1 Emergency response space. Where electrophysiology studies are performed, dedicated space and equipment for emergency resuscitation and stabilization shall be immediately accessible to the procedure room.
- 1224.28.2.2 Control room. A control room or area shall be provided. A view window permitting full view of the patient from the control console shall be provided.
- 1224.28.2.3 Equipment space. An equipment space or enclosure large enough to contain x-ray transformers, power modules, and associated electronics and electrical gear shall be provided.
- 1224.28.2.4 Scrub facilities. Scrub facilities with hands-free operable controls shall be provided adjacent to the entrance of procedure rooms.
- 1224.28.2.5 Staff clothing change areas. Appropriate areas shall be provided for male and female staff working within the surgical service space. The areas shall contain lockers, showers, toilets, lavatories equipped for handwashing, and space for donning surgical attire. These areas shall be arranged to ensure a traffic pattern so that personnel entering from outside the service space can enter, change their clothing, and move directly into the cardiac catheterization service space. The staff change area may be combined with the surgical staff change area.
- 1224.28.2.6 Patient holding. A patient preparation, holding, and recovery area or room shall be provided and arranged to provide visual observation before and after the procedure. This may occur in a unit outside of the catheterization service space.
- 1224.28.2.7 Clean utility room. A clean utility room shall be provided. If the room is used for preparing patient care items, it shall contain a work counter and handwashing fixture. If the room is used only for storage and holding of clean and sterile supply materials, the work counter and handwashing fixtures shall be permitted to be omitted. The clean utility may be shared with an adjacent surgical unit.
- 1224.28.2.8 Soiled utility room. A soiled utility room shall be provided which shall contain a handwashing fixture and a clinical sink (or equivalent flushing rim fixtures). When the room is used for temporary holding or soiled materials, the clinical sink and handwashing fixture shall be permitted to be omitted. The soiled utility may be shared with an adjacent surgical unit.
- 1224.28.2.9 Housekeeping room. Shall be a minimum floor area of 15 square feet (1.4 m²). It shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment. This may be shared with an adjacent surgical unit.
- 1224.28.3 Freestanding cardiac catheterization laboratory service space. A general acute care hospital refer-

- enced in Health and Safety Code Section 1255 (d)(3)(E) may provide cardiac catheterization laboratory service in a freestanding nonhospital building in conformance with this section and Section 1226.2.2. In addition, the service space shall comply with Section 1224.28.2 and applicable requirements in Section 1224.15.3 that are not covered by this section.
 - 1224.28.3.1 Outpatient support areas. Outpatient support areas shall include outpatient waiting rooms in compliance with Section 1224.4.5. A separate space shall be provided where outpatients change from street clothing and are prepared for a procedure. This space shall include provisions for clothing storage, toilet room(s), sink and an area for clothing change and gowning.
 - 1224.28.3.2 Connection to hospital. The freestanding cardiac catheterization laboratory service space shall be located in the nonhospital building such that the service space has a direct connection to the general acute care hospital providing cardiac surgery by a patient corridor link in compliance with Section 1224.4.7. The corridor link shall have a minimum width of 8 feet (2438 mm) as required under Section 1224.4.7.1. The corridor link shall connect to the hospital corridor system with access to all basic services as required under Section 1224.4.7.5.
 - 1224.28.3.3 Control station. Control station(s) shall be located to permit visual observation of all traffic into the semi-restricted service space from unrestricted corridors and/or passageways.
 - 1224.28.3.4 Essential electrical system. Cardiac catheterization laboratories shall meet the provisions for ambulatory surgical clinics required in the California Electrical Code including the requirements of Article 517.45 for an essential electrical system.
 - 1224.28.3.5 Services/systems and utilities. Services/
 systems and utilities that support the catheterization
 laboratory space include, but are not limited to: normal power; emergency power; nurse call; communication and data systems; space heating systems; cooling
 systems; domestic hot and cold water systems; building
 drain and sewer systems; and medical gas systems.
 When these systems serve other portions of the building, any alteration to the system shall be subject to
 review by the Office of Statewide Health Planning and
 Development.
- 1224.28.4 Interventional imaging. Image-guided interventional procedures shall be performed in procedure rooms in compliance with this section. Cardiac catheterization operating rooms shall be in compliance with Section 1224.28.2, and hybrid operating rooms shall be in compliance with Section 1224.28.5.
 - 1224.28.4.1 Space requirements. The procedure room shall meet the space, clearance, and storage requirements for the imaging equipment contained in the room and the following:
 - 1. A minimum clear dimension of 18 feet (5486 mm).

- 2. The procedure room shall also be sized to allow a minimum clearance of 4 feet (1219 mm) on all sides of the procedure table.
- 1224.28.4.2 Pre-procedure and recovery. Pre-procedure and recovery areas shall be immediately accessible to procedure rooms and separate from corridors. The pre-procedure and recovery areas shall comply with the requirements of Section 1224.16 Anesthesia/recovery Service Space.
- 1224.28.4.3 Interventional MRI facilities. Interventional and intraoperative magnetic resonance imaging (I-MRI) procedure rooms shall comply with Section 1224.28.5 Hybrid Operating Rooms.
- **1224.28.4.4 Control room or area.** A control room or area shall be provided.
 - 1. The control room or area shall be sized to accommodate the image-recording and viewing equipment.
 - 2. A shielded view window permitting direct observation of the patient from the control console shall be provided.
 - 3. The shielded control room shall be configured to prevent radiation exposure into occupied areas of the control room when ionizing radiation modalities are used.
 - 4. Where the procedure room requires positive (or negative) pressure, a door shall be provided between the control room and the procedure room or between the combined control room/procedure room and other adjacent space.
 - 5. Where control functions for ionizing radiation exposures take place in the procedure room, storage for personal radiation protection devices shall be provided.
- 1224.28.4.5 Scrub facilities. Scrub sinks shall be located outside of sterile areas. A minimum of one scrub sink station shall be provided for each interventional imaging procedure room. Scrub sinks shall have water supply controls not requiring direct contact of the hands for operation.
- **1224.28.4.6 Medication station.** A medication station shall be provided in compliance with the requirements in Section 1224.4.4.4.
- 1224.28.4.7 Reading room. A reading room for reviewing images shall be available for use by the interventional imaging suite.
- 1224.28.4.8 Electrical equipment room. Electronic equipment or enclosures large enough to contain x-ray transformers, power modules, and associated electronics and electrical gear shall be provided. Sharing of electronics equipment rooms by multiple procedure rooms is permitted.
- **1224.28.4.9 Clean utility room.** A clean utility room shall be provided in accordance with the requirements in Section 1224.4.4.6.

- 1224.28.4.10 Soiled workroom. A soiled workroom shall be provided in accordance with Section 1224.4.4.7.
- 1224.28.4.11 Housekeeping room. A housekeeping room shall be provided in accordance with the requirements of Section 1224.4.15.
- 1224.28.4.12 Staff changing areas. Staff changing areas shall be provided and arranged to ensure a traffic pattern so that personnel can enter from outside the suite, change their clothing, and move directly into the semi-restricted corridor within the interventional imaging suite.
- 1224.28.5 Hybrid operating room(s). Hybrid operating rooms shall comply with the requirements of Section 1224.15 and comply with the requirements in this section.
 - 1224.28.5.1 Space requirements. Each hybrid operating room shall meet the space, clearance, and storage requirements for the imaging equipment contained in the room and the following:
 - 1. A minimum clear floor area of 650 square feet (60.39 m²) is required for a hybrid operating room unless the imaging equipment requires a larger area.
 - 2. The minimum clear dimension shall be 24 feet (7315 mm) unless the requirements for the specific imaging equipment require a greater distance.
 - 3. If mobile storage units are used in lieu of fixed cabinets, the minimum clear dimension shall be available between such units when they are parked against a permanent partition.
 - 1224.28.5.2 Control room. If required, a control room shall be provided that accommodates the imaging system control equipment and the following requirements:
 - 1. The control room shall have a minimum clear floor area of 120 square feet (11.15 m²), which may include fixed work surfaces.
 - 2. The room shall be physically separated from the hybrid operating rooms with walls and a door.
 - 3. The room shall have viewing windows that provide for a full view of the patient and the surgical team.
 - 4. If the control room is adjacent to a restricted area, it must be physically separated from the restricted area with walls and a door.
 - 1224.28.5.3 Imaging equipment room. An imaging equipment room shall be provided for each hybrid operating room.
 - **1224.28.5.4 Radiation protection.** If the imaging equipment emits ionizing radiation, protection shall be provided in accordance with Section 1224.18.1.1.
 - 1224.28.5.5 Requirements for specific types of hybrid operating rooms.

1224.28.5.5.1 CT. Hybrid operating rooms with intraoperative computerized tomography (CT) systems shall have control rooms that comply with Section 1224.18.3.1.

1224.28.5.5.2 iMRI. Hybrid operating rooms with intraoperative magnetic resonance imaging (iMRI) systems shall comply with the following:

- 1. Space and configuration requirements in Section 1224.18.4, except the clearances shall meet the requirements of 1224.28.5.1.
- 2. The control room shall comply with Section 1224.18.4, Item 1.
- 3. The anteroom shall comply with Section 1224.18.4.2.
- 4. Entry doors to iMRI hybrid rooms shall swing outward from inside the room.

1224.28.5.5.3 Vascular imaging. Hybrid operating rooms with vascular imaging systems shall comply with Section 1224.28.4.4.

1224.28.5.6 Pre-procedure and recovery. Pre-procedure and recovery areas shall be immediately accessible to procedure rooms and separate from corridors. The pre-procedure and recovery areas shall comply with the requirements of Section 1224.16 (Anesthesia/recovery Service Space).

1224.28.6 Electroconvulsive Therapy. If electroconvulsive therapy (ECT) is provided, the requirements of this section shall be met. Where a psychiatric unit is part of a general acute care hospital (Section 1224.31 Psychiatric Nursing Unit), all the requirements in this section shall be permitted to be accommodated in a procedure suite that complies with the requirements in this section or in an operating room in a surgical suite that meets the requirements in Section 1224.15.

1224.28.6.1 General. The ECT procedure area may be a single procedure room or a suite of procedure rooms.

1224.28.6.2 ECT procedure room.

- 1. Space requirements. Each ECT procedure room shall have a minimum clear floor area of 200 square feet (18.6 m²) with a minimum clear dimension of 14 feet (4267 mm)
- 2. Handwashing station. A handwashing station shall be provided.
- 3. Documentation area. Accommodation for written or electronic documentation shall be provided.

1224.28.6.3 Pre-procedure and recovery area. When ECT services have a low-volume of procedures, the ECT procedure room may be used for pre-procedure patient care and recovery. If a pre-procedure and recovery areas are provided they shall comply with the requirements of Section 1224.16.

1224.28.6.4 Emergency equipment storage. Space shall be provided in the procedure room(s) for storage of emergency equipment such as a CPR cart. A sepa-

rate emergency equipment storage is permitted to serve more than one ECT procedure room.

1224.28.6.5 Patient support areas. A waiting area and changing area shall be provided for outpatient use in perioperative areas in support ECT suites that provide outpatient procedures. The waiting room shall comply with Section 1224.4.5. The changing area shall include space for changing or gowning, provisions for storing patients' belongings during the procedure, and access to patient toilet(s).

1224.29 INTENSIVE CARE UNITS.

1224.29.1 General. The following shall apply to all types of intensive care service spaces, acute respiratory-care service spaces, burn center spaces, critical-care units, coronary-care service spaces, pediatric intensive-care service spaces unless otherwise noted. Each unit shall comply with the following provisions:

1224.29.1.1 Service space. Each intensive-care unit shall contain not less than four or more than 12 beds.

Exception: When approved by the licensing agency a small or rural hospital intensive care unit may consist of less than four but not less than two patient beds.

1224.29.1.2 Patient space. In new construction, each patient space (whether separate rooms, cubicles, or multiple bed space) shall have a minimum of 200 square feet (18.58 m²) of clear floor area with a minimum headwall width of 13 feet (3962 mm) per bed. There shall be a minimum clear dimension of 1 foot (305 mm) clear space from the head of the bed to the wall, a minimum of 5 feet (1524 mm) clear space from the foot of the bed to the wall, a minimum of 5 feet (1524 mm) clear space on one side of each bed for patient transfer, a minimum of 4 feet (1218 mm) clear width on the non-transfer side, and a minimum of 8 feet (2438 mm) clear space between beds.

Exception: Where renovation of existing intensive care units is undertaken, in facilities approved under the 2001 or prior California Building Code, existing patient space (whether separate rooms, cubicles, or multiple bed space) may be renovated or replaced in kind one for one in the renovated space. Such patient space shall have no less than 132 square feet (12.26 m²) with no dimension less than 11 feet (3353 mm), and with 4 feet (1219 mm) of clearance at each side and the foot of the bed, and with a minimum of 8 feet (2438 mm) between beds. The space shall be designed so that all beds shall be placed in relation to the nurse's station or work area to permit, enable or allow maximum observance of patients.

1224.29.1.3 Private rooms. When private rooms or cubicles are provided, view panels to the corridor shall be required with a means to provide visual privacy. Where only one door is provided to a bed space, it shall be at least 4 feet (1219 mm) wide and arranged to minimize interference with movement of beds and large

<

equipment. Sliding doors shall not have floor tracks. Where sliding doors are used for access to cubicles within a service space, a 3-foot-wide (914 mm) swinging door may also be provided for personnel communication.

- 1224.29.1.4 Modular toilet. Modular toilet/sink combination units located within a privacy curtain may be used within each patient space or private room. The toilet fixture shall be completely contained within cabinetry when not in use. This fixture shall not be equipped with a bedpan washing attachment. Exhaust ventilation requirements shall comply with the California Mechanical Code.
- 1224.29.1.5 Visitors and visual privacy. Each patient bed area shall have space at each bedside for visitors, and provisions for visual privacy from casual observation by other patients and visitors. For both adult and pediatric units, there shall be a minimum of 8 feet (2438 mm) between beds.
- 1224.29.1.6 Outside environment. Each patient bed shall have visual access, other than clerestory windows and skylights, to the outside environment with not less than one outside window in each patient bed area.
 - 1224.29.1.6.1 Distance. The distance from the patient bed to the outside window shall not exceed 50 feet (15 240 mm). When partitioned cubicles are used, patients' view to outside windows may be through no more than two separate clear vision panels.
- 1224.29.1.7 Handwashing stations. Handwashing stations shall be directly accessible to nurse stations and patient bed areas. There shall be at least one handwashing station for every three beds in open plan areas, and one in each patient room. The handwashing station shall be located near the entrance to the patient cubicle or room.
- 1224.29.1.8 Administrative center or nurse station. This area shall have space for counters and storage. It may be combined with or include centers for reception and communication.
- 1224.29.1.9 Nurses' work area. There shall be direct visual observation between either a centralized or distributed nurse station or work station and the heads of all patient beds in the intensive care unit.
- 1224.29.1.10 Monitoring. Each unit shall contain equipment for continuous monitoring. Monitors shall be located to permit easy viewing but not interfere with access to the patient.
- 1224.29.1.11 Emergency equipment storage. Space that is easily accessible to the staff shall be provided for emergency equipment such as a CPR cart.
- 1224.29.1.12 Medication station. A medication station shall be provided in accordance with Section 1224.4.4.4.
- 1224.29.1.13 Airborne infection isolation room. At least one airborne infection isolation room shall be

provided per unit. The room shall comply with the requirements of Section 1224.14.3; however, the adjoining toilet room is not required. Modular toilet units located within a privacy curtain may be used within the airborne infection isolation room. The modular toilet fixture shall comply with Section 1224.29.1.4.

Exception: When approved by the licensing agency an airborne infection isolation room is not required for small or rural hospitals.

- 1224.29.1.14 Additional service spaces. The following additional service spaces shall be immediately accessible within each intensive care service space. These may be shared by more than one intensive care unit provided that direct access is available from each.
 - 1224.29.1.14.1 Clean utility/workroom. Clean utility/workroom shall be provided in accordance with Section 1224.4.4.6.
 - 1224.29.1.14.2 Clean linen storage. There shall be a designated area for clean linen storage. This may be within the clean utility room or a separate closet.
 - 1224.29.1.14.3 Soiled utility/workroom. Soiled workroom or soiled holding room shall be provided in accordance with Section 1224.4.4.7.
 - **1224.29.1.14.4** *Nourishment area.* A nourishment area or room shall be provided in accordance with Section 1224.4.4.5.
 - 1224.29.1.14.5 Ice machine. Each unit shall have equipment to provide ice for treatments and nourishment. Ice-making equipment may be in the clean utility room or at the nourishment station. Ice intended for human consumption shall be from self-dispensing icemakers.
 - 1224.29.1.14.6 Equipment storage room. Appropriate room(s) shall be provided for storage of large items of equipment necessary for patient care. Each intensive care unit shall provide not less than 20 square feet (1.86 m^2) per patient bed.

1224.29.1.15 Support. The following shall be provided and shall be located immediately accessible to the unit:

- 1. Visitors' waiting room.
- 2. Office space.
- 3. Staff lounge(s) and toilet room(s).
- 4. Multipurpose room(s). Provide for staff, patients, and patients' families for patient conferences, reports, education, training sessions, and consultation.
- 5. **Housekeeping room.** Provide within or immediately adjacent to the intensive care unit. It shall not be shared with other nursing units or departments.
- 6. Gurney and wheelchair storage. Provide a minimum 15 square feet (1.39 mm) per each nursing unit
- 1224.29.2 Newborn intensive care units (NICU). The NICU shall comply with all the requirements of Section

11

>

1224.29.1. Additionally each NICU shall include or comply with the following:

- 1224.29.2.1 Entrance. The NICU shall have a clearly identified entrance and reception area for families. The area shall permit visual observation and contact with all traffic entering the unit.
- 1224.29.2.2 Handwashing fixture(s). Provide one handwashing fixture for each four infants and for each major fraction thereof. In a multiple-bed room, every bed position shall be within 20 feet (6096 mm) of a handwashing fixture. Where an individual room concept is used, a handwashing fixture shall be provided within each infant care room.
- 1224.29.2.3 Doors. At least one door to each patient room shall be a minimum of 44 inches (1118 mm) wide.
- 1224.29.2.4 View windows. When viewing windows are provided, provision shall be made to control casual viewing of infants. Controls shall be provided to enable lighting to be adjusted over individual patient care spaces. Darkening sufficient for transillumination shall be available when necessary.
- 1224.29.2.5 Control station. A central area shall serve as a control station, and shall have space for counters and storage, and direct access to a handwashing station. It may be combined with or include centers for reception, communication and patient monitoring.
- 1224.29.2.6 Area. Each patient care space shall contain a minimum of 120 square feet (11.15 m²) of clear floor area per bassinet excluding handwashing fixtures and aisles. There shall be an aisle for circulation adjacent to each patient care space with a minimum width of 4 feet (1219 mm).
 - Exception: Where renovation of existing NICUs is undertaken in facilities built under the 2001 or prior California Building Code, patient care areas shall have no less than 80 square feet (7.43 m²) of clear floor area per bassinet exclusive of space for nurse control, scrubbing and gowning, and reception area.
- **1224.29.2.7** *Ceilings. Ceilings shall have a noise reduction coefficient (NRC) of at least 0.90.*
- 1224.29.2.8 Airborne infection isolation room. Shall comply with the requirements of Section 1224.29.1.13 except for separate toilet, bathtubs or shower. The room shall be enclosed and separated from the nursery unit with provisions for observation of the infant from adjacent nurseries or control area(s).
- 1224.29.2.9 Lactation. Space shall be provided for lactation support and consultation in or immediately adjacent to the NICU.

1224.29.2.10 Infant formula facilities.

1224.29.2.10.1 Location.

1. Where infant formula is prepared on site, direct access from the formula preparation room to any infant care room is prohibited.

- 2. The formula preparation room shall be located in or adjacent to the NICU. The formula preparation room may be located at another location as approved by the Licensing Agency.
- 1224.29.2.10.2 Formula preparation room. The formula preparation room shall include the following:
 - 1. A separate cleanup area for washing and sanitizing. This area shall include a handwashing station, facilities for bottle washing and a work counter.
 - 2. A separate room for preparing infant formula. This room shall contain a refrigerator, work counter, formula sterilizer, storage facilities and a handwashing station.
- 1224.29.2.10.3 Refrigerated storage and warming facilities for infant formula. Shall be accessible for use by NICU personnel at all times.
- 1224.29.2.10.4 Commercial infant formula. Where a commercial infant formula is used, omission of the separate cleanup and preparation rooms shall be permitted, and storage and handling in the NICU workroom or another appropriate room that is readily accessible at all hours shall be permitted. The preparation area shall have the following:
 - 1. A work counter
 - 2. A hand-washing station
 - 3. Storage facilities
- 1224.29.2.11 Emergency equipment storage. Space shall be provided for emergency equipment that is under direct control of the nursing staff, such as a CPR cart.
- 1224.29.2.12 Housekeeping room. Shall be directly accessible from the unit and be dedicated for the exclusive use of the neonatal intensive care unit.
- 1224.29.2.13 Daylight. In addition to meeting the requirements in Section 1224.4.9, at least one source of daylight shall be visible from newborn care areas.
 - 1. External windows in infant care rooms shall be glazed with insulating glass to minimize heat gain or loss.
 - 2. External windows in infant care rooms shall be situated at least 2 feet (610 mm) away from any part of a baby's bed to minimize radiant heat loss from the baby.
 - 3. All external windows shall be equipped with easily cleaned shading devices that are neutral color or opaque to minimize color distortion from transmitted light.
- 1224.30 PEDIATRIC AND ADOLESCENT UNIT. A pediatric nursing unit shall be provided if the hospital has eight or more licensed pediatric beds. The unit shall meet the following standards:
 - 1224.30.1 Patient rooms. Each patient room shall meet the following standards:
 - 1224.30.1.1 Beds. The space requirements for pediatric patient beds shall be the same as required by Section 1224.14.1.2.

- 1224.30.1.2 Windows. Each patient room shall have a window in accordance with Section 1224.4.9.
- 1224.30.2 Examination or treatment rooms. This room shall be provided for pediatric and adolescent patients. A separate area for infant examination and treatment may be provided within the pediatric nursery workroom.
- 1224.30.3 Service areas. The service areas in the pediatric and adolescent nursing units shall conform to Section 1224.14.2 and shall also provide the following:
 - 1224.30.3.1 Play area. A play area shall be provided.
 - 1224.30.3.2 Infant formula. Space for preparation and storage of infant formula shall be provided immediately accessible to the unit.
 - 1224.30.3.3 Toilet rooms. Patient toilet room(s) with a lavatory in each room, in addition to those serving bed areas, shall be located adjacent to play area(s) and in or directly accessible to each central bathing facility.
 - **1224.30.3.4 Storage.** Closets or cabinets for toys, educational, and recreational equipment shall be provided.
 - 1224.30.3.5 Airborne infection isolation room. At least one airborne infection isolation room shall be provided within each pediatric unit; minimum of one per 15 beds. Airborne infection isolation room(s) shall comply with the requirements of Section 1224.14.3.
 - **1224.30.3.6 Clean and soiled workrooms.** Separate clean and soiled workrooms or holding rooms shall be provided as described in Sections 1224.14.2.6 and 1224.14.2.7.

1224.31 PSYCHIATRIC NURSING UNIT.

- **1224.31.1 Psychiatric unit space.** A psychiatric unit shall be housed in a separate and distinct nursing unit and shall provide the following:
 - 1224.31.1.1 General. A psychiatric nursing unit shall meet the requirements of Section 1224.14 or 1228.14, in addition to the requirements of Section 1228.4, based on the functional program. Specific application shall respond to the patient injury and suicide prevention component of the Patient Safety Risk Assessment prepared under California Administrative Code (Part 1 of Title 24) Section 7-119. If a unit provides acute medical care, the unit shall comply with Section 1224.14 and be located in a building rated SPC 3 or higher.
 - 1224.31.1.2 Windows. Windows modified to prevent patients from leaving the unit.
 - 1224.31.1.3 Access control. Entrances and exits which may be locked if necessary.
 - **1224.31.1.4 Seclusion room(s).** Seclusion rooms shall be provided and comply with Section 1224.4.4.1.4.
 - 1224.31.1.5 Consultation room(s). Used for interviewing patients.
 - **1224.31.1.6 Dining and recreation.** Provide spaces for dining and recreation. The total area for these purposes shall be not less than 30 square feet (2.8 m²) per patient.

- 1224.31.1.7 Storage. Storage closets or cabinets for recreational and occupation therapy equipment.
- 1224.31.1.8 Exam or treatment room. A room for physical examinations and medical treatment.
- 1224.31.1.9 Activity spaces. Indoor and outdoor space for therapeutic activities.
- **1224.31.1.10 Occupational therapy.** Facilities for occupational therapy shall comply with Section 1224.35.3.
- **1224.31.1.11 Recreation.** A recreation room with a minimum of 100 square feet (9.3 m²) in each building, and on each floor of a building accommodating six or more psychiatric patients.
- **1224.31.1.12 Nurse call.** Refer to Section 1224.4.6.5.
- 1224.31.1.13 Privacy. Visual privacy in multibed rooms (e.g., cubicle curtains) is not required.
- 1224.31.1.14 Tamper resistant. The ceiling and the air distribution devices, lighting fixtures, sprinkler heads, and other appurtenances shall be of a tamper-resistant type.
- 1224.31.1.15 Toilet rooms. Each patient room shall be provided with a private toilet room that meets the following requirements:
 - 1. The door shall not be lockable from within.
 - 2. The door shall be capable of swinging outward.
 - 3. The ceiling shall be of tamper-resistant construction and the air distribution devices, lighting fixtures, sprinkler heads, and other appurtenances shall be of the tamper-resistant type.
- 1224.31.1.16 Handwashing fixtures. Handwashing fixtures located in patient rooms and patient toilet rooms may include anti-ligature features that do not compromise compliance with the hot and cold water supply controls, laminar flow, and sink requirements of Section 210.0 and Table 4-2 of the California Plumbing Code. Handwashing fixtures within patient rooms and patient toilet rooms in psychiatric nursing units are not required to be equipped with gooseneck spouts and the discharge point may be less than 5 inches (127 mm) above the fixture rim.
- 1224.31.2 Education. If a unit treats children of school age over a period of one month or more, it shall provide physical facilities for an educational program, such as classrooms and an office for the teacher.
- 1224.31.3 Service areas. The standards noted in Section 1224.14.2 shall apply to service areas for psychiatric nursing units.
- 1224.32 OBSTETRICAL FACILITIES (PERINATAL UNIT SPACE)
 - 1224.32.1 General. The obstetrical facility, including cesarean operating room(s) and delivery room(s), shall be located and designed to prohibit nonrelated traffic through the unit.
 - 1224.32.2 Antepartum and postpartum unit
 - **1224.32.2.1 Patient bedrooms.** Antepartum and post-partum bedrooms shall comply with Section 1224.14.1.

1224.32.2.2 Service areas. Shall be provided in accordance with Section 1224.14.2 with the following additions:

- 1. Staff lounge.
- 2. Staff storage. Lockable closets or cabinets for personal articles of staff.
- *3. Consultation/conference room(s).*
- 1224.32.3 Cesarean delivery and delivery service space. When cesarean operating rooms are located in the obstetrical suite, access and service arrangements shall be such that neither staff nor patients are required to travel through the cesarean delivery area to access other services.
 - 1224.32.3.1 Cesarean delivery suite. A minimum of one cesarean operating room shall be provided in the obstetrical unit, unless a surgical operating room is designated specifically for cesarean delivery procedures. The cesarean delivery suite shall include the following:
 - 1224.32.3.1.1 Cesarean operating room(s). Provide a minimum clear floor area of 360 square feet (33.45 m²) with a minimum dimension of 16 feet (4877 mm). There shall be a minimum of one such room.
 - **1224.32.3.1.2 Scrub facilities**. Scrub sinks shall be located outside of sterile areas and meet the requirements of Section 1224.32.3.8.2.4.
 - 1224.32.3.1.3 Control/nurse station. A control station shall be provided in accordance with Section 1224.15.3.1 and shall be located to restrict unauthorized traffic into the suite.
 - 1224.32.3.1.4 Soiled workroom. A soiled workroom shall be provided in accordance with Section 1224.15.3.7.
 - **1224.32.3.1.5 Housekeeping.** A housekeeping room shall be provided for the use of the cesarean delivery suite.
 - 1224.32.3.1.6 Perioperative support services. Preoperative patient holding and post-anesthesia recovery shall be provided in accordance with Section 1224.16. Post-anesthesia care shall provide direct access to the cesarean surgical service space without crossing unrestricted corridors.
 - 1224.32.3.2 Delivery room(s). At least one delivery room shall be provided in the obstetrical unit. Delivery rooms shall have a minimum clear floor area of 300 square feet (27.87 m²). An emergency communication system shall be connected with the obstetrical facilities control station.
 - 1224.32.3.2.1 Postpartum bed ratio. Delivery rooms, which are used for no other purpose, shall be provided at the ratio of one per 12 postpartum beds and for each major fraction thereof.

Exceptions:

1. If LDR or LDRP beds are provided, each LDR or LDRP may be counted as a delivery room in the postpartum bed ratio.

2. When approved by the licensing agency, the operating room of small or rural hospitals with a licensed bed capacity of 50 or less may serve as the delivery room.

1224.32.3.3 Clocks. Shall be provided as follows:

- 1. A direct-wired or battery-operated clock with sweep second hand and lapsed time indicators in each cesarean operating and delivery room.
- 2. A direct-wired or battery-operated clock or other equivalent timing device, visible from the scrubup sinks.
- 1224.32.3.4 Surgical lights. Provide a surgical light in each cesarean operating or delivery room.
- 1224.32.3.5 Infant resuscitation. Provide within cesarean operating rooms and delivery rooms a minimum clear floor area of 80 square feet (7.43 m²) in addition to the required area of each room or may be provided in a separate but immediately accessible room with a clear floor area of 150 square feet (13.94 m²). Six single or three duplex electrical outlets shall be provided for the infant in addition to the facilities required for the mother.
- 1224.32.3.6 Labor room(s) (LDR or LDRP rooms may be substituted). Where LDRs or LDRPs are not provided, a minimum of two labor beds shall be provided for each cesarean operating room. Each room shall be designed for either one or two beds with a minimum clear floor area of 120 square feet (11.15 m²) per bed. Each labor room shall contain a handwashing fixture and have access to a toilet room. One toilet room may serve two labor rooms, Labor rooms shall have controlled access with doors that are arranged for observation from a nursing station. At least one shower (which may be separate from the labor room if under staff control) for use of patients in labor shall be provided. Windows in labor rooms, if provided, shall be located, draped, or otherwise arranged, to preserve patient privacy from casual observation from outside the labor room.
 - **Exception:** Where renovation of labor rooms is undertaken in facilities built under the 2001 or prior California Building Code, existing labor rooms shall have a minimum clear floor area of 100 square feet (9.29 m²) per bed.
- 1224.32.3.7 Recovery room(s) (LDR or LDRP rooms may be substituted). Each recovery room shall contain at least two beds and have a nurse station, with charting facilities, located to permit visual observation of all beds. Each room shall include a handwashing station and a medication station. A clinical sink with bedpan flushing device shall be directly accessible, as shall storage for supplies and equipment. Provide visual privacy of the new family.
- 1224.32.3.8 Service areas. Individual rooms shall be provided as indicated in the following standards; otherwise, alcoves or other open spaces that do not interfere with traffic may be used.

1224.32.3.8.1 Services. The following services shall be provided:

- Control/nurse station. This shall be located to restrict unauthorized traffic into the service space.
- 2. Soiled workroom or soiled holding room. See Section 1224.4.4.7.
- 3. Fluid waste disposal.

1224.32.3.8.2 Shared services. The following services shall be provided and may be shared with the surgical facilities. Where shared, areas shall be arranged to avoid direct traffic between the delivery and operating rooms

1224.32.3.8.2.1 Supervisor's office or station. Office or station shall be a minimum of 80 square feet (7.43 m^2) and have a desk.

1224.32.3.8.2.2 Waiting room. This room shall have toilet rooms, telephone(s) and drinking fountains that are immediately accessible. The toilet rooms shall contain a lavatory.

1224.32.3.8.2.3 Drug distribution station. Shall have a handwashing fixture and provisions for controlled storage, preparation and distribution of medication.

1224.32.3.8.2.4 Scrub facilities for cesarean operating or delivery rooms(s). Two positions shall be provided adjacent to entrance to the first cesarean operating room. Provide one additional scrub sink per cesarean or delivery operating room. Scrub facilities shall be arranged to minimize any splatter on nearby personnel or supply carts. In new construction, provide view windows at scrub stations to permit the observation of room interiors.

1224.32.3.8.2.5 Clean utility room. A clean utility room shall be provided if clean materials are assembled within the obstetrical service space prior to use. If a clean utility room is provided see Section 1224.4.4.6.

1224.32.3.8.2.6 Storage.

- 1. Clean sterile storage area readily accessible to the delivery room.
- 2. Equipment storage room(s) for equipment and supplies used in the obstetrical service space.

1224.32.3.8.2.7 Workroom. An anesthesia workroom for cleaning, testing and storing anesthesia equipment. It shall contain a work counter, sink, and provisions for separation of clean and soiled items.

1224.32.3.8.2.8 Male and female staff clothing change areas. The clothing change area shall be designed to encourage one-way traffic and eliminate cross-traffic between clean and contaminated personnel. The area shall contain lockers, showers, toilets, handwashing fixtures, and space for donning and disposing scrub suits and booties.

1224.32.3.8.2.9 Staff lounge. Lounge and toilet room facilities for obstetrical staff shall be readily accessible to cesarean operating rooms(s), delivery room(s), labor rooms(s) and recovery room(s). Each toilet room shall contain a handwashing station.

1224.32.3.8.2.10 On-call room. An on-call room(s) for physician and/or staff shall be provided, but may be located elsewhere in the facility.

1224.32.3.8.2.11 Housekeeping room.

1224.32.4 LDR and LDRP facilities.

1224.32.4.1 Location. LDR room(s) may be located in a separate LDR service space or as part of the cesarean/delivery service space. The postpartum unit may contain LDRP rooms.

1224.32.4.2 Space requirements. These rooms shall have a minimum of 250 square feet (23.23 m²) of clear floor area with a minimum dimension of 13 feet (3962 mm). There shall be space for crib and sleeping space for support person. An area within the room but distinct from the mother's area shall be provided for infant stabilization and resuscitation. The medical gas outlets shall be located in the room so that they are accessible to the mother's delivery area and infant resuscitation area.

1224.32.4.3 Occupancy. Each LDR or LDRP room shall be for single occupancy.

1224.32.4.4 Shower or tub. Each LDR or LDRP room shall have direct access to a private toilet room with shower or tub.

1224.32.4.5 Handwashing fixtures. Each LDR or LDRP room shall be equipped with handwashing fixtures.

1224.32.5 Newborn/well baby nurseries

1224.32.5.1 General. Infants shall be housed in nurseries that comply with the standards below. All nurseries shall be immediately accessible to the postpartum unit and obstetrical facilities. The nurseries shall be located and arranged to preclude the need for unrelated pedestrian traffic. No nursery shall open directly onto another nursery. Each nursery shall contain the following:

1224.32.5.1.1 Handwashing fixtures. At least one handwashing fixture for each six infant bassinets.

1224.32.5.1.2 Storage. Storage for linens and infant supplies at each nursery room.

1224.32.5.1.3 Lactation. A consultation/demonstration/breast feeding or pump room shall be provided in a location that is readily accessible to the nursery. Provisions shall be made, either within the room or immediately accessible to the room, for a sink, counter, refrigeration and freezing, storage for pump and attachments, and educational materials. This area may be shared between units.

1224.32.5.1.4 Workroom(s). Each nursery shall be served by a connecting workroom. The workroom shall contain gowning facilities at the entrance for

staff and housekeeping personnel, work counter, refrigerator, storage for supplies, and a handwashing fixture. One workroom may serve more than one nursery room provided that required services are convenient to each. Adequate provision shall be made for storage of emergency cart(s) and equipment out of traffic and for the sanitary storage and disposal of soiled waste.

1224.32.5.1.5 Housekeeping room. A housekeeping room shall be provided for the exclusive use of the nursery unit. It shall be directly accessible from the unit.

1224.32.5.1.6 Charting space. Charting facilities shall have linear surface space to ensure that staff and physicians may chart and have simultaneous access to information and communication systems.

1224.32.5.2 Space requirements. Each newborn nursery room shall contain no more than 16 infant stations. Nurseries shall provide a minimum of 25 square feet (2.32 m²) of floor area per bassinet, with at least 3 feet (914 mm) between bassinets and at least 6 inches (152 mm) from a wall.

1224.33 EMERGENCY SERVICE.

1224.33.1 Definition. Levels of emergency care range from initial emergency management as Standby Emergency Medical Service, with a Physician on call; to definitive emergency care as Basic Emergency Medical Service, with a Physician on duty; to a Comprehensive Emergency Medical Service as an Emergency Department.

1224.33.2 Standby Emergency Medical Service. If provided, initial emergency management shall be provided in a specifically designated area of the hospital which shall include the following elements:

1224.33.2.1 Exterior entrance. A well-marked, illuminated and covered entrance, at grade level. The emergency vehicle entry cover shall provide shelter for both the patient and the emergency medical crew during transfer from an emergency vehicle into the building. This exterior entrance shall not be substituted for the required accessible entrance to the hospital, protected from the weather by canopy or roof overhang assigned for passengers loading zone. Ambulance entrances shall provide a minimum of 6 feet (183 mm) in clear width to accommodate bariatric stretchers, mobile patient lift devices, and accompanying attendants. Reception shall be located to permit staff observation and control of access to treatment area, pedestrian and ambulance entrances, and public waiting area.

1224.33.2.2 Treatment room. Standby emergency service shall include at least one treatment room with the following elements:

1. The area shall not be less than 120 square feet (11.15 m²) of clear floor area, exclusive of toilet room(s), waiting area and storage.

- 2. Each treatment room shall contain an examination light, work counter, and handwashing station
- 3. Medical equipment, cabinets, medication storage and counter space for writing.
- 4. The dimensions and arrangement of treatment rooms shall be such that there is a minimum of 3 feet (914 mm) between the sides and foot of the bed/gurney and any wall or any other fixed obstruction. The treatment room may have additional space and provisions for several patients with cubicle curtains for privacy.
- 5. Multiple-station treatment rooms shall provide a minimum of 80 square feet (7.43 m²) per patient gurney, with a minimum 8 foot width (2,438 mm) and 3 feet (914 mm) at the foot of the bed/gurney, with a minimum of 3 feet to any wall or fixed obstruction, and a minimum of 5 feet (1524 mm) between patient gurneys. Patient gurneys shall be separated from adjoining cubicles by curtains. Handwashing fixtures shall be provided for each four treatment stations and for each major fraction thereof in multiple-station areas. These shall be uniformly distributed to provide equal access from each patient station.

Exception: Where renovation of existing treatment rooms is undertaken in facilities approved under the 2001 or prior California Building Code, existing treatment rooms may be renovated, or replaced in kind one for one in the renovated space. Such treatment rooms shall have no less than 80 square feet (7.43 m²) of clear floor area, the least dimension of which shall be 8 feet (2438 mm).

1224.33.2.3 Storage. Equipment and supply storage shall be provided and be sized for general medical/surgical emergency supplies, medications and equipment such as ventilator, defibrillator, splints, etc. This storage shall be located in an alcove or room, out of corridor or hallway traffic, and under staff control.

1224.33.2.4 Lobby. Provisions for reception, control, and public waiting, including a public toilet room(s) with handwashing fixture(s), and public telephone.

1224.33.2.5 Toilet room(s). Patient toilet room(s) with handwashing fixture(s) shall be immediately accessible to the treatment room(s).

1224.33.2.6 Communication. Communication connections to the Poison Control Center and local EMS system shall be provided.

1224.33.2.7 Observation area. A patient cubicle with a minimum clear floor area of 100 square feet (9.29 m²) shall be provided under the visual control of an emergency service staff work area. The patient station shall have space at bedside for visitors and shall have provision for visual privacy from casual observation by other patients and visitors. A handwashing station shall be located in each room, and at least one handwashing station shall be provided for every four patient stations,

and for each major fraction thereof, in open-bay areas. These shall be uniformly distributed to provide equal access from each patient station.

Exception: For small and rural hospitals, the observation area need not be dedicated solely for that purpose.

- 1224.33.2.8 Airborne infection isolation exam/treatment room. If provided, the airborne infection isolation exam/treatment room shall comply with the requirements of Section 1224.4.4.1.3.
- 1224.33.3 Basic Emergency Medical Service. When 24-hour basic emergency service is to be provided, at a minimum, all the provisions of Standby Emergency Service under Section 1224.33.2 and the following shall be provided:
 - 1224.33.3.1 Exterior entrance. In addition to the requirements of Section 1224.33.2.1 the emergency entrance shall have direct access from public roads for ambulance and vehicle traffic conforming with the requirements of the local authorities having jurisdiction. Entrance and driveway shall be clearly marked. If a raised platform is used for ambulance discharge, provide a ramp for pedestrian and wheelchair access.
 - 1224.33.3.2 Patient access. Paved emergency access shall be provided to permit discharge of patients from automobiles and ambulances, and temporary parking convenient to the entrance.
 - 1224.33.3.3 Reception, triage, and control station(s). This area shall be located to permit staff observation and control of access to treatment areas, pedestrian and ambulance entrances, and public waiting area.
 - 1224.33.3.4 Wheelchair and gurney storage. Storage for wheelchairs and gurneys for arriving patients shall be located out of circulation paths with access to emergency entrances.
 - 1224.33.3.5 Public waiting area. A public waiting area shall be provided in compliance with Section 1224.4.5 and include provision of public toilet room(s), drinking fountains, and telephone adjacent to the waiting area, dedicated to, and within, the Emergency Service Space.
 - 1224.33.3.6. Examination and treatment room(s). Examination and treatment rooms shall meet the requirements under Section 1224.33.2.2.
 - 1224.33.3.7 Trauma/cardiac rooms. These rooms are for emergency procedures, including emergency surgery, and shall have at least 250 square feet (23.23 m²) of clear floor space. A minimum clearance of 5 feet (152 mm) shall be provided around all sides of the procedure table or gurney. Each room shall have cabinets and emergency supply shelves, image viewing capability, examination lights, and counter space for writing. Additional space with cubicle curtains for privacy may be provided to accommodate more than one patient at a time in the trauma room with a minimum clear floor area of 200 square feet (18.58 m²) for each patient bay defined by the privacy curtains.

There shall be storage provided for immediate access to attire used for universal precautions. Doors leading from the ambulance entrance to the cardiac trauma room shall have an opening with a minimum width of 5 feet (1524 mm). At least one scrub sink shall be located outside the entrance to each trauma room. One scrub station consisting of two scrub positions is permitted to serve two trauma rooms if located adjacent to the entrance of each procedure room. The placement of scrub sinks shall not restrict the minimum required corridor width.

- 1224.33.3.8 Orthopedic and cast work. At least one orthopedic or cast room shall be provided within the emergency service space. Provisions shall include storage for splints and other orthopedic supplies, traction hooks, image viewing capability, and examination lights. If a sink is used for the disposal of plaster of paris, a plaster trap shall be provided. The clear floor space for this area shall be a minimum of 180 square feet (16.7 m^2)
- 1224.33.3.9 Poison Control Center and EMS communications center. Communication connections shall be provided as required under Section 1224.33.2.6. The communications center may be a part of the staff work and charting area.
- 1224.33.3.10 Emergency equipment storage space. Equipment and supply storage shall be provided as required under Section 1224.33.2.3.
- 1224.33.3.11 Patients' toilet room. A patient toilet room with a lavatory shall be immediately accessible to the treatment room(s). Where there are more than eight treatment stations, a minimum of two toilet rooms, with a lavatory in each toilet room, shall be required.
- 1224.33.3.12 Storage. Provide rooms for clean, soiled or used supplies.
 - 1224.33.3.12.1 Soiled workroom or soiled holding room. See Section 1224.4.4.7. This room is for the exclusive use of the emergency service space.
 - **1224.33.3.12.2 Clean utility room.** See Section 1224.4.4.6.
- 1224.33.3.13 Administrative center or nurses' station for staff work and charting. These areas shall have space for counters, cabinets, and medication storage, and shall be provided with handwashing stations. They may be combined with or include centers for reception and communication.
- 1224.33.3.14 Staff lounge. A staff lounge shall be located within the Emergency Department and include staff clothing change areas with lockers, showers, toilets and handwashing stations for male and female staff.
- 1224.33.3.15 Housekeeping room. A housekeeping room, compliant with Section 1224.4.15, shall be located within the unit and dedicated to the emergency service space.

1224.33.3.16 Airborne infection isolation exam/treatment room. If provided shall comply with the requirements of Section 1224.4.4.1.3.

1224.33.3.17 Secured holding room. When a secure holding room is provided, it shall meet the following requirements. The location of the secure holding room(s) shall facilitate staff observation and monitoring of patients in these areas. The secure holding room shall have a minimum clear floor area of 60 square feet (5.57 square meters) with a minimum wall length of 7 feet (2.13 meters) and a maximum wall length of 11 feet (3.35 meters). This room shall be designed to prevent injury to patients:

- 1. All finishes, light fixtures, vents, diffusers, and fire protection/alarm components shall be tamper resistant and ligature resistant.
- 2. There shall not be any electrical outlets, medical gas outlets, or similar devices.
- 3. There shall be no sharp corners, edges, or protrusions, and the walls shall be free of objects or accessories of any kind.
- 4. Patient room doors shall swing out and shall have hardware on the exterior side of the door only. The minimum width shall be 44 inches (1120 mm).
- 5. A small impact-resistant view panel or window shall be provided in the door for discreet staff observation of the patient.

1224.33.4 Comprehensive Emergency Medical Service. When 24-hour comprehensive emergency service is to be provided, an Emergency Department shall be provided. At a minimum, all the provisions of Stand-by Emergency Service under Section 1224.33.2, the provisions of Basic Emergency Service under Section 1224.33.3, and all of the following shall be provided:

1224.33.4.1 Triage stations. In addition to the requirements of Section 1224.33.3.3, the triage area shall include triage station(s) with the following minimum requirements:

- 1. 100 square feet (9.29 m²) minimum clear floor area for each private triage room and 80 square feet (7.4 m²) minimum clear floor area for each station in open-bay triage areas.
- 2. Provisions for patient privacy.
- 3. Handwashing station in each triage room. In open-bay triage areas, one handwashing station shall be provided for every four triage stations.
- 4. Immediate access to emergency call and code call stations.
- 5. Medical gas outlets for triage areas in compliance with Table 1224.4.6.1.

1224.33.4.2 Fast-track area. A fast-track area may be used for treating patients presenting simple and less serious conditions. If a fast-track area is provided, it shall meet the following requirements:

- 1. Space requirements each fast-track station shall have a minimum 100 square feet (9.29 m²) of clear floor area.
- 2. Each station shall include a handwashing station, work/documentation counter, examination table light.
- 3. Storage areas for supplies and medication.
- 4. A separate procedure room may be provided. It shall have a minimum clear floor area of 120 square feet (11.15 m²).

1224.33.4.3 Pre-screening stations. A pre-screening area may be used prior to admission to the Emergency Department. If pre-screening is provided, each station must have a minimum of 80 square feet (7.4 m²) of clear floor area, a handwashing station, documentation counter, and a storage cabinet. Pre-screening stations, whether private rooms or open bays, are considered a part of the waiting area and must meet the same ventilation requirements.

1224.33.4.4 Diagnostic service areas. Radiological/ Imaging services shall be readily accessible. The Emergency Department shall be supported by Clinical Laboratory services. A STAT lab may be provided within the emergency medical service space in addition to more comprehensive support provided by the Clinical Lab.

1224.33.4.5 On-call room(s). Provisions shall be made to accommodate on-call sleeping room(s) for physicians and/or medical staff within the Emergency Department.

1224.33.4.6 Police and press room. Provisions shall be made to accommodate police briefing/debriefing and press releases. This may be located outside the Emergency Department.

1224.33.5 Other space considerations.

1224.33.5.1 Observation units. Observation rooms for the monitoring of patients up to 24 hours may be provided as a distinct unit within, the emergency department. If provided the unit shall have the following:

- 1. Handwashing stations shall be provided in each patient room and for each four treatment stations, and for each major fraction thereof. These shall be uniformly distributed to provide equal access from each patient station. Handwashing stations shall be directly accessible to nurse stations and patient care areas.
- 2. Each patient station shall have a minimum of 120 square feet (11.15 m²) of clear floor area including space at each bedside for visitors and provision for visual privacy from casual observation by other patients and visitors.
- 3. One toilet room shall be provided for each six treatment stations and for each major fraction thereof.
- 4. An administrative center/nurse station, in compliance with Section 1224.4.4.2, positioned to

- allow staff to observe each patient care station or room.
- 5. A nourishment area in compliance with Section 1224.4.4.5.

1224.34 NUCLEAR MEDICINE

1224.34.1 General. If nuclear medicine is provided, the following shall be provided:

1224.34.1.1 Radiation protection. A certified physicist shall specify the type, location and amount of radiation protection to be installed in accordance with final approved department layout and equipment selection. Radiation protection requirements shall be incorporated into the construction documents and comply with Chapter 31C and the requirements of California Radiation Control Regulations, California Code of Regulations, Title 17, Division 1, Chapter 5, and Subchapter 4.

1224.34.1.2 Nuclear medicine room. Shall be sized to accommodate the equipment and a gurney.

When provided, the following facilities shall meet the requirements below:

1224.34.1.2.1 Scintigraphy (Gamma Camera) Facilities. Shall include the following:

- 1. Scanner room. The scanner room shall provide a minimum clearance of 4 feet (1218 mm).at each side and the foot of the table.
- 2. Handwashing stations shall be provided throughout the gamma camera suite at locations of patient contact and at locations where radiopharmaceutical materials are handled, prepared, or disposed of.

1224.34.1.2.2 Positron Emission Tomography (PET). Shall include the following:

- 1. Scanner room shall provide a minimum clearance of 4 feet (1218 mm) at each side and the foot of the table. Additional space shall be provided when PET is combined with CT, and include compliance with Section 1224.18.3 and shielding requirements in Section 1224.34.1.1.
- 2. Cyclotron room. Where radiopharmaceuticals are prepared on-site, a cyclotron shall be provided. Cyclotron facilities shall be located in access-restricted areas. Shielding requirements for cyclotron facilities shall comply with Section 1224.34.1.1.
- 3. Control room. A control room shall be provided with a full direct view of the patient in the PET scanner.
- 4. Patient uptake/cool-down room. A shielded room with access to a dedicated patient toilet, to accommodate radioactive waste, and lavatory shall be provided.
- 5. Handwashing stations shall be provided throughout the PET suite at locations of

- patient contact and at locations where radiopharmaceutical materials are handled, prepared, or disposed of.
- 6. Pre-procedure patient care and recovery area shall be provided to accommodate at least two stretchers. This area shall comply with Section 1224.34.2.6.
- 7. Computer equipment room shall be provided in support of the equipment provided.
- 8. Contaminated (hot) soiled holding shall be provided and operationally integrated to minimize incidental exposure to ionizing radiation.

1224.34.1.2.3 Single-Photon Emission Computed Tomography (SPECT) Facilities. When provided shall include the following:

- 1. Scanner room. Scanner room shall provide a minimum clearance of 4 feet (1218 mm) at each side and the foot of the table.
- 2. Control room. A control room shall be provided with a full direct view of the patient in the SPECT scanner.
- 3. Computer equipment room shall be provided in support of the equipment provided.
- 4. Handwashing stations shall be provided throughout the SPECT suite at locations of patient contact and at locations where radiopharmaceutical materials are handled, prepared, or disposed.
- 1224.34.1.3 Radiopharmacy. If radiopharmaceutical preparation is performed, an area adequate to house a radiopharmacy shall be provided with appropriate shielding. This area shall include adequate space for storage of radionuclides, chemicals for preparation, dose calibrators, and record keeping. If preprepared materials are used, storage and calculation area may be considerably smaller than that for on-site preparation. Space shall provide adequately for dose calibration, quality assurance, and record keeping. The area may still require shielding from other portions of the facilities.
- 1224.34.2 Support areas for nuclear medicine services. Nuclear medicine area when operated separately from the imaging department shall provide the following:
 - 1224.34.2.1 Entrance. Space shall be adequate to permit entry of gurneys, beds, and able to accommodate imaging equipment, electronic consoles, and if present, computer terminals.
 - 1224.34.2.2 Cleanup. Provisions for cleanup shall be located within the service space and be readily accessible. They shall include a service sink or floor receptacle as well as storage space for equipment and supplies.
 - 1224.34.2.3 Consultation. A consultation area may be provided.

1224.34.2.5 Dose administration area. Provide a dose administration area that is immediately accessible to the preparation area. Since as much as several hours may elapse for the dose to take effect, the area shall provide for visual privacy from other areas.

1224.34.2.6 Pre-procedure/holding area. A pre-procedure/holding area for patients on gurneys or beds shall be provided out of traffic and under control of staff and may be combined with the dose administration area with visual privacy between the areas.

1224.34.2.7 Patient dressing rooms. Patient dressing rooms shall be immediately accessible to the waiting area and procedure rooms. Each dressing room shall include a seat or bench, a mirror, and provisions for hanging patients' clothing and for securing valuables.

1224.34.2.8 Patient toilet room(s). Patient toilet rooms shall be reserved for nuclear medicine patients and shall be immediately accessible to waiting and procedure rooms.

1224.34.2.9 Staff toilet rooms. Staff toilet rooms shall be readily accessible to the nuclear medicine laboratory.

1224.34.2.10 Handwashing fixtures. Shall be located within each procedure room.

1224.34.2.11 Control desk and reception.

1224.34.2.12 Storage area for clean linen.

1224.34.2.13 Soiled and contaminated material. Provisions with handwashing fixtures shall be made for holding soiled material. Separate provisions shall be made for holding contaminated material.

1224.34.2.14 Hot lab for scintigraphy (gamma camera), PET, and SPECT facilities. A securable area or room shall be provided in which radiopharmaceuticals can be safely stored and doses can be calculated and prepared.

- 1. A single hot lab shall be permitted to serve multiple scanners and nuclear medicine modalities.
- 2. The hot lab shall be shielded in compliance with Section 1224.34.1.1.
- 3. A source storage area, a dose area, and a storage area for syringe shields shall be provided.

1224.34.3 Radiotherapy service space.

1224.34.3.1 Radiation therapy space. If radiation therapy is provided, the following shall be accommodated:

- 1. Patient reception and waiting areas.
- 2. Space for medical and physics staff functions.
- 3. Space for equipment and supplies.

- 4. Housekeeping room.
- 5. Direct access to space provided for radiation measurement and calibration equipment, including a calibration constancy instrument and access to a secondary standard dose meter.
 - 5.1. A megavoltage treatment unit capable of delivering x-rays or gamma rays of effective energy 500 KeV or more and conforming to the requirements of Chapter 31C and the California Radiation Control Regulations, California Code of Regulations, Title 17, Division 1, Chapter 5, Subchapter 4.
 - 5.2. Access to a medium voltage or superficial treatment unit delivering 500 KeV or less, but otherwise having the same functional characteristics as the above mega-voltage units and conforming to the requirements of Chapter 31C and the California Radiation Control Regulations, California Code of Regulations, Title 17, Division 1, Chapter 5, Subchapter 4.
 - 5.3. Direct access to space provided for brachytherapy equipment which shall meet the requirements of Chapter 31C and the California Radiation Control Regulations, California Code of Regulations, Title 17, Division 1, Chapter 5, Subchapter 4.
 - 5.4. Shielding of the rooms shall meet the requirements of Chapter 31C and the California Radiation Control Regulations. California Code of Regulations, Title 17, Division 1, Chapter 5, Subchapter 4.

1224.34.3.2 Radiation protection. Cobalt, linear accelerators, hot lab and high dose rate brachytherapy rooms and simulation rooms require radiation protection. All rooms that provide radiation treatment shall be appropriately shielded. A certified physicist shall specify the type, location, and amount of protection to be installed in accordance with final approved department layout and equipment selection. Radiation protection requirements shall be incorporated into the construction documents and comply with Chapter 31C and the requirements of California Radiation Control Regulations, California Code of Regulations, Title 17, Division 1, Chapter 5, and Subchapter 4.

1224.34.3.3 Room sizes. Rooms shall be sized as follows:

1. Cobalt rooms and linear accelerators shall be sized in accordance with equipment requirements and shall accommodate a gurney for litter borne patients. Layouts shall provide for preventing the escape of radioactive particles. Openings into the room, including doors, ductwork, vents and electrical raceways and conduits, shall be baffled to prevent direct exposure to other areas of the facility.

- 2. Simulator, accelerator and cobalt rooms shall be sized to accommodate the equipment with patient access on a gurney, medical staff access to the equipment and patient, and service access.
- 3. Where a table is used, the room shall be sized to provide a minimum clearance of 4 feet (1218 mm) on three sides of the table to facilitate bed transfer and provide access to the patient. The door swing shall not encroach on the equipment space, patient circulation space, or transfer space.
- 4. Minimum room size shall be 260 square feet (24.15 m²) for the simulator room; 680 square feet (63.17 m²), including the maze, for accelerator rooms; 200 square feet (18.58 m²) for brachytherapy rooms; and 450 square feet (41.81 m²) for cobalt rooms.

1224.34.3.4 General support area. The following areas shall be provided:

- 1. A gurney hold area adjacent to the treatment rooms, screened for privacy, and combined with a seating area for outpatients.
- Exam or treatment room shall be provided with a minimum of 100 square feet (9.29 m²) with a minimum dimension of 8 feet (2438 mm). Each exam room shall be equipped with a handwashing fixture.

Exceptions:

П

- Where renovation of existing treatment rooms is undertaken in facilities built under the 2001 or prior California Building Code, treatment rooms shall have no less than 80 square feet (7.43 m²) of clear floor area.
- 2. Darkroom is optional. If provided, shall be readily accessible to the treatment room(s)
- 3. Patient gowning area with provision for safe storage of valuables and clothing and with direct access to toilet room(s). At least one space shall be large enough for staff-assisted dressing.
- 4. Film files area is optional. If provided shall have storage for unprocessed film.

1224.34.4 Additional support areas for linear accelerator.

1224.34.4.1 Mold room with exhaust hood and handwashing fixture.

1224.34.4.2 Block room with storage. The block room may be combined with the mold room.

1224.34.5 Additional support areas for cobalt room.

1224.34.5.1 Hot lab. A hot lab shall be provided in accordance with Section1224.34.2.14.

1224.34.6 Radiosurgery suite. If radiosurgery (gamma knife/cyber knife) is provided, the following shall be provided:

1224.34.6.1 General. The radiosurgery suite shall be located near the imaging services suite to facilitate image acquisition prior to radiosurgery treatment. Location of gamma knife or cyber knife treatment rooms in a radiation therapy suite shall be permitted.

1224.34.6.2 Radiosurgery treatment rooms. Radiosurgery (gamma knife/cyber knife) treatment rooms shall provide a minimum clearance of 4 feet (1218 mm) shall be provided on all sides of the treatment table/chair. The door shall not encroach on the equipment or on patient circulation or transfer space. A handwashing station shall be provided in each radiosurgery treatment room.

1224.34.6.3 Pre-procedure/recovery accommodations. If provided, pre-procedure/recovery patient care stations shall meet the following requirements:

- 1. Pre-procedure and recovery area(s) shall be immediately accessible to procedure rooms and separate from corridors. The pre-procedure and recovery patient area or room shall be arranged to permit visual observation of the patient by staff before and after the procedure. Bays, cubicles, or single-bed rooms shall be permitted to serve as patient care stations.
- 2. Area. Where open bays are used, each patient care station shall have a minimum clear floor area of 80 square feet (7.43 m²).
- 3. Clearances. Each bay or cubicle shall have a minimum clearance of 3 feet (914 mm) between walls or partitions and the sides and foot of gurneys or patient beds. Each bay shall have a minimum clearance of 4 feet (1218 mm) between sides of gurneys or patient beds.
- 4. Patient privacy. Provisions such as cubicle curtains shall be provided for patient privacy.
- 5. Handwashing station. A handwashing station shall be provided within the pre-procedure/recovery area.

1224.34.6.4 Support areas for radiosurgery treatment rooms. The following shall be provided:

- 1. Space for sterilization of head-frames.
- 2. Area for target planning.
- 3. Medication station.
- 4. Nourishment area.
- 5. Head-frame storage.
- 6. Toilet room(s) for patients, staff and the public.
- 7. Area for sedation of pediatric patients.

1224.35 REHABILITATION THERAPY DEPARTMENT.

1224.35.1 Rehabilitation center space. If provided, a rehabilitation center space shall be designed to meet the requirements of Section 1224.14, except as follows:

1. Patient bedrooms shall contain a minimum of 110 square feet (10.22 m²) of clear floor area per bed, exclusive of toilet room(s), closets, lockers, wardrobes, alcoves or vestibules, with greater space

- provided for special needs such as circ-o-electric beds.
- 2. Space for group dining shall be provided at the minimum rate of 20 square feet (1.86 m²) per bed.
- 3. Space for group recreation or patient's lounge shall be provided at the minimum rate of 20 square feet (1.86 m²) per bed.
- 4. Space for staff conferences, patient evaluation, and progress reports.
- 5. A classroom space.
- 6. An examination and treatment room, adjacent or directly accessible to an office for the physician in charge of the outpatient service.
- 7. A patient waiting area with access to telephone, drinking fountain, and men's and women's toilet room facilities in or adjacent to the rehabilitation outpatient service area.
- 8. Access to an outside area to be used for therapeutic procedures for patients.
- 9. At least one training toilet room in each patient unit with minimum dimensions of 5 feet by 6 feet (1524 mm by 1829 mm).
- 10. Patient bathtubs, where provided, of standard height and located to provide access to both sides and one end of the tub.
- 11. Patient showers, where provided in centralized bathing facilities, shall comply with Section 11B-608.2.2, no dimension of which shall be less than 4 feet (1219 mm), be equipped with handrails, privacy curtains, and designed for ease of accessibility. The floor shall be sloped to provide drainage.

1224.35.2 Physical therapy service space. If physical therapy is part of the service, the following shall be included:

- 1. The minimum floor area for a physical therapy space shall be 300 square feet (27.87 m²) with no dimensions less than 12 feet (3658 mm). Each individual patient care station shall have a minimum clear floor area of 60 square feet (5.57 m²), except individual patient care stations formed with permanent partitions shall have a minimum clear floor area of 80 square feet (7.43 m²). Each individual patient care station shall have privacy screens or curtains.
- 2. Handwashing fixtures for staff either within or at each treatment space. (One handwashing fixture may serve several treatment stations.)
- 3. Exercise area and facilities.
- 4. Clean linen and towel storage.
- 5. Storage for equipment and supplies.
- 6. Separate storage for soiled linen, towels, and supplies.

Exception: When approved by the licensing agency small or rural hospitals are exempt from Sections 1224.35.2.1 through 1224.35.2.6.

1224.35.3 Occupational therapy service space. If this service is provided, the following shall be included:

- 1. Work areas and counters suitable for wheelchair access.
- 2. Handwashing fixture(s).
- 3. Storage for supplies and equipment.
- 4. An area for teaching daily living activities shall be provided. It shall contain an area for a bed, kitchen counter with appliances and sink, bathroom, and a table/chair.

1224.35.4 Speech pathology and/or audiology service space. If a speech pathology service is provided, space shall be provided for:

- 1. Tables and chairs to conduct interviews, consultations and treatment, and to accommodate patients in wheelchairs and stretchers.
- 2. A waiting area with access to public toilet room(s) if outpatients are being served.
- 3. Handwashing fixture.
- 4. Testing unit. If an audiology service is provided, there shall be, in addition to Items 1, 2 and 3 above, a minimum of one two-room testing unit that meets the American National Standards Institute, ANSI/ASA S-3.1, 1999, (2008) Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms.

1224.36 RENAL DIALYSIS SERVICE SPACE (ACUTE AND CHRONIC)

1224.36.1 General. If provided, renal dialysis service shall comply with the following:

1224.36,2 Treatment area.

1224.36.2.1 Location. The treatment area may be an open area and shall be separate from administrative and waiting areas.

1224.36.2.2 Nurses' station(s). Shall be located within the dialysis treatment area and designed to provide visual observation of all patient stations.

1224.36.2.3 Individual patient treatment areas. Shall contain at least 80 square feet (7.44 m²). There shall be at least a 4-foot (1219 mm) space around and between beds and/or lounge chairs.

1224.36.2.4 Handwashing stations. Handwashing stations shall be directly accessible to the nurses' station and to patient treatment areas. Handwashing stations shall be provided for each four treatment stations, and for each major fraction thereof. These shall be uniformly distributed to provide equal access from each patient station.

1224.36.2.5 *Privacy.* The open unit shall be designed to provide privacy for each patient.

- 1224.36.2.6 Bloodborne infection isolation room. A minimum of one bloodborne infection isolation room of at least 120 square feet (11.15 m²) of clear floor space shall be provided for patients. This room shall contain a counter and handwashing fixture.
- 1224.36.2.7 Medication dispensing. If provided, there shall be a medication dispensing station for the dialysis center. A work counter and handwashing fixtures shall be included in this area. Provisions shall be made for the controlled storage, preparation, distribution and refrigeration of medications.
- 1224.36.2.8 Home training. If provided in the unit, a private treatment area of at least 120 square feet (11.15 m²) shall be provided for patients who are being trained to use dialysis equipment at home. This room shall contain counter, handwashing fixtures, and a separate drain for fluid disposal.
- **1224.36.2.9 Examination room.** An examination room with a handwashing fixture shall be provided with at least 100 square feet (9.29 m^2) .
- 1224.36.2.10 Clean utility room. A clean utility room shall be provided. If the room is used for preparing patient care items, it shall contain a work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as part of a system for distribution of clean and sterile materials, the work counter and handwashing fixture may be omitted. Soiled and clean utility rooms or holding rooms shall be separated and have no direct connection.
- 1224.36.2.11 Soiled utility room. A soiled workroom shall be provided and contain a sink, handwashing fixture, work counter, storage cabinets, waste receptacles and a soiled linen receptacle.
- 1224.36.2.12 Reprocessing room. If dialyzers are reused, a reprocessing room is required and sized to perform the functions required and include one-way flow of materials from soiled to clean with provisions for a refrigerator (temporary storage or dialyzer), decontamination/cleaning areas, sinks, processors, computer processors and label printers, packaging area and dialyzer storage and disinfectants cabinets.
- 1224.36.2.13 Nourishment station. If a nourishment station for the dialysis service is provided, the nourishment station shall contain a sink, a work counter, a refrigerator, storage cabinets and equipment for serving nourishments as required.
- **1224.36.2.14 Housekeeping room.** Provide a house-keeping room that is immediately accessible to, and for the exclusive use of the unit
- 1224.36.2.15 Repair room. If required, an equipment repair and breakdown room shall be equipped with a handwashing fixture, deep service sink, work counter and storage cabinet. Needs water supply and drain connection for testing machines.
- **1224.36.2.16 Supplies.** Supply areas or supply carts shall be provided.

- **1224.36.2.17 Storage.** Storage space shall be available for wheelchairs and gurneys, if gurneys are provided, out of direct line of traffic.
- 1224.36.2.18 Clean linen storage. A clean linen storage area shall be provided. This may be within the clean utility room, a separate closet, or an approved distribution system. If a closed cart system is used, storage may be in an alcove. It must be out of the path of normal traffic and under staff control.
- 1224.36.2.19 Mixing room. Each facility using a central batch delivery system shall provide, either on the premises or through written arrangements, individual delivery systems for the treatment of any patient requiring special dialysis solutions. The mixing room shall also include a sink, storage space and holding tanks.
- 1224.36.2.20 Water treatment room. The water treatment equipment shall be located in an enclosed room.
- **1224.36.2.21 Patient toilet.** A patient toilet room with a lavatory shall be provided.
- 1224.36.3 Ancillary facilities.
 - 1224.36.3.1 Staff lounge, lockers and toilet(s). Space shall be available for male and female personnel for staff clothing change area and lounge. The areas shall contain lockers, shower, toilet(s), and handwashing fixtures.
 - 1224.36.3.2 Patient storage. Storage for patients' belongings shall be provided.
 - 1224.36.3.3 Waiting room. A waiting room, toilet room(s) with handwashing fixtures, drinking fountain, public telephone, and seating accommodations for waiting periods shall be available or accessible to the dialysis unit.
 - 1224.36.3.4 Administrative services. Provide office and clinical work space.
- 1224.37 RESPIRATORY THERAPY SERVICE SPACE. If respiratory service is provided, the following elements shall be included:
 - 1. Storage for equipment and supplies.
 - 2. Space and utilities for cleaning and disinfecting equipment. Provide physical separation of the space for receiving and cleaning soiled materials from the space for storage of clean equipment and supplies. Appropriate local exhaust ventilation shall be provided if gluteraldehyde or other noxious disinfectants are used in the cleaning process. This space may be co-located with other reprocessing functions within the hospital.
 - 3. Additional facilities. If respiratory services such as testing and demonstration for outpatients are part of the program, additional facilities and equipment shall be provided including but not limited to:
 - 3.1. Patient waiting.
 - 3.2. A reception and control station.
- 1224.38 INTERMEDIATE-CARE SERVICE SPACE. An intermediate-care service unit shall be housed in a separate

and distinct nursing unit and shall comply with the applicable requirements of Section 1225.

1224.39 OUTPATIENT SERVICE SPACE.

- 1224.39.1 Waiting area(s). Provide with access to public toilet room facilities, a public telephone and a drinking fountain. These facilities may be shared with other services.
- **1224.39.2 Outpatient surgery.** If outpatient surgery is performed in the out patient service area, the following shall be provided:
 - 1. An operating room(s) with a minimum clear floor area of 270 square feet (25.08 m²), no dimension of which shall be less than 15 feet (4572 mm).
 - 2. Preoperative patient holding shall be provided in accordance with Section 1224.16.2.
 - 3. A postanesthesia recovery area which meets the requirements of Section 1224.16.
 - 4. Each surgical unit shall provide a separate cleanup room separated from any surgical sterilizing facilities. The cleanup room shall provide 24 square feet (2.2 m²) per operating room up to eight operating rooms and shall have the minimum area of 48 square feet (4.5 m²), with no dimension less than 6 feet (1829 mm).
 - 5. Scrub sinks which meet the requirements of Section 1224.15.3.5.
 - 6. Service areas which meet the requirements of Section 1224.15.3.
 - 7. A housekeeping room shall be provided for the exclusive use of outpatient surgery. It shall be directly accessible from the service area.
- 1224.39.3 Gastrointestinal endoscopy. If gastrointestinal endoscopy is performed in the outpatient service area, the endoscopy suite shall be divided into a minimum of three major functional areas: the procedure room(s), instrument processing room(s), and patient holding/preparation and recovery room or area and the following shall be provided:

1224.39.3.1 Procedure room(s).

- 1224.39.3.1.1 Space requirements. Procedure room shall have a minimum clear floor area of 200 square feet (18.6 m²). Room arrangement shall permit a minimum clearance of 3 feet, 6 inches (1067 mm) at each side, head, and foot of the gurney/table.
- 1224.39.3.1.2 Handwashing stations. A separate dedicated handwashing station with hands-free controls shall be provided in the procedure room.

1224.39.3.2 Processing room.

- 1224.39.3.2.1 Dedicated processing room(s) for cleaning and decontaminating instruments shall be provided. The cleaning area shall allow for flow of instruments from the contaminated area to the clean assembly area and then to storage.
- **1224.39.3.2.2** The decontamination area shall be equipped with the following:

- 1. Utility sink(s) shall be provided as appropriate to the method of decontamination used.
- 2. One freestanding handwashing station.
- 3. Work counter space(s).
- 1224.39.3.3 Pre-operative patient holding. A pre-operative patient holding area shall be provided in accordance with Section 1224.16.2.
- **1224.39.3.4 Post-anesthesia recovery area.** A post-anesthesia recovery area shall meet the requirements of Section 1224.16.3.
- 1224.39.3.5 Communication system. A system for emergency communication shall be provided.

1224.39.4 CANCER TREATMENT/INFUSION THERAPY SERVICE SPACE.

1224.39.4.1 General. If provided, cancer treatment/infusion therapy service shall comply with the following:

1224.39.4.2 Treatment area.

- 1224.39.4.2.1 Location. The treatment area may be an open area and shall be separated from administrative and waiting areas.
- 1224.39.4.2.2 Nurses' station(s). Shall be located within the cancer treatment/infusion therapy area and designed to provide visual observation of all patient stations.
- 1224.39.4.2.3 Individual patient treatment areas. Shall contain at least 80 square feet (7.4 m2).

There shall be at least a 4-foot (1219 mm) space around and between beds and/or lounge chairs used for chemotherapy treatment/infusion.

- 1224.39.4.2.4 Handwashing stations. Handwashing stations shall be directly accessible to the nurses' station and patient treatment areas. Handwashing stations shall be provided for each four patient stations, and for each major fraction thereof. These shall be uniformly distributed to provide equal access from each patient station.
- **1224.39.4.2.5 Privacy.** The open unit shall be designed to provide privacy for each patient.
- 1224.39.4.2.6 Medication dispensing. If provided, there shall be a medication dispensing station for the cancer treatment/infusion therapy area. A work counter and handwashing fixture(s) shall be included in the area. Provisions shall be made for the controlled storage, preparation, distribution and refrigeration of medications.
- 1224.39.4.2.7 Examination room. An examination room with a handwashing fixture shall be provided with at least 100 square feet (9.29 m^2) .
- 1224.39.4.2.8 Clean utility room. A clean utility room shall be provided. If the room is used for preparing patient care items, it shall contain a work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used for storage and holding as part of a system for distribution of clean and sterile materials, the work counter and handwashing fixture may be omitted.

Soiled and clean utility rooms or holding rooms shall be separated and have no direct connection.

1224.39.4.2.9 Soiled utility room. A soiled work-room shall be provided and contain a sink, handwashing fixture, work counter, storage cabinets, waste receptacles and a soiled linen receptacle.

1224.39.4.2.10 Nourishment station. If nourishment station for the cancer treatment/infusion therapy service is provided, the nourishment station shall contain a sink, a work counter, a refrigerator, storage cabinets and equipment for serving nourishment as required.

1224.39.4.2.11 Housekeeping room. Provide a housekeeping room that is immediately accessible to and for the exclusive use of the unit.

1224.39.4.2.12 Supplies. Supply areas or supply carts shall be provided.

1224.39.4.2.13 Storage. Storage space shall be available for wheelchairs and gurneys. If gurneys are provided, they shall be out of the direct line of traffic.

1224.39.4.2.14 Clean linen storage. A clean linen storage area shall be provided. This may be within the clean utility room, a separate closet, or an approved distribution system. If a closed cart system is used, storage may be in an alcove. It must be out of the path of normal traffic and under staff control.

1224.39.4.2.15 Patient toilet. A patient toilet room with a lavatory shall be provided.

1224.39.4.3 Ancillary facilities.

1224.39.4.3.1 Staff lounge, lockers and toilets. Space shall be available for male and female personnel for staff clothing change area and lounge. The areas shall contain lockers, toilets, and handwashing stations.

1224.39.4.3.2 Patient storage. Storage for patients' belongings shall be provided.

1224.39.4.3.3 Administrative services. Office and clinical work space shall be provided.

1224.39.4.3.4 Special design elements. Decorative water features and fish tanks shall not be located inside cancer treatment/infusion therapy unit.

1224.39.5 HYPERBARIC THERAPY SERVICE SPACE.

1224.39.5.1 General. If provided, clinical hyperbaric oxygen therapy service space shall meet the requirements of the "Hyperbaric Facilities" chapter in NFPA 99: Health Care Facilities Code and shall comply with the following:

1224.39.5.2 Hyperbaric chambers.

1224.39.5.2.1 Class A chamber (multi-place facilities).

1. Clearances. There shall be a minimum clearance of 3 feet (914 mm) around the chamber. The area in front of the chamber entry designed for gurney or bed access shall have a minimum clearance of 8 feet (2438 mm) for

- gurney or bed approach. The area in front of the chamber entry designed for ambulatory or wheelchair access only shall have a minimum clearance of 5 feet (1524 mm) for wheelchair approach.
- 2. Entries. Chamber entries shall be provided with access ramps that are flush with the chamber entry doorway. Chamber entries not designed for gurney/bed access shall be a minimum of 3 feet (914 mm).

1224.39.5.2.2 Class B chamber (mono-place facilities).

- 1. Clearances. There shall be a minimum clearance of 3 feet (914 mm) around the chamber. A minimum clearance of 44 inches (1118 mm) shall be provided between the control sides of two chambers. The area in front of the chamber entry shall be designed for gurney or bed access with a minimum clearance of 8 feet (2438 mm) for gurney or bed approach.
- 2. **Oxygen.** An oxygen service valve shall be provided for each chamber.

1224.39.5.3 Pre-procedure patient holding area(s). In facilities with a Class A hyperbaric chamber or with three or more Class B chambers, a pre-procedure/patient holding area shall be provided to accommodate patients on gurneys or beds and sitting space for ambulatory patients. The area shall permit visual observation of the patient by nursing staff and be located out of traffic flow. Each gurney station shall be a minimum clear floor area of 80 square feet (7.43 m²) and shall have a minimum clearance of 3 feet (914 mm) on the sides of the gurneys and the foot of the gurney. There shall be provisions for privacy such as cubicle curtains.

1224.39.5.4 Medical gas station outlets. Refer to Table 1224.4.6.1 Station Outlets for Oxygen, Vacuum (Suction) and Medical Air.

1224.39.5.5 Support areas for the hyperbaric suite.

1224.39.5.5.1 Reception/control desk. An administrative center/nurse station shall be provided within the hyperbaric suite.

1224.39.5.5.2 Examination/treatment room(s). Room(s) for individual consultation and treatment shall be provided and meet the requirements of Section 1224.4.4.1.

1224.39.5.5.3 Clean linen storage. A clean linen storage area shall be provided. This may be within the clean utility room, a separate closet or an approved distribution system. If a closed cart system is used, storage may be in an alcove. It must be out of the path of normal traffic and under staff control.

1224.39.5.5.4 Clean supply room. A clean supply room shall be provided and meet the requirements of Section 1224.4.4.6.1. This room may be omitted if the suite is served by a cart system.

1224.39.5.5.5 Gas cylinder room. The gas cylinder room shall provide space to house eight (H) cylinders and two gas manifolds, consisting of at least two (H) cylinders on each manifold.

1224.39.5.5.6 Gurney and wheelchair storage. Space for gurney and wheelchair storage shall be provided.

1224.39.5.5.7 Housekeeping room. A housekeeping room shall be provided and shall be immediately accessible to the hyperbaric suite.

1224.39.5.5.8 Compressor room. A compressor room shall be provided to house the chamber compressors, accumulator tanks and fire suppression system.

1224.39.5.6 Support areas for staff. Toilet rooms with a handwashing stations shall be immediately accessible to the hyperbaric suite for staff use.

1224.39.5.7 Support areas for patients.

1224.39.5.7.1 Patient waiting area. The patient waiting area shall be provided and meet the requirements of Section 1224.39.1.

1224.39.5.7.2 Patient changing areas. Changing area(s) for outpatients shall be provided for patient clothing and for securing valuables.

1224.39.5.7.3 Patient toilet room. A patient toilet room with a handwashing station shall be directly accessible to the hyperbaric suite.

1224.40 SKILLED NURSING SERVICE SPACE. If provided a skilled nursing service unit shall be housed in a separate and distinct nursing unit and shall comply with the applicable requirements of Section 1225.

1224.41 SOCIAL SERVICE SPACE. If provided, the social service space shall include office or other space for privacy in interviewing, telephoning and conducting conferences.

SECTION 1225 [OSHPD 2] SKILLED NURSING AND INTERMEDIATE-CARE FACILITIES

1225.1 Scope. The provisions of this section shall apply to skilled nursing and intermediate-care facilities, including distinct part skilled nursing and intermediate-care services of a general acute-care or acute psychiatric hospital license, provided either is in a separate unit or a freestanding building. Skilled nursing facilities and intermediate-care facilities shall provide all common elements and support services. The required services for skilled nursing and intermediate-care facility licensure: physician, skilled nursing, dietary, pharmaceutical services, and activity program shall be provided. At the option of the provider, the medical model or the household model may be used.

1225.1.1 Small house skilled nursing facilities. Skilled nursing facilities participating in the Small House Nursing Facilities Pilot Program established by and in conformance with Section 1323.5 of the California Health and Safety Code, shall meet all the provisions of Section 1225.4 Common Elements and Section 1225.5.2 Household Model applicable to small house skilled nursing facilities.

1225.2 Application. New buildings and additions, alterations or repairs to existing buildings subject to licensure shall comply with applicable provisions of the California Electrical Code, California Mechanical Code, California Plumbing Code, California Fire Code (Parts 3, 4, 5 and 9 of Title 24), and this section.

Exception: See Section 1224.2.

1225.2.1 Services/systems and utilities. Services/systems and utilities that are necessary to the operation of a skilled nursing facility or intermediate care facility shall meet the requirements of this section. Examples of services/systems and utilities include but are not limited to normal power; emergency power; nurse call; fire alarm; communication and data systems; space-heating systems; process load systems; cooling systems; domestic hot and cold water systems; means of egress systems; fire-suppression systems; building drain and sewer systems; and medical gas systems that support licensed services.

1225.2.1.1 New buildings, additions, alterations and remodels. Services/systems and utilities for new buildings, additions, alterations and remodels shall only originate in, pass through or under structures which are under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD).

1225.2.2 Means of egress for single-story wood frame or light-steel frame skilled nursing facilities and intermediate care facilities. Means of egress for single-story wood frame or light-steel frame skilled nursing facilities and intermediate care facilities shall only pass through buildings that are under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD).

1225.3 Definitions. Refer to Section 1224.3.

1225.4 COMMON ELEMENTS.

1225.4.1 NURSING SERVICE SPACE.

1225.4.1.1 Nurses' station. A nurses' station in freestanding skilled nursing and intermediate-care facilities shall be provided within each nursing unit. Nurses' stations shall be designed to serve no more than 60 beds.

1225.4.1.1.1 Components. Nurses' stations shall be provided with a cabinet, a desk, space for records, a bulletin board, a telephone, a specifically designated, lockable and illuminated medicine storage compartment, and a handwashing fixture. If a separate medicine room is provided, it shall have a lockable door and a sink. This sink cannot replace the required nurses' station handwashing fixture.

1225.4.1.1.2 Size. Nurses' stations serving 25 or less beds shall have a minimum floor area of 100 square feet (9.29 m²). Nurses' stations servicing more than 25 beds shall have a minimum floor area of 125 square feet (11.6 m²). The minimum dimension of any nurses' station shall not be less than 8 feet (2438 mm).

1225.4.1.1.3 Distance. In free-standing skilled nursing and intermediate-care facilities, the distance between the nurses station entrance and the center

Exception: The 150-foot (45,720 mm) limit does not apply to distinct part skilled nursing and intermediate-care services provided as a separate unit in a general acute-care hospital or acute psychiatric hospital.

1225.4.1.2 Room identification. Each patient room shall be labeled with an identification number, letter, or combination of the two.

Exception: Small house skilled nursing facilities.

1225.4.1.3 Utility rooms. Utility rooms shall be provided in each nursing unit. Soiled and clean utility or holding rooms shall be separated and have no direct connection.

1225.4.1.3.1 Clean utility room. If the room is used for preparing patient care items, it shall contain a work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as part of a system for distribution of clean and sterile materials, the work counter and handwashing fixture may be omitted.

1225.4.1.3.2 Soiled workroom or soiled holding room. This room shall be separate from the clean utility room. The soiled workroom/utility room shall contain a clinical sink (or equivalent flushing-rim fixture). The room shall contain a handwashing fixture. The above fixtures shall both have a hot and cold mixing faucet. The room shall have a work counter and space for separate covered containers for soiled linen and waste. Rooms used only for temporary holding of soiled material may omit the clinical sink and work counter. If the flushing-rim clinical sink is eliminated, facilities for cleaning bedpans shall be provided elsewhere.

1225.4.1.4 Visual privacy. A method of assuring visual privacy for each patient shall be provided in patient rooms and in tub, shower and toilet rooms.

1225.4.1.5 Treatment or exam room. If provided, the treatment or exam room shall comply with all of the requirements of Section 1224.4.4.

1225.4.1.6 Toilet room and bath facilities. Separate toilet room facilities shall be provided for the use of patients, staff, and the public. Fixtures serving individual patient rooms shall not be considered as meeting the required ratios for bedrooms not served by individual adjoining toilet room or bathrooms.

1225.4.1.6.1 Grab bars. Each toilet, bathtub and shower serving patients shall be provided with conveniently located grab bars.

1225.4.1.6.2 Toilet rooms. One patient toilet room shall serve no more than two patients. The toilet room shall contain a toilet, a handwashing station, a mirror and individual storage for the personal effects of each patient.

Exception. Where renovation of existing patient rooms is undertaken in facilities built under the 2013, or prior, California Building Code, each

toilet room may continue to serve up to the number of beds previously served, but not more than two patient rooms, or eight beds.

1225.4.1.6.3 Bathroom facilities. Bathtubs or showers shall be provided at a ratio of 1:20 patients, and for each major fraction thereof, with a minimum of one bathtub per floor.

1225.4.1.7 Patient/nurse call system. A patient/nurse call system complying with Section 517.123, California Electrical Code, shall be provided.

1225.4.1.7.1 In small house skilled nursing facilities, visitor toilet room(s) shall be equipped with a nurse call station.

1225.4.1.8 Special-purpose rooms. Special-purpose rooms for the purpose of single-patient occupancy shall be provided at a ratio of one room for every 35 patients or fraction thereof. Airborne infection isolation rooms may be included in determining the number of special-purpose rooms required for the facilities.

Exception: The special-purpose room may be omitted if all patient rooms are single-resident rooms.

1225.4.1.9 Airborne infection isolation rooms. If provided, the airborne infection isolation room shall comply with all of the requirements of Section 1224.14.3.

1225.4.1.10 Protective environment room(s). If provided, the protective environment room shall comply with all of the requirements of Section 1224.14.4.

1225.4.1.11 Quiet room. If a quiet room is provided, the quiet room shall comply with the following requirements.

1225.4.1.11.1 Space requirements. Refer to Section 1225.5.1.2, Nursing service space.

1225.4.1.11.2 Toilet room. Provide a patient toilet room adjacent to the quiet room. The patient toilet room shall not be shared with another patient room. If the quiet room is located in a common area, the patient toilet room may be shared with compatible services or activities.

1225.4.1.11.3 Noise control. The quiet room shall comply with the acoustic requirements of Section 1224.4.19, Noise control.

1225.4.2 DIETETIC SERVICE SPACE.

1225.4.2.1 General. Food service facilities and equipment shall conform with these standards, the standards of the National Sanitation Foundation, and the requirements of the local public health agency.

1225.4.2.1.1 Distribution. Provision(s) shall be made for transport of hot and cold foods as required, appropriate for the type of food service selected.

1225.4.2.1.2 Dining space. Separate dining spaces shall be provided for patients and staff. These spaces shall be separate from the food preparation and distribution areas.

Exception: Shared dining shall be provided for patients and staff in small house skilled nursing facilities.

- 1225.4.2.1.3 Location. The design and location of dining facilities shall encourage patient use.
- 1225.4.2.1.4 Food service. Facilities shall be furnished to provide nourishment and snacks between scheduled meal service.
- 1225.4.2.2 Functional elements. The following facilities, in the size and number appropriate for the type of food service selected, shall be provided:
 - 1225.4.2.2.1 Location. Food-service areas shall be directly accessible to the entry for food supply deliveries and for the removal of kitchen wastes.
 - 1225.4.2.22 Receiving/control stations. A control station shall be provided for the receiving and control of incoming dietary supplies.
 - 1225.4.2.2.3 Food preparation facilities. Food preparation facilities shall be provided to accommodate the method of food preparation required.
 - 1. Conventional food preparation systems require space and equipment for preparing, cooking, and baking.
 - 2. Convenience food service systems using frozen prepared meals, bulk packaged entrees, individual packaged portions, or those using contractual commissary services require space and equipment for thawing, portioning, cooking, and baking.
 - 1225.4.2.2.4 Handwashing stations. Handwashing stations shall be located in the food preparation area.
 - 1225.4.2.2.5 Ice-making facilities. Ice-making facilities may be located in the food preparation area or in a separate room. They shall be easily cleanable and immediately accessible to the dietary function.
 - 1225.4.2.2.6 Assembly and distribution. A patient tray assembly area shall be provided and shall be immediately accessible to the food preparation and distribution areas.
 - 1. If food service carts are utilized, a cart distribution system shall accommodate spaces for storage, loading, distribution, receiving, and sanitizing of the food service carts. Cart circulation shall not be through food preparation areas.
 - 1225.4.2.2.7 Ware-washing facilities. Ware-washing space shall be provided in a room separate from the food preparation and serving area. It shall be designed to prevent contamination of clean wares with soiled wares through cross-traffic. The clean wares shall be transferred for storage or use in the dining area without having to pass through food preparation areas.
 - 1. Commercial-type ware-washing equipment shall be provided.
 - 2. Space shall be provided for receiving, scraping, sorting, and stacking soiled tableware, and for transferring clean tableware to the using areas.
 - 3. Handwashing stations shall be provided in the ware-washing space.

1225.4.2.2.8 Pot-washing facilities. Pot-washing facilities shall include multi-compartmented sinks.

1225.4.2.29 Office space. Office or other space shall be provided for the dietician or dietetic service supervisor.

1225.4.2.2.10 Storage.

1. Food storage space, including cold storage, shall be provided for a supply of food of at least a 7 day staple, 2 day frozen, 2 day perishable, and an emergency food and water supply. All food shall be stored clear of the floor. The lowest shelf shall be not less than 12 inches (305 mm) above the floor or shall be closed in and sealed tight, for ease of cleaning.

As a minimum, dietary storage space shall be provided in accordance with the following schedule:

Licensed Bed Capacity Storage Space 1 to 99 beds 2 square feet (0.19 m^2) per bed 100 to 199 beds 200 square feet $(18.58 \, m^2) \, plus$ 1 square foot $0.0929 \, m^2$) per bed in excess of 100 beds 200 beds and over 300 square feet (27.99 m^2) , plus 1/2 square foot (0.0465 m^2) per bed in excess of 200 beds

Space to allow refrigeration for the storage of frozen and chilled foods shall be provided at a minimum of 2 cubic feet (0.057 m³) of usable space per bed.

- 2. Additional storage space for dietetic service supplies, such as paper products, equipment, tray delivery carts, etc. shall be provided.
- 3. Storage areas and sanitizing facilities for cans, carts, and mobile-tray conveyors shall be provided.
- 4. Waste, storage, and recycling facilities (per local requirements) shall be located in a separate room easily accessible to the outside for direct pickup or disposal.
- 1225.4.2.2.11 Toilet rooms. Toilet rooms shall be provided for the exclusive use of the dietary staff. They shall not open directly into the food preparation areas, but shall be readily accessible.

Exception: Small house skilled nursing facilities utilizing staff trained for dietary and care-giving responsibilities may provide toilet room(s) serving both the dietary and nursing service areas.

1225.4.2.2.12 Lockers. An enclosed, separate area shall be provided for dietetic service employees' clothing and personal belongings.

Exception: Small house skilled nursing facilities utilizing staff trained for dietary and care-giving

responsibilities may provide common locker room(s) serving both the dietary and nursing service areas.

1225.4.2.2.13 Housekeeping room. A housekeeping room meeting the requirements of Section 1224.4.15 shall be located within the dietary department for the exclusive use of the dietary department.

1225.4.2.3 Outside service. On approval of the Licensing Agency, when food is provided by an outside food service, the facility shall maintain adequate space, equipment, and food supplies to accommodate required functional elements listed in Section 1225.4.2.2, as required to provide patient food service in the event that the outside food service is interrupted.

SUPPORT SERVICES

1225.4.3 ADMINISTRATION SPACE.

1225.4.3.1 Administration and public spaces. An administration area shall be provided which shall include space for business, administration, admitting, public toilet room(s), lobby, and public telephone.

1225.4.3.2 Medical record storage. Space shall be provided for the storage of medical records.

1225.4.3.3 Office. An office for the director of nurses shall be provided.

1225.4.3.4 Small house skilled nursing facilities. Small house skilled nursing facility units may provide the administration and public spaces, medical record storage and the nursing director's office in a separate centralized support area attached to the unit(s) or detached in a separate building in close proximity to the unit(s), as a part of the small house skilled nursing facility. This building shall be under OSHPD jurisdiction.

1225.4.4 STERILE SUPPLIES.

1225.4.4.1 Storage. Each facility shall provide space for the storage of disposable sterile supplies or provide space for sterilization and disinfection equipment.

Exception: Facilities with contractual arrangements for outside autoclaving and sterilizing services.

1225.4.4.2 Central sterile supply. If provided, shall accommodate the following:

1225.4.4.2.1 Minimum requirements. A central supply and sterilizing area shall be provided. Rooms and spaces shall accommodate the following services and equipment:

- 1. Soiled work area. A receiving and gross cleaning area which shall contain work space and equipment for cleaning medical and surgical equipment and for disposal of or processing of soiled material.
- 2. Clean work area. A clean work area which shall contain work space and equipment for sterilizing medical and surgical equipment and supplies.
- 3. Sterilizing space.
- 4. Storage. Space for sterile supplies and unsterile supplies.

1225.4.4.2.2 Sterilizers. All sterilizers and autoclaves which emit steam exhaust shall be vented to the outside of the building. Such vents shall be independent from the plumbing vent system.

Exception: Small instrument sterilizers.

1225.4.5 STORAGE.

1225.4.5.1 Required areas. Facilities shall provide combined general and specialized storage in accordance with the following schedule:

Licensed Bed Capacity	Storage Area
1 to 10 beds	120 square feet (11.15 m²) minimum
11 to 100 beds	12 square feet (1.11 m²) per bed
Over 100 beds	1,200 square feet (111.48 m²) plus 5 square feet (0.46 m²) per bed for each bed over 100

1225.4.5.2 Specialized storage. Shall include those spaces identified in the dietetic food storage of Section 1225.4.2.2.10 and as follows:

1225.4.5.2.1 Linen. Separate and enclosed facilities for clean and soiled linen in each nursing unit. The clean linen storage space shall have a minimum area of 10 square feet (0.93 m^2) and may be within the clean utility room. The soiled linen collection space shall have an area of no less than 10 square feet (0.93 m^2) , except where linen chutes are provided, and may be within the soiled utility room.

1225.4.5.2.2 Supply. One supply storage space having a minimum area of 15 square feet (1.39 m²) shall be provided in each nursing unit. Supply storage may be within the clean utility room used only as part of a system for distributing clean and sterile supplies.

1225.4.5.2.3 Wheelchairs. A room or space shall be provided in each nursing unit for wheelchairs and stretchers. The wheelchair and stretcher space shall have a minimum area of 15 square feet (1.39 m^2) .

1225.4.5.2.4 Separate supplies. Sterile and unsterile supplies shall be stored separately.

1225.4.5.2.5 Location. All storage spaces shall be readily accessible in the licensed facility.

1225.4.6 HOUSEKEEPING ROOMS. Housekeeping rooms shall be provided to serve each department and nursing unit, and may be shared by compatible departments, except when specifically required by other sections.

1225.4.7 LAUNDRY. If a laundry is to be provided, the following is required in addition to the laundry room:

- 1. A separate soiled linen receiving, holding and sorting room with handwashing fixture.
- 2. A separate clean linen storage, issuing and holding room.

679

3. Storage for laundry supplies.

1225.4.7.1 Outside service. If linen is processed off site, the following shall be provided within the facility:

- 1. A soiled linen holding room.
- 2. A separate clean linen receiving and storage room.

1225.4.8 EMPLOYEE DRESSING ROOMS AND LOCK-ERS. Separate dressing rooms with toilet(s), lavatories, and lockers for male and female personnel shall be provided.

Exception: Small house skilled nursing facilities, with a peak shift of less than five staff, may provide a single toilet room serving both male and female personnel in compliance with the California Plumbing Code Table 4-3, footnote 7.

1225.5 SKILLED NURSING UNIT MODELS. The requirements of the Medical Model or the Household Model shall apply to the Nursing Unit(s) in its entirety.

1225.5.1 MEDICAL MODEL.

1225.5.1.1 General construction. Skilled nursing and intermediate-care facilities shall comply with Sections 1224.4 through 1224.13 whenever applicable.

1225.5.1.2 NURSING SERVICE SPACE.

- 1225.5.1.2.1 Patient bedrooms. Patients shall be accommodated only in rooms with the following minimum floor area, exclusive of toilet rooms, wardrobes, entrance vestibules, and fixed furnishings or equipment.
 - 1. Single-patient rooms: 110 square feet (10.21 m²).
 - 2. Multi-patient rooms: 80 square feet (7.43 m²) per bed.
- 1225.5.1.2.2 Bed clearance. The dimensions and arrangement shall be such that there is a minimum distance of 3 feet (914 mm) between the sides and foot of the beds and any wall or any other fixed obstruction. In multiple-bed rooms, in addition to the above, a minimum clearance of 3 feet (914 mm) shall be provided between beds and a clearance of 4 feet (1219 mm) shall be available at the foot of each bed to permit the passage of equipment and beds.
- 1225.5.1.2.3 Patient room beds. Patient rooms shall be of such shape and dimensions to allow for the performance of routine functions, including the easy transfer of patients to and from bed to wheelchair or wheeled stretcher. Patient rooms shall provide direct access to a toilet room without entering or passing through a patient bed area. Maximum occupancy shall be two patients per patient room.

Exception: Where renovation of existing individual patient rooms is undertaken in facilities built under the 2013, or prior, California Building Code, maximum room capacity shall be no more than the present capacity, to a maximum of four patients per patient room. Placement of beds shall not be more than three deep from the exterior window.

1225.5.1.2.4 Outside exposure. Each patient bed area shall have an outside exposure and shall not be below ground level. The window or glazed opening shall provide an unobstructed view from the head of each patient bed to the outdoors and shall be accessible to approach using a wheelchair or other patient-operated mobility device.

1225.5.1.2.5 Patient storage. Each patient room shall be provided with wardrobe or locker spaces for clothing, toilet articles, or other personal belongings for each patient.

Exception: Pediatric and psychiatric patient rooms.

1225.5.1.2.6 Patient toilet room. Each patient shall have direct access to a toilet room without entering a general corridor or patient bed area in a shared patient room.

1225.5.1.3 PHARMACEUTICAL SERVICE SPACE.

1225.5.1.3.1 Drug space and storage. Adequate space shall be provided at each nursing station for the storage of drugs and preparation of medication doses.

1225.5.1.3.2 Drug access. All spaces and areas used for the storage of drugs shall be lockable and accessible to authorized personnel only.

1225.5.1.3.3 Narcotics. Specific space shall be designed for safe storage of narcotics and other dangerous drugs.

1225.5.1.3.4 Drug refrigeration. Facilities shall provide for storage of drugs requiring refrigeration.

1225.5.1.3.5 Pharmacy. The pharmacy shall not serve the general public unless a separate public entrance or a separate public serving window is utilized.

1225.5.1.4 ACTIVITY PROGRAMMING SPACE. Designated activity areas appropriate to independent and group needs of patients shall be provided as follows:

1225.5.1.4.1 Skilled nursing facilities.

- 1. Recreation room. Each floor of each building accommodating six or more patients shall be provided with a recreation room with a minimum of 100 square feet (9.29 m²).
- 2. Recreation and dining. A minimum of 100 square feet (9.29 m²) plus 12 square feet (1.11 m²) per bed shall be provided for recreation and dining activities.

1225.5.1.4.2 Intermediate-care facilities.

- 1. Recreation room. Each floor of each building accommodating five or more patients shall be provided with a recreation room with a minimum of 150 square feet (13.94 m²).
- 2. Recreation and dining. A minimum of 30 square feet (2.79 m²) per bed for recreation and dining activities.
- 3. Outdoor space for activities and recreation.

1225.5.1.4.3 Equipment and supplies. Recreation and dining spaces shall be provided with space to store equipment and supplies.

1225.5.2 HOUSEHOLD MODEL.

1225.5.2.1 General construction. Skilled nursing and intermediate-care facilities and small house skilled nursing facilities shall comply with Sections 1224.4 through 1224.13 whenever applicable, and the following sections:

1225.5.2.1.1 Door thresholds. Door thresholds, except where required at exterior doors and expansion joint covers, shall be designed to facilitate use of wheelchairs and carts and to prevent tripping, and shall provide a smooth and level transition from surface-to-surface.

1225.5.2.1.2 Seating area. A seating area(s) located out of the required egress width shall be provided along the access corridor that is used by patients.

1225.5.2.1.3 Towel bars. Towel bars shall be provided at each bathing facility.

1225.5.2.1.4 Hardware. All patient use plumbing fixtures and door operating hardware shall be equipped with lever type hardware for easy gripping and turning.

1225.5.2.1.5 Drinking fountain. A minimum of one drinking fountain shall be provided per resident floor, unless drinking water is available from the resident dietary area.

1225.5.2.2 Cluster/household unit and resident unit.

1225.5.2.2.1 Design. Each resident unit shall consist of the resident rooms, resident support areas, and resident living areas. The unit shall be designed as a cluster/household resident unit or as a resident unit with double or single loaded access corridors. If the cluster/household unit design is utilized, it shall be designed around resident support and living areas with a maximum of 20 patients per cluster/household unit. If the double or single loaded corridor resident unit design is utilized, the access corridor shall be designed so that travel distance from the entrance of the resident unit to the furthest resident room door is no more than 60 feet (18.29 m) without a change of corridor direction or a node for a resident sitting area.

Exception: Small house skilled nursing facilities are limited to household units with a maximum of 12 patients per unit. Small house household units may also be developed as individual, free-standing facilities.

1225.5.2.2 Arrangement. Each resident unit shall be arranged to avoid unnecessary and unrelated travel through the unit.

1225.5.2.3 Distinct parts or neighborhoods. Both the cluster/household unit and resident unit designs may be grouped into distinct parts or neighborhoods to a maximum of 60 patients. These distinct parts or neighborhoods composed of the resident unit(s) as described in Section 1225.5.2.2.1 may share the functional requirements of the resident support areas as described in Sections 1225.5.2.4 and 1225.5.2.5 of this code.

1225.5.2.3 Resident room.

1225.5.2.3.1 Capacity. In new construction and additions, the maximum room capacity shall be two patients. Resident sleeping areas in all double resident room designs shall be visually separated from each other by a full height wall or a permanently installed sliding or folding door or partition, and shall provide each patient direct use of and direct access to an exterior window at all times. Walls, doors, or partitions used to separate resident beds shall provide visual and acoustical separation. A door leading to each resident bed area in addition to the corridor door is not required. Other resident room arrangements where a permanent partition or door is not used to separate the resident sleeping areas may be utilized if adequate visual separation such as a cubicle curtain(s) and an exterior window for each individual resident sleeping area is provided. In this case individual thermostats for the resident bed areas shall not be required.

Exception: In small house skilled nursing facilities, resident sleeping areas in all double-resident room designs shall be visually separated from each other by a full-height wall or a permanently installed sliding or folding door or partition, and shall provide each patient direct use of and direct access to an exterior window at all times. Walls, doors, or partitions used to separate resident beds shall provide visual and acoustical separation.

1225.5.2.3.2 Renovation. Where renovation work is undertaken of the resident room that alters the physical configuration of the resident room and the present capacity is more than two patients, the maximum room capacity shall be no more than two patients at the conclusion of the renovation.

1225.5.2.3.3 Space requirements. Rooms shall have a minimum of 100 square feet (9.29 m²) of clear floor area per bed in double resident rooms and 120 square feet (11.15 m²) of clear floor area in single resident rooms, exclusive of the space consumed by toilet rooms, closets, lockers, wardrobes, lavatories, alcoves, and door swings into the room or entrance vestibules, whichever is greater. For the purpose of minimum clear floor area, the entrance vestibule is defined as that floor area located between the room entrance door and the room floor area containing the resident bed(s).

1225.5.2.3.4 Arrangement. Dimensions and arrangement of resident rooms shall be designed to accommodate at least two bed positions to provide patient choice of bed placement. All such bed positions shall be designed so that the bed will not obstruct access to the supporting utilities serving the bed, such as the nurse call station, and the required electrical outlets that provide service for that bed.

681

Only one bed position design shall be required for a bed that is equipped with a piped medical gas headwall unit, unless special requirements such as providing care for bariatric patients does permit the design of two bed positions in the room.

1225.5.2.3.5 Clearance. A 3 feet (0.91 m) wide clear access to each bed shall be provided along at least 75 percent of the length of one side of the bed and shall be designed to allow access for the use of a wheelchair and other portable equipment. For beds equipped with a piped-in medical gas headwall unit, there shall be a minimum of 3 feet (0.91 m) between the sides and foot of the bed and any wall or any other fixed obstruction. For planning purposes, a full-size bed is assumed to be 3 feet 6 inches (1.07 m) wide by 8 feet (2.43 m) long.

1225.5.2.3.6 Renovations. For renovations that alter the physical configuration of the resident room but have existing structural limitations that require two resident beds to be located in a shared resident sleeping area, there shall be a minimum of 3 feet (0.91 m) between the sides and foot of the bed and the adjacent bed. If one bed must be located to the side of the other bed, there shall be a clearance of 4 feet (1.22 m) to any fixed obstruction available at the foot of this bed to permit the passage of equipment and bed without moving the resident's bed located nearest to the room door.

Exception: In small house skilled nursing facilities, two beds shall not be permitted in a shared resident sleeping area.

1225.5.2.3.7 Resident toilet or bath room. Each patient shall have access to a toilet room without having to enter the general corridor area or the resident bed area in a shared resident room. One toilet room shall serve no more than two patients and no more than two resident rooms. The door to the toilet room shall be side hinged and either swing out from the toilet room, or be equipped with emergency release hardware. Sliding doors equipped with sliding door hardware located on the resident room side of the wall and not equipped with a bottom door track shall be permitted. If a sliding door is used in a resident toilet or bath room, a D-shaped handle at least 4 inches (10.16 cm) long shall be provided to open the door. The sliding door shall permit access, and negate the need to push against a patient who may have collapsed within the toilet room. Unless otherwise required by this code, this door shall be at least 36 inches (914.4 mm) wide. A lavatory shall be provided in each resident toilet room.

1225.5.2.3.8 Wardrobe closet. Each resident room shall be provided with a wardrobe or closet for each patient. Each wardrobe or closet shall have minimum inside dimensions of 2 feet (0.61 m) in depth by 1 foot 8 inches (0.51 m) in width. Each shall be accessible to the patient at all times and shall have adjustable shelf(s) and an adjustable clothes rod that is adjustable in at most 4 inches (10.16 cm) increments from 4 feet (1.22 m) to 5 feet 8 inches (1.73 m) above finished

floor or higher as closet size permits. When the wardrobe or closet is designed to meet the requirements for accessibility per Chapter 11B of this code, it shall include additional accessible storage area(s) for fulllength garments. The shelf may be omitted if the clothing unit provides at least two drawers. Locked storage for personal items shall be provided within the resident sleeping room or area.

1225.5.2.4 Resident support area.

1225.5.2.4.1 Features and arrangement. Size and features of each resident support area will depend upon the number and type of patients served. The resident support area may be arranged and located to serve more than one resident unit, but at least one such support area shall be provided on each resident floor. The following resident support areas shall be located in or be readily accessible to each resident unit

1225.5.2.4.2 Staff work area. A centralized staff work area shall be provided. It shall have space for supervisory administrative work activities, charting, and storage. In each resident unit, the functions of administrative work, charting and storage may be located among several separate direct care staff work areas. In this case, a centralized staff work area is not required.

1225.5.2.4.3 Clean utility. A clean utility or clean holding room for storage and distribution of clean supply materials shall be provided. If the room is used for preparing patient care items, it shall contain a work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as a part of a system for distribution of clean and sterile supply materials, the work counter and handwashing fixture requirements may be omitted. The minimum size of the room shall be 15 square feet (1.39 m²) with 1 square foot (0.092 m²) of additional space provided per patient for over 15 patients and may be allocated among several clean utility or clean holding rooms or closets.

1225.5.2.4.4 Soiled utility. A soiled utility or soiled holding room(s) shall be provided. The soiled utility function shall be comprised of a flushing rim clinical service sink or other appropriate flushing fixture, with bedpan rinsing device, soiled linen receptacles, waste receptacles and a work counter with a usable minimum work surface area of 6 square feet (0.56 m²). The total minimum size of the room shall be 20 square feet (1.86 m²) with 1.5 square feet (0.140 m²) of additional space provided per patient for over 15 patients and may be allocated among several soiled utility or soiled holding rooms. Rooms used only for the holding of soiled materials need contain only a handwashing fixture.

1225.5.2.4.5 Medicine preparation. A medicine preparation room or a self contained medicine dispensing unit shall be provided for the provision of medication distribution. The self-contained medicine dispensing unit shall be under the visual con-

trol of the staff. If a medicine preparation room is utilized, it shall be equipped with a lockable door, have a minimum area of 50 square feet (4.65 m^2) and shall contain a refrigerator, locked storage for controlled drugs, a handwashing fixture, and a work counter with a minimum of 6 square feet (0.56 m^2) of work surface. If a self-contained medicine dispensing unit is utilized, it may be located at the nurses' station, in the clean utility room, in an alcove, or in other spaces convenient for staff control provided the area occupied by the unit does not encroach upon required minimum areas. The dispensing unit may be used in a medicine preparation room as locked storage for controlled drugs within the minimum area of 50 square feet (4.65 m²), however, the standard "cup sinks" provided in many self-contained units shall not be a substitute for the required handwashing fixture. If there is no linen storage in the clean utility room, medicine preparation may be part of the clean utility room in which case an additional 20 square feet (1.8 m²) dedicated for this purpose shall be required. A refrigerator shall also be required if medicine preparation is included in this room. Non-controlled prescription drugs may be stored inside the resident's sleeping room or toilet room if they are secured inside of an automatic closing and automatic locking dispensing unit that is secured in place.

1225.5.2.4.5.1. In small house skilled nursing facilities, if self-contained medicine dispensing units are provided, they shall be located in either a medication preparation room or a clean utility room.

1225.5.2.4.6 Equipment storage. An equipment storage room(s) shall be provided for storage of resident unit equipment. The minimum area required shall be equal to 2 square feet (0.19 m^2) for each patient with no room being less than 20 square feet (1.86 m^2) in area.

1225.5.2.4.7 Housekeeping room. A housekeeping room(s) shall be provided for storage and use of housekeeping supplies and equipment.

1225.5.2.4.8 Clean linen room. A clean linen storage room, closet, or area shall be provided. This area may be located within the clean utility or clean holding room and shall be large enough to accommodate the storage of linen carts.

1225.5.2.4.9 Nourishment room. A nourishment room or area for serving nourishments between meals shall be provided and shall contain a work counter, refrigerator, storage cabinets, and sink. Ice for patients' consumption shall be provided by an icemaker unit that may serve more than one nourishment station if the nourishment stations are in close proximity to each other. Where the icemaker unit is accessible to patients or the public, it shall be a self-dispensing type. The nourishment room shall include space for trays and dishes used for non-scheduled meal service. A handwashing fixture shall

be in or immediately accessible from the nourishment room.

1225.5.2.4.9.1 In small house skilled nursing facilities, the nourishment area may be provided as part of the resident dietary area required under Section 1225.5.2.5.4.

1225.5.2.4.10 Storage alcove. A storage alcove space for a wheelchair(s) shall be provided in an area located out of the required means of exit access.

1225.5.2.4.11 Resident bathing facilities. Resident bathing facilities shall be provided with a minimum of one bathtub or one hydro tub per resident unit, or one shower for every 20 patients and for each major fraction thereof not otherwise served by bathing facilities in resident rooms. When centralized bathing is provided, patients shall have access to at least one bathing room per floor or unit sized to permit assisted bathing in a tub or shower in that resident unit. The bathtub in this room shall be accessible to patients in wheelchairs and the shower shall accommodate a shower chair. Other tubs or showers shall be in individual rooms or curtained enclosures with space for private use of the bathing fixture, for drying and dressing, and access to a grooming location containing a sink, mirror, and counter or shelf. A separate private toilet shall be provided that is directly accessible to each multi-bathing fixture central bathing area without requiring entry into the general corridor. This toilet may also serve as a toilet training facility. This centralized bathing area shall comply with Chapter 11B of this code.

1225.5.2.4.12 Private bathing. All showers located in bathrooms connected directly to the resident room shall be designed so that a shower chair can be easily rolled over the threshold. Resident rooms and associated toilet rooms, required to be accessible, shall comply with Chapter 11B of this code.

1225.5.2.5 Resident living area.

1225.5.2.5.1 Dining. Dining, lounges, and recreation and social areas for patients shall be provided in each resident unit. The total area of these spaces shall be a minimum of 35 square feet (3.25 m²) per patient with a minimum total area of 225 square feet (20.90 m²). At least 20 square feet (1.86 m²) per patient shall be available for dining. Storage for supplies and equipment shall be provided in the recreation area.

1225.5.2.5.2 Outdoor area. Outdoor area(s) shall be provided for the use of all patients and shall include walking paths of durable materials, benches, shaded areas, and visual focusing element(s) such as landscaping, sculpture(s), or fountain(s). Security fencing if used shall be of a residential design and provide some visual connection to the exterior of the secured area. If an exterior visual connection is not possible or desirable, then

683

the interior of the outside area shall be landscaped to be visually interesting.

1225.5.2.5.3 Storage. Storage for supplies, patient needs, and recreation shall be provided. The minimum required area shall be 5 square feet (0.46 m^2) per bed up to 600 square feet (55.74 m^2) .

1225.5.2.5.4 Dietary area. A resident dietary area shall be provided in the resident unit for the use of staff, patients, and family. The resident dietary area may include cooking equipment, counter tops, kitchen sink, and storage areas. This dietary area is in addition to the dietetic service space requirements in Section 1225.4.2.

1225.5.2.5.4.1 Food preparation spaces in the resident dietary area in a small house skilled nursing facility shall be designed to accommodate the method of food preparation required. The California Department of Public Health, Licensing and Certification shall review proposed food services spaces at a preliminary stage of plan review.

1225.5.2.5.4.2. The resident dietary area in a small house skilled nursing facility shall provide a handwashing fixture. This handwashing fixture shall be in addition to the kitchen sink and shall be located in or immediately accessible to the resident kitchen facilities.

1225.5.2.5.4.3 When provided, the resident dietary area in a small house skilled nursing facility shall have a commercial ware-washing space meeting the requirements for the care model used. This space shall be designed to prevent cross contamination by providing area for receiving, scraping, sorting, and stacking soiled tableware and for transferring clean tableware to point-of-use areas.

1225.5.2.5.4.4 The resident dietary area in a small house skilled nursing facility shall provide access to self-dispensing drinking water and self-dispensing ice.

- (a) Ice-making equipment shall be accessible to residents and visitors
- (b) Ice-making equipment shall be located, designed, and installed to minimize noise.
- (c) Ice-making equipment shall be permitted to serve more than one food area within resident kitchen facilities.

1225.5.2.5.5 Therapy unit. If provided, physical, speech, and occupational therapy units shall comply with Sections 1225.6.2 through 1225.6.4.

1225.5.2.5.6 Barber/beauty room. If provided, the barber/beauty room shall be a minimum of 120 square feet (11.15 m^2) with the least dimension of 10 feet (3.05 m).

1225.5.2.5.7 Resident laundry facilities. If provided, resident laundry facilities including washing

and drying equipment may be provided for staff, family, or individual patient use for the laundering of patient's personal items. If provided they shall be readily accessible from each resident unit without requiring the user to enter another resident unit or floor, and may be shared between two resident units. These resident laundry facilities may utilize residential laundry equipment. Each resident laundry area shall contain a handwashing fixture.

1225.5.2.6 STAFF SUPPORT AREA.

1225.5.2.6.1 Staff lounge. Staff lounge area(s) shall be provided. It may be shared by multiple resident units if the lounge is located so it is accessible without requiring the user to enter into or through any other resident unit.

1225.5.2.6.2 Storage. Lockable closets, drawers, or compartments shall be provided on the resident unit for staff and may be located in the lounge for safe-keeping of staff's personal effects.

1225.5.2.6.3 Staff toilet rooms. Staff toilet rooms shall be readily accessible to each resident unit.

1225.5.2.6.4 Multipurpose room. At least one multipurpose room per skilled nursing facility shall be provided for conferences, meetings, and health education purposes, and shall accommodate the use of visual aids. This room shall have a minimum area of 120 square feet (11.15 m²).

1225.5.2.6.5 Conference room. Conference or consultation room for patient and family use shall be provided and may be shared by more than two resident units if it is centrally located to each.

1225.6 OPTIONAL SERVICES.

1225.6.1 General. Waiting areas and access to optional services for outpatients shall accommodate the following:

1225.6.1.1 Outpatient waiting rooms. Waiting rooms for outpatients shall provide a seating area and space for wheelchairs, and have public corridor access to, or provisions for, public toilet room(s), drinking fountain, and telephone.

Note: One waiting area may serve more than one department or service.

1225.6.1.2 Circulation. If x-ray examinations are to be performed on outpatients, outpatient access to the radiological spaces shall not traverse a nursing unit.

Exception: Satellite radiology, laboratory, pharmacy, and physical and occupational therapy space serving inpatients may be located in nursing units and inpatient treatment areas.

1225.6.2 PHYSICAL THERAPY SERVICE. Refer to Section 1224.35.2.

1225.6.3 OCCUPATIONAL THERAPY SERVICE. Refer to Section 1224.35.3.

1225.6.4 SPEECH PATHOLOGY AND/OR AUDIOL-OGY SERVICE. At least one space free of ambient noise shall be provided. A handwashing fixture shall be provided.



1225.6.5 SOCIAL WORK SERVICE. Office space for privacy in interviewing, telephoning, and conferences shall be provided.

1225.6.6 SPECIAL TREATMENT PROGRAM SER-VICE. Refer to California Administrative Code (Part 1 of Title 24), Section 7-119, Functional Program, for requirements. Projects associated with Special Treatment Program Services in skilled nursing and intermediate-care facilities shall include a Patient Safety Risk Assessment.

1225.6.6.1 Location. A special treatment program service providing therapeutic services to an identified mentally disordered population group shall be located in a distinct separate unit of the facility.

1225.6.6.2 *Nursing service.* The nursing service space shall comply with Section 1225.4.1.

1225.6.6.3 Activity program. The activity program space shall provide a minimum of 25 square feet (2.3 m^2) of dining and recreation space per bed.

1225.6.6.4 Indoor and outdoor space. Shall be designated for the special treatment program.

SECTION 1226 [OSHPD 3] CLINICS

1226.1 Scope. The provisions of this section shall apply to outpatient clinical services of a hospital when provided in a freestanding building, primary care clinics, specialty clinics, and psychology clinics. Primary care clinics include free clinics, community clinics, employee clinics and optometric clinics. Specialty clinics include surgical clinics, chronic dialysis clinics, rehabilitation clinics and alternative birth centers (ABC).

1226.2 Application. All new buildings and additions, alterations or repairs to existing buildings, and conversion of space to a clinic use within existing buildings, subject to licensure by Licensing and Certification, California Department of Public Health, shall comply with applicable provisions of the California Electrical Code, California Mechanical Code, California Plumbing Code, California Fire Code, (Parts 3, 4, 5, and 9 of Title 24) and this section. OSHPD requirements apply to all facilities described above and are not dependent upon Occupancy Group designations.

Exception: See Section 1224.2.

1226.2.1 Outpatient clinical services. Hospitals providing outpatient clinical services and clinics licensed under Health and Safety Code Section 1200 providing services that are not covered by this section shall meet the applicable requirements in Section 1224.

1226.2.2 Special services. A general acute care hospital referenced in Health and Safety Code Section 1255 (d) (3) (E), that provides special services in conformance with Health and Safety Code Section 1255, shall meet all the provisions of Section 1224.28.3 in addition to Section 1226.2. The Office of Statewide Health Planning and Development (OSHPD) shall review any proposed construction or alteration for OSHPD compliance.

1226.3 Definitions. Refer to Section 1224.3.

1226.4 General construction. Clinics and outpatient clinical services under a hospital license shall comply with the following provisions wherever applicable.

1226.4.1 Examination and treatment areas.

1226.4.1.1 Service spaces. Refer to Section 1224.4.2.

1226.4.1.2 Treatment spaces. Refer to Section 1224.4.3.

1226.4.1.3 Examination or treatment room. Refer to Section 1224.4.4.1.

1226.4.1.4 Airborne infection isolation exam/treatment room. Refer to Section 1224.4.4.1.3.

1226.4.2 Miscellaneous requirements.

1226.4.2.1 Station outlets. When provided, refer to Section 1224.4.6.1.

1226.4.2.2 Gas and vacuum systems. When provided refer to Section 1224.4.6.2.

1226.4.2.3 Hyberbaric facilities. When provided, refer to Section 1224.4.6.3.

1226.4.2.4 Laboratories. Refer to Section 1224.4.6.4.

1226.4.2.5 *Nurse call systems. Refer to Section* 1224.4.6.5.

1226.4.3 Corridors.

1226.4.3.1 Outpatient services. Refer to Section 1224.4.7.3

1226.4.3.2 Corridor width. For clinics with bed/gurney patient(s) refer to Section 1224.4.7.1.

1226.4.3.3 Light traffic. Refer Section 1224.4.7.2.

1226.4.3.4 Handrails. For rehabilitation services space, refer to Section 1224.4.7.4.

1226.4.3.5 Connections. Refer to Section 1224.4.7.5.

1226.4.4 Doors and door openings.

1226.4.4.1 Toilet room doors. Refer to Section 1224.4.8.1.

1226.4.4.2 Pocket doors. Refer to Section 1224.4.8.2.

1226.4.5 Windows.

1226.4.5.1 Window screens. Refer to Section 1224.4.9.4.

1226.4.5.2 Light and ventilation. Refer to Section 1224.4.9.5.

1226.4.6 Ceiling heights.

1226.4.6.1 Minimum height. For minimum ceiling height requirements, refer to Section 1224.4.10.1.

1226.4.6.2 Minimum height with fixed ceiling equipment. Refer to Section 1224.4.10.2.

1226.4.7 Interior finishes.

1226.4.7.1 Floor finishes. Refer to Section 1224.4.11.1 and Table 1224.4.11.

1226.4.7.1.1 Coved base. Refer to Section 1224.4.11.1.1.

685

1226.4.7.1.2 Wet cleaning. Refer to Section 1224.4.11.1.3.

1226.4.7.1.3 Airborne infection isolation exam/ treatment room. Refer to Section 1224.11.1.4.

1226.4.7.2 Wall bases.

1226.4.7.2.1 Material. Refer to Section 1224.4.11.2.1.

1226.4.7.2.2 Wet cleaning. Refer to Section 1224.4.11.2.2.

1226.4.7.3 Wall finishes. Refer to Section 1224.4.11.3.

1226.4.7.4 Ceilings. Ceiling finishes shall comply with Section 1224.4.11.4 and Table 1224.4.11.

1226.4.8 Elevators.

1226.4.8.1 Elevator cab requirements. Buildings over one story in height with accommodations or services for patients on floors without grade-level entrance shall provide at least one elevator in compliance with Section 3002.4.

1226.4.8.2 Dimensions. Elevators used for the routine transport of wheeled stretchers shall have minimum inside platform dimensions of 5 feet by 8 feet (1524 mm by 2438 mm) and a minimum clear door opening of 3 feet 8 inches (1118 mm).

1226.4.9 Garbage, solid waste, medical waste and trash storage. These facilities shall comply with the appropriate local health and environmental authorities' requirements, California Department of Public Health requirements for medical waste management, and comply with the following minimum requirements:

1226.4.9.1 Location. A location shall be provided for waste collection and storage with sufficient space based upon the volume of projected waste and length of anticipated storage. The location of compactors, balers, sharps containers, and recycling container staging at docks or other waste removal areas shall comply with Section 1224.4.2.

1226.4.9.2 Enclosure. A lockable room or screened enclosure of at least 25 square feet (2.32 m²) shall be provided for the washing and cleaning of garbage containers and for the storage of garbage, trash and other solid wastes.

Exception: This amount of space may not be required by the enforcing agency if there is a proposed method of handling and storage which requires a lesser amount of space. Additional space may be required by the enforcing agency when special operations or collection and disposal methods result in greater than usual accumulation of solid wastes.

The room or screened enclosure shall include the following:

- 1. **Floor and curb.** A concrete floor with a curb and with a drain connected to the sewer.
- 2. Water. Steam or hot water and cold water supplies in accordance with the California Plumbing Code.

3. Size. A minimum floor area of not less than 25 square feet (2.32 m²), the least dimension of which shall be 4 feet (1219 mm). This amount of space may not be required by the enforcing agency if there is proposed a method of handling, storage, or cleaning of containers which requires a lesser amount of space. Additional space may be required by the enforcing agency when special operations or collection and disposal methods result in greater than usual accumulation of solid wastes.

1226.4.9.3 Waste holding room. As an alternative to the requirements in Section 1226.4.9.2, a holding room for medical waste and garbage may be provided.

Exception: This amount of space may not be required by the enforcing agency if there is a proposed method of handling and storage which requires a lesser amount of space. Additional space may be required by the enforcing agency when special operations or collection and disposal methods result in greater than usual accumulation of solid wastes.

The waste holding room shall comply with the following:

- 1. The waste holding room shall be a minimum of 25 square feet, with the least dimension of which is 4 feet.
- 2. The waste holding room shall have 100 percent exhaust ventilation.
- 3. All finishes in the waste holding room shall comply with the requirements in Section 1224.4.11.
- 4. The waste holding room shall be immediately accessible to an exterior door.

1226.4.10 Compactors. Trash compactor systems shall meet the drainage and wash-down requirements under Section 1226.4.9.2, Items 1 and 2.

Exception: If a dumpster system is proposed, operational procedures for handling and storage must be specifically approved by the local health officials.

1226.4.11 Housekeeping room. Refer to Section 1224.4.15.

1226.4.12 Laundry and trash chutes. Gravity-type laundry and trash chutes shall comply with Section 1224.4.16.

1226.4.13 Support areas for examination and treatment rooms.

1226.4.13.1 Administrative center(s) or nurse station(s). This area shall have space for counters and storage and shall have direct access to a handwashing stations (refer to Section 1224.3 for definition of handwashing station). It may be combined with or include centers for reception, charting and communication.

1226.4.13.2 Medication station. Provision shall be made for distribution of medications. This shall be

done from a medicine preparation room or a selfcontained medicine dispensing unit.

1226.4.13.2.1 Medicine preparation room or area. When provided, the entry of the medicine preparation room or area shall be under the visual control of the staff. This may be a part of the administrative center or nurse station and shall include all of the following:

- 1. Work counter
- 2. Sink
- 3. Lockable refrigerator
- 4. Immediate access to handwashing station
- 5. Locked storage for biologicals and drugs

When a medicine preparation room or area is to be used to store self-contained medicine dispensing units, the room shall be designed with adequate space to prepare medicines with the self-contained medicine-dispensing units present.

1226.4.13.2.2 Self-contained medicine-dispensing unit. When provided, the location of a self-contained medicine-dispensing unit shall be permitted in the clean workroom or at the administrative center or nurses' station, provided there is adequate security for medications and adequate lighting to easily identify drugs. Immediate access to a handwashing station shall be provided.

1226.4.13.3 Clean utility room. A clean utility room shall be provided. If the room is used for preparing patient care items, it shall contain:

- 1. Work counter
- 2. Handwashing fixture
- 3. Storage facilities for clean and sterile supplies

If the room is used only for storage and holding as part of a system for distribution of clean and sterile materials, the work counter and handwashing fixture may be omitted. Soiled and clean utility rooms or holding rooms shall be separated and have no direct connection.

1226.4.13.4 Soiled workroom or soiled holding room. Soiled workroom or soiled holding room shall be provided and contain:

1. Clinic sink

Exception: For primary care clinics, a utility sink or patient toilet room equipped with a bedpan flushing device may be provided in lieu of a clinic sink. A utility sink may be used for soaking or rinsing and shall be provided as appropriate to the method of decontamination used.

- 2. Handwashing fixture
- 3. Work counter
- 4. Storage cabinets
- 5. A designated area for waste receptacle(s)

6. A designated area for soiled linen receptacle(s)

If the clinic includes a central sterile supply that complies with Section 1224.22 and the soiled holding room is used only for temporary holding of soiled materials, the clinic sink and work counter may be omitted. Where rooms are used for temporary holding of materials, provisions shall be made for separate collection, storage, and disposal of soiled materials. Soiled and clean utility rooms or holding rooms shall be separated and have no direct connection.

1226.4.13.5 Sterile and pharmaceutical supply storage. Separate storage for sterile supplies and pharmaceutical supplies shall be provided.

1226.4.13.6 Sterilization facilities. When provided, a sterilization facility shall meet the following applicable requirements:

1226.4.13.6.1 Storage. Each facility shall provide space for the storage of disposable sterile supplies or provide space for sterilization and disinfection equipment.

Exception: Facilities with contractual arrangements for outside autoclaving and sterilizing services

1226.4.13.6.2 Central sterile supply and sterilizing area. When provided, rooms and spaces of the central supply and sterilizing area shall comply with the following:

- 1. Soiled work area. A receiving and gross cleaning area which shall contain work space and equipment for cleaning medical and surgical equipment and for disposal of or processing of soiled materials.
- 2. Clean work area. A clean work area which shall contain work space and equipment for sterilizing medical and surgical equipment and supplies.
- 3. Sterilizing and equipment disinfection space.
- 4. **Storage.** Space for sterile supplies and unsterile supplies.

1226.4.13.6.3 Sterilizers. When provided, all sterilizers and autoclaves which emit system steam exhaust shall be vented to the outside of the building. Such vents shall be independent from the plumbing vent system.

Exception: Small instrument sterilizers.

1226.4.13.7 Nourishment room. When provided, the nourishment room or area shall have all of the following:

687

- 1. Sink
- 2. Work counter
- 3. Refrigerator
- 4. Storage cabinets
- 5. Equipment for serving nourishment

6. A handwashing fixture, as defined in Section 1224.3, shall be located in the nourishment room or adjacent to the nourishment area.

1226.4.14 Support areas for patients.

1226.4.14.1 Patient toilet room(s). Toilet room(s) with a lavatory shall be provided separate from public use toilet(s) and shall be located to permit access from patient care areas without passing through publicly accessible areas.

Exception: For primary care clinics where the facility contains no more than three examination and/or treatment rooms, the patient toilet room shall be permitted to serve outpatient waiting room(s).

1226.4.14.2 Specimen and/or blood collection facilities. When provided, refer to Section 1224.4.4.2. Use of patient toilet room(s) shall be permitted for specimen collection.

1226.4.15 General support services and facilities.

1226.4.15.1 Areas for off-site laundry services. If linen is to be processed off site, the following shall be provided:

- 1. Soiled linen holding area or designated and dedicated area for soiled laundry cart.
- 2. Clean linen storage area that protects linen from soil or damage.

1226.4.16 Public and administrative areas.

1226.4.16.1 Public.

1226.4.16.1.1 Reception. A reception and information counter or desk shall be provided.

1226.4.16.1.2 Outpatient waiting rooms. Refer to Section 1224.4.5.

1226.4.16.2 Administrative services.

1226.4.16.2.1 Medical records storage. Outpatient clinics shall provide a health record service which shall comply with the following:

- 1. Work area for sorting and recording records for either paper or electronic media.
- 2. Storage area for records for either paper or electronic media.

1226.4.16.2.2 Equipment and supply storage. General storage facilities for office supplies and equipment shall be provided.

1226.4.17 Support areas for staff.

1226.4.17.1 Staff toilet(s). Provide staff toilet(s) in addition to and separate from, public and patient facilities. The areas shall contain toilet(s) and handwashing fixtures pursuant to the California Plumbing Code, Table 4-2.

1226.4.17.2 Storage for employees. Provide storage for staff personal effects with locking drawers or cabinets (may be individual desks or cabinets). Such storage shall be readily accessible to individual workstations and shall be staff controlled.

1226.4.17.3 Staff lounge. When provided, the lounge shall have adequate space to accommodate staff.

OUTPATIENT CLINICAL SERVICES OF A HOSPITAL

1226.5 OUTPATIENT CLINICAL SERVICES OF A HOS-

PITAL. A licensed hospital may elect to locate certain outpatient services in a freestanding outpatient clinical services building(s). To be considered a freestanding outpatient clinical services building the building must not be physically attached to a building in which inpatient services are provided. No more than 25 percent of the services provided in an outpatient clinical services building may be rendered to inpatients. Services that duplicate the basic services may be provided in freestanding building(s). These services, defined in Subsection (a) of the Health and Safety Code Section 1250, must be in excess of the basic services, necessary for hospital licensure, required to be located in a hospital building under OSHPD jurisdiction.

Outpatient clinical services of a hospital in a freestanding outpatient clinical services building shall comply with Sections 1226.4.2 through 1226.4.8 and the provisions of this section. Outpatient clinical services of a hospital that are not addressed in the provisions of Section 1226 shall comply with applicable provisions of Section 1224.

GENERAL SUPPORT AREAS FOR OUTPATIENT CLINICAL SERVICES - Requirements for all service types.

1226.5.1 Support areas for patients.

1226.5.1.1 Patient toilet room(s). Refer to Section 1226.4.14.1.

1226.5.1.2 Specimen and/or blood collection facilities. When provided, refer to Section 1224.4.4.2.

1226.5.2 General support services and facilities.

1226.5.2.1 Garbage, solid waste, medical waste, and trash storage. Refer to Section 1226.4.9.

1226.5.2.2 Housekeeping room. Refer to Section 1224.4.15.

1226.5.3 Public and administrative areas.

1226.5.3.1 Public area.

1226.5.3.1.1 Reception. Refer to Section 1226.4.16.1.1.

1226.5.3.1.2 Outpatient waiting room. Refer to Section 1224.4.5.

1226.5.3.1.3 Public toilet(s). Refer to Section 1224.4.5.

1226.5.3.1.4 Public telephone access. Refer to Section 1224.4.5.

1226.5.3.1.5 Drinking fountain(s). Refer to Section 1224.4.5.

1226.5.3.2 Administrative services.

1226.5.3.2.1 Medical records storage. Refer to Section 1226.4.16.2.1.

1226.5.3.2.2 Equipment and supply storage. Refer to Section 1226.4.16.2.2.

1226.5.4 Support areas for staff.

- **1226.5.4.1 Staff toilet(s).** Refer to Section 1226.4.17.1.
- 1226.5.4.2 Storage for employees. Refer to Section 1226.4.17.2.

RADIOLOGICAL/IMAGING SERVICE SPACE

- 1226.5.5 Radiological/imaging service space. When x-ray examination services, computerized tomography scanning, magnetic resonance imaging, ultrasound, and/or mammography services are provided, the radiological/imaging services space shall comply with the provisions of this section.
 - 1226.5.5.1 Support spaces for radiological/imaging services. The following spaces are common to the imaging service area and are minimum requirements:
 - 1226.5.5.1.1 Patient toilet room(s). In service spaces with procedure rooms that do not require dedicated patient toilets, provide a minimum of one patient toilet room within the service space, refer to Section 1226.4.14.1.
 - 1226.5.5.1.2 Outpatient change area. A separate space shall be provided where outpatients change from street clothing. This shall include provisions for clothing storage, space for clothing change and gowning area. Dressing rooms shall be readily accessible to the imaging rooms.
 - 1226.5.5.1.3 Staff facilities. In service space of three or more procedure rooms, staff toilet room(s) internal to the service space.
 - **1226.5.5.1.4 Handwashing fixtures.** Handwashing fixtures shall be located within the unit.
 - 1226.5.5.1.5 Imaging storage (active). If imaging storage systems are used, provide a means of sorting and filing patient film or electronic media for immediate retrieval shall be provided.
 - **1226.5.5.1.6 Medication station.** Provision shall be made for locked storage of medications and drugs. Refer to Section 1226.4.13.2.
 - 1226.5.5.1.7 Areas for off-site laundry services. Refer to Section 1226.4.15.1.
 - 1226.5.5.2 Radiation protection. Radiation protection requirements for equipment refer to Section 1224.18.1.1.
- **1226.5.6** X-ray examination services. When provided, x-ray examination services space shall comply with the following:
 - 1. X-ray room.
 - 2. When shielded control alcove with protective view windows is provided, refer to Section 1224.18.1.1.
 - 3. Fluoroscopy room, when provided, shall have a toilet room directly accessible to the fluoroscopy room. This toilet room is in addition to common patient toilet room facilities located in the radiological/imaging service space.
 - 4. Space for processing images.

- 5. An office or other suitable area for viewing and reporting radiographic examination.
- 1226.5.7 Computerized tomography (CT) scanning. When provided, CT services space shall comply with the requirements of Section 1224.18.3.
- 1226.5.8 Magnetic resonance imaging (MRI). When provided, MRI services space shall comply with the requirements of Section 1224.18.4.
- **1226.5.9 Ultrasound.** When ultrasound is provided, refer to Section 1224.18.5.
- 1226.5.10 Mammography. When mammography is provided, refer to Section 1224.18.6.

GASTROINTESTINAL ENDOSCOPY

- 1226.5.11 Gastrointestinal endoscopy. When provided, gastrointestinal endoscopy services space shall comply with Section 1224.39.3 and the provisions of this section:
 - 1226.5.11.1 Procedure Room(s).
 - **1226.5.11.1.1 Space requirements.** Refer to Section 1224.39.3.1.1.
 - **1226.5.11.1.2 Handwashing fixture.** Refer to Section 1224.39.3.1.2.
 - **1226.5.11.2 Processing room.** Refer to Section 1224.39.3.2.
 - 1226.5.11.3 Pre-operative patient holding. Refer to Section 1224.15.2.
 - **1226.5.11.4 Post-anesthesia recovery area.** Refer to Section 1224.16.
 - **1226.5.11.5 Communication system.** Refer to Section 1224.39.3.5.
 - 1226.5.11.6 Support areas for outpatient gastrointestinal endoscopy.
 - **1226.5.11.6.1 Control station.** Refer to Section 1224.15.3.1.
 - **1226.5.11.6.2 Medication station.** Refer to Section 1226.4.13.2.
 - **1226.5.11.6.3 Soiled workroom.** Refer to Section 1224.15.3.7.
 - **1226.5.11.6.4 Clean utility room.** Refer to Section 1224.15.3.8.
 - **1226.5.11.6.5 Anesthesia workroom.** Refer to Section 1224.15.3.9.
 - 1226.5.11.6.6 Storage room(s) for equipment and supplies used in gastrointestinal endoscopy service space. Refer to Section 1224.15.3.10.
 - **1226.5.11.6.7 Staff clothing change areas.** Refer to Section 1224.15.3.11.
 - **1226.5.11.6.8 Housekeeping room.** Refer to Section 1224.39.2, Item 7.
 - **1226.5.11.6.9 Cleanup room.** Refer to Section 1224.39.2, Item 4.
 - 1226.5.11.6.10 Sterile and pharmaceutical supply storage. Refer to Section 1226.4.13.5.

689

1226.5.11.7 Additional support areas for patients.

1226.5.11.7.1 Outpatient change area. A separate space shall be provided where patients change out of their street clothing and are prepared for the procedure. This space shall include provisions for clothing storage, toilet room(s), sink, space for clothing change and gowning area.

NUCLEAR MEDICINE

- 1226.5.12 Nuclear medicine. When provided, nuclear medicine services space shall comply with Section 1224.34 and the provisions of this section:
 - **1226.5.12.1 Radiation protection.** When provided, refer to Section 1224.34.1.1.
 - **1226.5.12.2 Nuclear medicine room.** Refer to Section 1224.34.1.2.
 - 1226.5.12.3 Radiopharmacy. When provided, refer to Section 1224.34.1.3.
 - 1226.5.12.4 Support areas for nuclear medicine services.
 - **1226.5.12.4.1 Cleanup.** Refer to Section 1224.34.2.2.
 - **1226.5.12.4.2 Dose administration area.** Refer to Section 1224.34.2.5.
 - 1226.5.12.4.3 Holding. Refer to Section 1224.34.2.6.
 - **1226.5.12.4.4 Patient dressing rooms.** Refer to Section 1224.34.2.7.
 - **1226.5.12.4.5 Patient toilet room(s).** Refer to Section 1224.34.2.8.
 - **1226.5.12.4.6 Staff toilet room(s).** Refer to Section 1224.34.2.9.
 - **1226.5.12.4.7 Handwashing fixtures.** Refer to Section 1224.34.2.10.
 - 1226.5.12.4.8 Control desk and reception. Refer to Section 1226.5.3.
 - **1226.5.12.4.9 Clean linen storage**. A storage area for clean linen shall be provided.
 - 1226.5.12.4.10 Soiled and contaminated material. Refer to Section 1224.34.2.13.
 - 1226.5.12.5 Radiotherapy service space. When provided, radiotherapy service space shall comply with the following provisions of this section:
 - **1226.5.12.5.1 Radiation protection.** Refer to Section 1224.34.3.2.
 - **1226.5.12.5.2 Room sizes.** Refer to Section 1224.34.3.3.
 - **1226.5.12.5.3 General support area.** Refer to Section 1224.34.3.4.
 - 1226.5.12.6 Additional support areas for linear accelerator.
 - **1226.5.12.6.1 Mold room.** Refer to Section 1224.34.4.1.
 - 1226.5.12.6.2 Block room. Refer to Section 1224.34.4.2.

- 1226.5.12.7 Additional support areas for cobalt room.
 - 1226.5.12.7.1 Hot lab.

1226.5.12.8 High dose rate brachytherapy room. CANCER TREATMENT/INFUSION THERAPY

- 1226.5.13 Cancer treatment/infusion therapy service space. When provided, cancer treatment/infusion therapy service space shall comply with the provisions of this section:
 - 1226.5.13.1 Treatment area.
 - **1226.5.13.1.1 Location.** Refer to Section 1224.39.4.2.1.
 - **1226.5.13.1.2 Nurses' station(s).** Refer to Section 1224.39.4.2.2.
 - 1226.5.13.1.3 Individual patient treatment areas. Refer to Section 1224.39.4.2.3.
 - **1226.5.13.1.4 Handwashing fixtures.** Refer to Section 1224.39.4.2.4.
 - 1226.5.13.1.5 Privacy. Refer to Section 1224.39.4.2.5.
 - **1226.5.13.1.6 Medication dispensing.** Refer to Section 1224.39.4.2.6.
 - **1226.5.13.1.7 Examination room.** Refer to Section 1224.39.4.2.7.
 - **1226.5.13.1.8 Clean utility room.** Refer to Section 1224.39.4.2.8.
 - **1226.5.13.1.9 Soiled utility room.** Refer to Section 1224.39.4.2.9.
 - **1226.5.13.1.10** *Nourishment station. Refer to Section* 1224.39.4.2.10.
 - **1226.5.13.1.11 Housekeeping room.** Refer to Section 1224.39.4.2.11.
 - **1226.5.13.1.12 Supplies.** Refer to Section 1224.39.4.2.12.
 - **1226.5.13.1.13 Storage.** Refer to Section 1224.39.4.2.13.
 - **1226.5.13.1.14 Clean linen storage.** Refer to Section 1224.39.4.2.14.
 - **1226.5.13.1.15 Patient storage.** Refer to Section 1224.39.4.3.2.

HYPERBARIC THERAPY

- 1226.5.14 Hyperbaric therapy service space. When provided, hyperbaric therapy service space shall comply with Section 1224.39.5 and the provisions of this section:
 - 1226.5.14.1 General. Refer to Section 1224.39.5.1.
 - **1226.5.14.2 Hyperbaric chambers.** Refer to Section 1224.39.5.2.
 - **1226.5.14.3** Pre-procedure patient holding area(s). Refer to Section 1224.39.5.3.
 - 1226.5.14.4 Medical gas station outlets. Refer to Section 1224.39.5.4.
 - 1226.5.14.5 Support areas for the hyperbaric suite.

- **1226.5.14.5.1 Reception/control desk.** Refer to Section 1224.39.5.5.1.
- 1226.5.14.5.2 Examination/treatment room(s). Refer to Section 1224.39.5.5.2.
- **1226.5.14.5.3 Clean linen storage.** Refer to Section 1224.39.5.5.3.
- **1226.5.14.5.4 Clean supply room.** Refer to Section 1224.39.5.5.4.
- **1226.5.14.5.5 Gas cylinder room.** Refer to Section 1224.39.5.5.5
- **1226.5.14.5.6** *Gurney and wheelchair storage. Refer to Section 1224.39.5.5.6.*
- **1226.5.14.5.7 Housekeeping room.** Refer to Section 1224.39.5.5.7.
- **1226.5.14.5.8 Compressor room.** Refer to Section 1224.39.5.5.8.
- **1226.5.14.6 Support areas for staff.** Refer to Section 1224.39.5.6.
- 1226.5.14.7 Support areas for patients.
 - **1226.5.14.7.1 Patient waiting area.** Refer to Section 1224.39.5.7.1.
 - **1226.5.14.7.2 Patient changing area.** Refer to Section 1224.39.5.7.2.
 - **1226.5.14.7.3 Patient toilet room.** Refer to Section 1224.39.5.7.3.

PRIMARY CARE CLINICS

1226.6 PRIMARY CARE CLINICS. Primary care clinics and outpatient clinical services of a hospital providing services equivalent to a primary care clinic shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section.

1226.6.1 Examination and treatment areas.

- **1226.6.1.1 Examination room(s).** Refer to Section 1224.4.4.1.
- 1226.6.1.2 Treatment room(s). Treatment room(s) for minor procedures (e.g. minor surgical procedures, casting), if provided, shall have a minimum area of 120 square feet (11.15 m²), the least dimension of which shall be a minimum of 10 feet (3048 mm), excluding such spaces as vestibules and work counters, and shall meet the requirements in Section 1224.4.4.1.
- 1226.6.1.3 Dental examination and treatment areas. When provided, the examination and treatment space shall be permitted to be a room or a patient care station in an open treatment area.
 - 1226.6.1.3.1 Area. The treatment space shall have a minimum clear floor area of 80 square feet (7.4 m²). This space is required for each station in an open operatory or treatment area. A minimum of 3 feet (915 mm) clearance shall be provided along the full length of one side of the chair, the head of the chair, and between the cuspidor and the head of the chair on the other side for assisting dental staff.

- 1226.6.1.3.2 Pediatric patients. At least one private consultation/treatment room shall be provided when pediatric patients are treated in a facility.
- 1226.6.1.3.3 Handwashing. Each treatment room shall include a handwashing station. If treatment is provided at stations in an open operatory, a handwashing station may be permitted to serve two treatment stations.
- 1226.6.1.3.4 Imaging. If provided, space for a dental panographic x-ray system and printer shall also comply with shielding requirements in Section 1226.5.5.2 and alcove requirements in Section 1224.18.1.1.
- 1226.6.1.4 Oral surgery. When provided, treatment areas for procedures for which general anesthesia is used, shall comply with the requirements in Section 1226.8.
- 1226.6.2 Support areas for examination rooms.
 - 1226.6.2.1 Administrative center or nurse station. Refer to Section 1226.4.13.1.
 - 1226.6.2.2 Medication station. Refer to Section 1226.4.13.2.
 - **1226.6.2.3 Clean utility room.** Refer to Section 1226.4.13.3.
 - 1226.6.2.4 Soiled workroom or soiled linen holding. Refer to Section 1226.4.13.4.
 - **1226.6.2.5 Consultation room.** Dental facilities must provide a consultation room for private conferences with patients.
 - 1226.6.2.6 Sterilization facilities. If sterile processing and/or high level disinfection is provided, the sterile processing room shall consist of a decontamination area and a clean work area. The sterile processing/high level disinfection room shall be designed to provide one-way flow of contaminated materials/instruments to the sterilizer/high level disinfection equipment. Sterile/high level disinfected instruments should be distributed from the area in such a manner that processed items do not pass through the decontamination area.
 - 1226.6.2.6.1 Decontamination area. The decontamination area shall be equipped with the following:
 - 1. Countertop, separated from clean countertop by 4 feet minimum distance.
 - 2. Handwashing station separate from the instrument washing sink.
 - 3. Sink for washing instruments. To avoid splash, the decontamination sink shall be separated from the clean work area by either a 4-foot distance from the edge of the sink or a separating wall or screen. If a screen is used, it shall extend a minimum of 4 feet (1220 mm) above the sink rim.

691

4. Storage for supplies.

1226.6.2.6.2 Clean work area. The clean work area shall be equipped with the following:

- 1. Countertop, separated from decontamination countertop by 4 feet minimum distance.
- 2. Sterilizer/high level disinfection equipment, as required for the services provided.
- 3. Handwashing station, may share with decontamination area handwashing station.
- 4. Built-in storage for supplies.

1226.6.2.7 Laboratory. Facilities for laboratory services shall be provided in dental facilities or through a contract arrangement with a laboratory service.

1226.6.3 Support areas for patients.

1226.6.3.1 Patient toilet room(s). Refer to Section 1226.4.14.1.

1226.6.3.2 Specimen collection and/or blood collection facilities. When provided, refer to Section 1224.4.4.2.

1226.6.4 General support services and facilities.

1226.6.4.1 Garbage, solid waste, medical waste and trash storage. Refer to Section 1226.4.9.

1226.6.4.2 Housekeeping room. Refer to Section 1224.4.15.

1226.6.5 Public and administrative areas.

1226.6.5.1 Public area.

1226.6.5.1.1 Reception. Refer to Section 1226.4.16.1.1.

1226.6.5.1.2 Outpatient waiting room. Refer to Section 1224.4.5.

1226.6.5.1.3 Public toilet(s). Refer to Section 1224.4.5.

1226.6.5.1.4 Public telephone access. Refer to Section 1224.4.5.

1226.6.5.1.5 Drinking fountain(s). Refer to Section 1224.4.5.

1226.6.5.2 Administrative services

1226.6.5.2.1 *Medical records storage. Refer to Section* 1226.4.16.2.1.

1226.6.5.2.2 Equipment and supply storage. Refer to Section 1226.4.16.2.2.

1226.6.6 Support areas for staff.

1226.6.6.1 Staff toilet(s). Refer to Section 1226.4.17.1.

1226.6.6.2 Storage for employees. Refer to Section 1226.4.17.2.

SURGICAL CLINICS

1226.8 SURGICAL CLINICS. Outpatient surgical clinics, and outpatient clinical services of a hospital providing services equivalent to a surgical clinic, shall comply with Sections 1226.4.2 through 1226.4.8 and the provisions of this section.

1226.8.1 Outpatient surgical service space.

1226.8.1.1 Operating room(s). Refer to Section 1224.39.2, Item 1.

1226.8.1.2 Perioperative services. Provide preoperative patient holding and post-anesthesia recovery area. Refer to Section 1224.16.

1226.8.2 Support areas for outpatient surgery.

1226.8.2.1 Control station. Refer to Section 1224.15.3.1.

1226.8.2.2 Supervisor's office or station. Refer to Section 1224.15.3.2.

1226.8.2.3 Substerile areas. When provided, refer to Section 1224.15.3.3.

1226.8.2.4 Medication station. Refer to Section 1226.4.13.2.

1226.8.2.5 Scrub facilities. Refer to Section 1224.15.3.5.

1226.8.2.6 Clock. Refer to Section 1224.15.3.6.

1226.8.2.7 Soiled workroom. Refer to Section 1224.15.3.7.

1226.8.2.8 Clean utility room. Refer to Section 1224.15.3.8.

1226.8.2.9 Anesthesia workroom. Refer to Section 1224.15.3.9.

1226.8.2.10 Equipment storage room(s) for equipment and supplies used in outpatient surgery. Refer to Section 1224.15.3.10.

1226.8.2.11 Staff clothing change areas. Refer to Section 1224.15.3.11.

1226.8.2.12 Housekeeping room. Refer to Section 1224.39.2, Item 7.

1226.8.2.13 Cleanup room. Refer to Section 1224.39.2, Item 4.

1226.8.2.14 Sterile and pharmaceutical supply storage. Refer to Section 1226.4.13.5.

1226.8.2.15 Sterilization facilities. Refer to Section 1226.4.13.6.

1226.8.3 Support areas for patients.

1226.8.3.1 Patient toilet room(s). Refer to Section 1226.4.14.1.

1226.8.3.2 Outpatient change area. A separate space shall be provided where patients change out of their street clothing and are prepared for the procedure. This space shall include provisions for clothing storage, toilet room(s), sink, space for clothing change and gowning area.

1226.8.4 General support services and facilities.

1226.8.4.1 Garbage, solid waste, medical waste and trash storage. Refer to Section 1226.4.9.

1226.8.4.2 Areas for off-site laundry services. Refer to Section 1226.4.15.1.

1226.8.5 Public and administrative areas.

1226.8.5.1 Public area.

- **1226.8.5.1.1 Reception.** Refer to Section 1226.4.16.1.1.
- **1226.8.5.1.2 Outpatient waiting room.** Refer to Section 1224.4.5.
- **1226.8.5.1.3 Public toilet(s).** Refer to Section 1224.4.5.
- **1226.8.5.1.4 Public telephone access.** Refer to Section 1224.4.5.
- **1226.8.5.1.5 Drinking fountain(s).** Refer to Section 1224.4.5.

1226.8.5.2 Administrative services

1226.8.5.2.1 Medical records storage. Refer to Section 1226.4.16.2.1.

1226.8.6 Support areas for staff.

- **1226.8.6.1 Staff toilet(s).** Refer to Section 1226.4.17.1.
- **1226.8.6.2 Storage for employees.** Refer to Section 1226.4.17.2.

CHRONIC DIALYSIS CLINICS

1226.9 CHRONIC DIALYSIS CLINICS. Chronic dialysis clinics and outpatient clinical services of a hospital providing services equivalent to a chronic dialysis clinic shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section.

1226.9.1 Examination and treatment rooms.

- 1226.9.1.1 Examination room(s). An examination room with a handwashing fixture shall be provided with a minimum clear floor area of 100 square feet (9.29 m^2) .
- 1226.9.1.2 Treatment room(s). When provided, refer to Section 1224.4.4.1.
- 1226.9.1.3 Individual patient treatment areas. Individual patient treatment areas shall contain at least 80 square feet (7.44 m²). There shall be at least a 4-foot (1219 mm) space around and between beds and/or lounge chairs. In addition, the following shall be provided:
 - 1. **Location.** The treatment area may be an open area and shall be separate from administrative area and outpatient waiting room.
 - 2. **Privacy.** An open unit shall be designed to provide visual privacy for each patient.
- **1226.9.1.4 Reception.** Refer to Section 1226.4.16.1.1.
- **1226.9.1.5 Outpatient waiting room.** Refer to Section 1224.4.5.
- 1226.9.1.6 Bloodborne infection isolation room. A minimum of one bloodborne infection isolation room of at least 120 square feet (11.15 m^2) of clear floor space shall be provided for patients. This room shall contain a counter and handwashing fixture.
- 1226.9.1.7 Airborne infection isolation exam/treatment room. When provided, refer to Section 1224.4.4.1.3.

- 1226.9.1.8 Home training. When provided in the unit, a private treatment area of at least 120 square feet (11.15 m²) shall be provided for patients who are being trained to use dialysis equipment at home. This room shall contain counter, handwashing fixture(s), and a separate drain for fluid disposal.
- 1226.9.2 Support areas for examination and treatment rooms.
 - 1226.9.2.1 Administrative center or nurse station. Administrative center or nurse station shall be located within the dialysis treatment area and designed to provide visual observation of all patient stations. In addition, refer to Section 1226.4.13.1 for nurses' station(s) requirements.
 - 1226.9.2.1.1 Handwashing stations. Handwashing stations shall be directly accessible to the administrative center or nurses' station and to patient treatment areas. Handwashing stations shall be provided for each four patient stations and for each major fraction thereof. These shall be uniformly distributed to provide equal access from each patient station. Refer to Section 1224.3 for the definition of a handwashing station.
 - **1226.9.2.2 Medication station.** Refer to Section 1226.4.13.2.
 - **1226.9.2.3 Clean utility room.** Refer to Section 1226.4.13.3.
 - **1226.9.2.4 Soiled workroom or soiled linen holding.** Refer to Section 1226.4.13.4.
 - 1226.9.2.5 Housekeeping room. Provide a housekeeping room that is immediately accessible to, and for the exclusive use of, the unit. This room shall have a minimum floor area of 15 square feet (1.4 m^2) and shall include the following:
 - 1. Service sink or floor receptor
 - 2. Supply storage
 - 3. Housekeeping equipment storage
 - 1226.9.2.6 Nourishment room. When provided, refer to Section 1226.4.13.7.
 - **1226.9.2.7 Sterilization facilities.** When provided, refer to Section 1226.4.13.6.
- **1226.9.3** *Administrative services. Provide office and clinical work space including the following:*
 - **1226.9.3.1.** *Medical records storage. Refer to Section* 1226.4.16.2.1.
 - **1226.9.3.2 Equipment and supply storage.** Refer to Section 1226.4.16.2.2.
- 1226.9.4 Support areas for patients.
 - 1226.9.4.1 Patient toilet room(s). Provide patient toilet room(s) directly accessible from treatment area. The toilet shall be equipped with bedpan flushing attachment(s). Refer to Section 1226.4.14.1.

693

1226.9.4.2 Patient storage. Provide space for storage of patient clothing and personal items.

1226.9.4.3 Specimen collection facilities. When provided, refer to Section 1224.4.4.2.

1226.9.5 General support services and facilities.

1226.9.5.1 Garbage, solid waste, medical waste and trash storage. Refer to Section 1226.4.9.

1226.9.5.2 Areas for off-site laundry services. Refer to Section 1226.4.15.1.

1226.9.5.3 Reprocessing room. When dialyzers are reused, a reprocessing room is required and sized to perform the functions required and include one-way flow of materials from soiled to clean with provisions for a refrigerator for temporary storage of dialyzer, decontamination/cleaning areas, sinks, processors, computer processors and label printers, packaging area, dialyzer storage and disinfectants storage.

1226.9.5.4 Repair room. When required, an equipment repair and breakdown room shall be equipped with a handwashing fixture, deep service sink, work counter and storage cabinet. Provide water supply and drain connection for testing machines.

1226.9.5.5 Mixing room. Each facility using a central batch delivery system shall provide, either on the premises or through written arrangements, individual delivery systems for the treatment of any patient requiring special dialysis solutions. The mixing room shall also include a sink, storage space and holding tanks.

1226.9.5.6 Water treatment room. The water treatment equipment shall be located in an enclosed room.

1226.9.6 Support areas for staff.

1226.9.6.1 Staff toilet(s). Refer to Section 1226.4.17.1.

1226.9.6.2 Storage for employees. Refer to 1226.4.17.2.

REHABILITATION CLINICS

1226.10 REHABILITATION CLINICS. Rehabilitation clinics and outpatient clinical services of a hospital providing services equivalent to a rehabilitation clinic shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section.

SUPPORT AREAS FOR THERAPY SERVICES.

1226.10.1 Support area for patients.

1226.10.1.1 Patient toilet room(s). Refer to Section 1226.4.14.1.

1226.10.2 General support.

1226.10.2.1 Garbage. Refer to Section 1226.4.9.

1226.10.2.2 Housekeeping. Refer to Section 1224.4.15.

1226.10.2.3 Areas for off-site laundry services. Refer to Section 1226.4.15.1.

1226.10.3 Public and administrative.

1226.10.3.1 Public area.

1226.10.3.1.1 Reception. Refer to Section 1226.4.16.1.1.

1226.10.3.1.2 Outpatient waiting room. Refer to Section 1224.4.5.

1226.10.3.1.3 Toilets. Refer to Section 1224.4.5.

1226.10.3.1.4 Drinking fountain. Refer to Section 1224.4.5.

1226.10.3.1.5 Telephone. Refer to Section 1224.4.5.

1226.10.3.2 *Administrative services.* Provide office and clinical work space including the following:

1226.10.3.2.1 Medical records storage. Refer to Section 1226.4.16.2.1.

1226.10.3.2.2 Equipment and supply storage. Refer to Section 1226.4.16.2.2.

1226.10.4. Support areas for staff.

1226.10.4.1 Staff toilet(s). Refer to Section 1226.4.17.1.

1226.10.4.2 Storage for employees. Refer to Section 1226.4.17.2.

REHABILITATION THERAPY SERVICE SPACES.

1226.10.5 Physical therapy service space. A physical therapy service space shall be provided. The service space shall comply with the following provisions:

- 1. Individual treatment area(s). Refer to Section 1224.35.2, Item 1.
- 2. Handwashing fixture(s). Refer to Section 1224.35.2, Item 2.
- 3. Exercise area. Refer to Section 1224.35.2, Item 3.
- 4. Clean linen and towel storage. Refer to Section 1224.35.2, Item 4.
- 5. Storage for equipment and supplies. Refer to Section 1224.35.2, Item 5
- 6. Separate storage for soiled linen, towels and supplies. Refer to Section 1224.35.2, Item 6.

1226.10.6 Occupational therapy service space. When an occupational therapy service is provided, the service space shall comply with following provisions:

- 1. Work areas and counters. Refer to Section 1224.35.3, Item 1.
- 2. Handwashing fixture(s). Refer to Section 1224.35.3, Item 2.
- 3. Storage for supplies and equipment. Refer to Section 1224.35.3, Item 3.
- 4. Area for teaching daily living activities. Refer to Section 1224.35.3, Item 4.

1226.10.7 Speech pathology and/or audiology service space. When speech pathology and/ or audiology service(s) is provided, the service space shall comply with the following provisions:

- 1. Interview, consultation and treatment space. Refer to Section 1224.35.4, Item 1.
- 2. Waiting area. Refer to Section 1224.35.4, Item 2.

- 3. Handwashing fixture. Refer to Section 1224.35.4, Item 3.
- 4. **Testing unit**. If an audiology service is provided. Refer to Section 1224.35.4, Item 4.

ALTERNATIVE BIRTHING CLINICS

1226.11 ALTERNATIVE BIRTHING CLINICS. Alternative birthing clinics and outpatient clinical services of a hospital providing services equivalent to alternative birthing clinics shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section:

1226.11.1 Birthing service space.

- 1226.11.1.1 Birthing room. A birthing room shall have a minimum clear floor area of 200 square feet (18.58 square meters), including the newborn care area. A birthing room shall have a minimum clear dimension of 12 feet (3658 mm). The maximum number of beds per room shall be one.
- **1226.11.1.2 Location.** Birthing rooms shall be located out of the path of unrelated traffic and under direct supervision of the facility staff.
- 1226.11.1.3 Nurse call system. A nurse call system shall be located in the birthing room which will alert the nearest continually staffed administrative center or nurses' station. Refer to Section 1224.4.6.5 for requirements.
- 1226.11.1.4 Hand-washing stations. A handwashing fixture, as defined in Section 1224.3, shall be located within or directly outside the room. If the fixture is located within the room, the fixture may be screened or within openable casework.
- **1226.11.1.5 Lighting.** Lighting capable of 1076 lux (100 footcandles) at working surfaces shall be provided. Dimmer switches may be used.
- 1226.11.1.6 Window. Each birthing room shall have an outside window. Refer to Sections 1224.4.9.4 and 1224.4.9.5.
- 1226.11.1.7 Privacy. Windows or doors within a normal sightline that would permit observation into the room shall be arranged or draped, as necessary, for mother and newborn privacy.
- **1226.11.1.8** Newborn care area. When provided, a separate newborn care area shall be provided that is in addition to the birthing room.
- **1226.11.1.9 Examination room.** When provided, the examination room shall meet the requirements of Section 1224.4.4.

1226.11.2 Support areas for birthing services.

- 1226.11.2.1 Administrative center or nurse station. Refer to Section 1226.4.13.1.
- **1226.11.2.2 Medication station.** Refer to Section 1226.4.13.2.
- **1226.11.2.3 Clean utility room.** Refer to Section 1226.4.13.3.
- 1226.11.2.4 Soiled utility or soiled holding room. Refer to Section 1226.4.13.4.

- **1226.11.2.5** Crash cart space. Space for storing crash cart shall be provided.
- 1226.11.2.6 Clean-up room. Each birthing room shall have immediate access to a clean-up room with a handwashing station and work space which is separate from any sterilizing facilities. The clean-up room shall provide 24 square feet (2.23 m²) per birthing room up to eight rooms, with no dimensions less than 6 feet (1829 mm).
- 1226.11.2.7 Ice-making equipment. Each facility shall have equipment to provide ice for treatments and nourishment. Ice-making equipment shall be permitted in the clean utility or the nourishment room/area. Ice intended for human consumption shall be provided in the nourishment station and shall be served from self-dispensing ice-makers.
- **1226.11.2.8** *Nourishment room or area.* When provided, refer to Section 1226.4.13.7.
- 1226.11.2.9 Medical gas outlets. When provided, oxygen and suction capabilities may be portable or piped.
- 1226.11.3 Support areas for mother and newborn.
 - 1226.11.3.1 Patient toilet room(s). Each birthing room shall have direct access to a private toilet room with lavatory, shower or tub and nurse call system. Facilities for cleaning bedpans shall be provided in the toilet room.
- 1226.11.4 General support services and facilities.
 - **1226.11.4.1 Housekeeping room.** Refer to Section 1224.4.15.
 - 1226.11.4.2 Garbage, solid waste, medical waste and trash storage. Refer to Section 1226.4.9.
 - 1226.11.4.3 Areas for off-site laundry services. Refer to Section 1226.4.15.1.
- 1226.11.5 Public and administrative areas.
 - 1226.11.5.1 Public area.
 - **1226.11.5.1.1 Reception.** Refer to Section 1226.4.16.1.1.
 - 1226.11.5.1.2 Outpatient waiting room. Refer to Section 1224.4.5.
 - **1226.11.5.1.3 Public toilet(s).** Refer to Section 1224.4.5.
 - **1226.11.5.1.4 Public telephone.** Refer to Section 1224.4.5.
 - **1226.11.5.1.5 Drinking fountain.** Refer to Section 1224.4.5.
 - 1226.11.5.2 Administrative services.
 - **1226.11.5.2.1 Medical records storage.** Refer to Section 1226.4.16.2.1.
 - **1226.11.5.2.2** Equipment and supply storage. Refer to 1226.4.16.2.2.
 - 1226.11.6 Support areas for staff.
 - 1226.11.6.1 Staff toilet(s). Refer to Section 1226.4.17.1.

1226.11.6.2 Storage for employees. Refer to Section 1226.4.17.2.

1226.11.6.3 Staff lounge. Refer to Section 1226.4.17.3.

1226.11.6.4 Staff clothing change area. When provided, a changing room with shower shall be provided for staff to change into work attire.

PSYCHOLOGY CLINICS

1226.12 PSYCHOLOGY CLINICS. Psychology clinics and outpatient clinical services of a hospital providing services equivalent to a psychology clinic shall comply with Sections 1226.4.3 through 1226.4.8 and the provisions of this section.

Psychology clinics shall provide at least an interview room, consulting room and group therapy room.

1226.12.1 Public and administrative area.

1226.12.1.1 Public area.

1226.12.1.1.1 Reception. Refer to Section 1226.4.16.1.1.

1226.12.1.1.2 Outpatient waiting room. Refer to Section 1224.4.5.

1226.12.1.1.3 Public toilet(s). Refer to Section 1224.4.5.

1226.12.1.1.4 Drinking fountain. Refer to Section 1224.4.5.

1226.12.1.1.5 Public telephone. Refer to Section 1224.4.5.

1226.12.1.2 Administrative Area.

1226.12.1.2.1 Medical Records storage. Refer to Section 1226.4.16.2.1.

1226.12.1.2.2 Equipment and supply storage. Refer to Section 1226.4.16.2.2.

SECTION 1227 [OSHPD 4] CORRECTIONAL TREATMENT CENTERS

1227.1 Scope. The provisions of this section shall apply to correctional treatment centers.

1227.2 Application. New buildings and additions, alterations or repairs to existing buildings subject to licensure shall comply with applicable provisions of the California Electrical Code, California Mechanical Code, California Plumbing Code, and California Fire Code (Parts 3, 4, 5, and 9 of Title 24) and this section.

Note: Refer to Section 1224.2, Exception 6.

1227.3 Definitions.

BASIC SERVICES for correctional treatment centers are those services required for licensure as a correctional treatment center, including medical, surgical, psychiatrist, psychologist, nursing, pharmacy and dietary. See "Optional services."

HAND WASHING FIXTURE is a special application sink having a water supply spout mounted so the discharge point is at least 5 inches (127 mm) above the fixture rim and equipped with hot and cold supply controls not requiring direct contact of the hands for operation. The fixture cannot

be equipped with an aerator and wrist or elbow blade handles. Gooseneck spouts shall not be used in correctional treatment centers.

LICENSING AGENCY is the California Department of Public Health.

OPTIONAL SERVICES are inpatient or outpatient services which are not required to be provided by law or regulation for licensure. An optional service, when provided, must accommodate the provisions of this section. See "Basic services."

OUTPATIENT SERVICE is an organizational unit of the correctional treatment center which provides nonemergency health care services to patients.

1227.4 GENERAL CONSTRUCTION.

1227.4.1 Services/systems and utilities. Correctional treatment centers shall comply with this section.

1227.4.1.1 Oxygen, vacuum and medical air. Correctional treatment centers shall comply with the requirements of Section 1224.4.6 wherever applicable.

1227.4.2 Service spaces. Spaces for dietary, laundry, morgue, ambulance entrance, receiving areas, power plants, mechanical equipment, incinerator, garbage can cleaning, automobile parking and storage areas for garbage, trash and medical gases shall be located and constructed to minimize noise, steam, odors and hazards in patient care areas and bedrooms.

1227.4.3 Treatment spaces. Radiology, laboratory, pharmacy and physical therapy spaces shall not be located in nursing units, surgical units, perinatal units, nursery areas, central sterilization rooms, food service areas, power plants, mechanical equipment rooms, maintenance shops, general storage, laundry, employees' dressing or housekeeping facilities.

1227.4.4 Exam room. If an exam room is provided, it shall have a minimum clear floor area of 80 square feet (7.43 m²), the least dimension of which shall be 8 feet (2438 mm).

1227.4.5 Treatment room. Unless specified elsewhere, if a treatment room is provided, it shall have a minimum clear floor area of 120 square feet (11.15 m²), the least dimension of which shall be 10 feet (3048 mm). A minimum of 3 feet (914 mm) is required between the sides and foot of the bed/gurney/table and any wall or other fixed obstruction. The room shall contain an examination light, a work counter for medical equipment, a handwashing fixture, cabinets, medication storage and counter for writing or electronic documentation.

1227.5 CORRIDORS.

1227.5.1 Width. The minimum width of corridors shall be 8 feet (2438 mm).

Exception: Patient-care corridors in correctional treatment centers for psychiatric care of patients who are not bedridden shall have a minimum clear and unobstructed width of 6 feet (1829 mm). For the purpose of this section, bedridden patients shall be defined as patients confined to beds who would be transported or evacuated in beds or litters.

1227.5.2 Service corridors width. Service corridors with anticipated light traffic volume for nonpatient use may be reduced to a width of 5 feet (1524 mm) if approved by the enforcing agency.

Exception: Corridors in administrative and business areas may be reduced to a width of 44 inches (1118 mm).

1227.5.3 Handrails. Corridors for patient traffic in areas providing skilled nursing, intermediate, care or rehabilitation services shall be furnished with a handrail on both sides at a height not less than 30 inches (762 mm) or greater than 36 inches (914 mm).

1227.5.4 Connections. Corridor systems shall connect all patient rooms and essential services.

1227.6 DOORS AND DOOR OPENINGS.

1227.6.1 Toilet room doors. Doors to toilet rooms shall have an opening of not less than 32 inches (813 mm) clear in width and shall be equipped with hardware which will permit the door to swing outward or in a manner to negate the need to push against a patient who may have collapsed within the toilet room.

1227.6.2 Pocket doors. Pocket sliding doors are not permitted.

Exception: Doors not serving as exit doors from administration areas.

1227.6.3 Door view windows. Doors to patient bedrooms shall be provided with a view window with a minimum area of 288 square inches (0.186 square meters). Window sill height shall not be higher than 42 inches (1067 mm) from the floor.

1227.7 WINDOWS AND SCREENS.

1227.7.1 Natural light. Rooms approved for the housing of patients shall be provided with natural light by means of glazed openings.

1227.7.2 Screens. When windows are operable, they shall be provided with insect screens of 16 meshes to the inch.

1227.7.3 Light and ventilation. All portions of a building used by patients, personnel or other persons shall be provided with artificial light and a mechanically operated ventilating system as specified in the California Electrical Code and the California Mechanical Code.

1227.7.4 Patient viewing windows. Each patient bedroom shall be provided with viewing windows from the corridor to allow full and unobstructed visual observation of the patient.

1227.8 CEILING HEIGHTS.

1227.8.1 Minimum height. The minimum height of ceilings shall be 8 feet (2438 mm).

Exception: Closet, toilet rooms and bathroom minimum ceiling heights shall not be less than 7 feet (2134 mm).

1227.8.2 Minimum height with fixed ceiling equipment. Rooms containing ceiling-mounted, major fixed equipment or ceiling-mounted surgical light fixtures shall have ceiling heights to accommodate the equipment or fixtures and their normal movement.

1227.9 INTERIOR FINISHES.

1227.9.1 Floor finishes.

1227.9.1.1 Floor finishes. Shall be smooth, waterproof and durable.

Exception: Upon written appropriate documented request, the enforcing agency may grant approval of the installation of carpet. See Table 1224.4.11.

1227.9.1.2 Resilient flooring. If used in toilet and bathing rooms, shall be continuous and extend upward onto the walls at least 5 inches (127 mm).

1227.9.2 Wall bases.

1227.9.2.1 Materials and installation. The material and textures of bases and the installation thereof shall be such as to minimize dust-catching surfaces, moisture, infiltration and the harboring of vermin.

Exception: In locations where carpet is permitted as a floor finish material, the use of carpeted base (coved or strip base) up to a maximum height of 5 inches (127 mm) is also permissible.

1227.9.2.2 Wood bases. Wood bases are prohibited except in administration departments and other offices described in Section 1227.16.

Exceptions: Wall bases in kitchens, operating rooms, delivery rooms, emergency operating rooms, cast rooms, special procedure rooms and other areas which are subject to wet cleaning methods shall be made integral and coved with the floor, and constructed without voids at the intersection of floor and wall surfaces.

1227.9.3 Walls. Interior wall finishes shall be smooth, washable and durable.

1227.9.4 Ceilings. Ceiling finishes shall be in compliance with Table 1224.4.11.

Exceptions: Walls and ceiling finish requirements do not apply to boiler rooms, mechanical equipment rooms, administration departments, other offices, enclosed stairways, maintenance shops and similar spaces.

1227.10 ELEVATORS.

1227.10.1 Patient elevators shall have minimum inside platform dimensions of 5 feet by 8 feet (1524 mm by 2438 mm) and a minimum clear door opening of 4 feet, 0 inches (1118 mm).

1227.10.2 Passenger elevators shall have minimum inside platform dimensions of 4 feet, 8 inches by 7 feet, 4 inches (1422 mm by 2236 mm).

1227.10.3 Buildings over one story in height with accommodations or services for patients on floors without grade level entrance shall provide at least one passenger or patient elevator.

1227.10.4 If bed patients are accommodated on one or more floors, other than the main entrance floor or where operating rooms or delivery rooms are above or below the

697

main entrance floor, at least one patient elevator shall be provided.

1227.10.5 At least one patient elevator and one service elevator shall be provided in correctional treatment centers with a capacity of 60 to 149 beds on floors other than the main entrance floor.

1227.10.6 At least one patient elevator, one passenger elevator and one service elevator shall be provided in hospitals with a capacity of 150 or more beds on floors other than the main entrance floor.

1227.10.7 If elevators in the correctional institution meet the above size requirements and are easily accessible, the elevators need not be duplicated in the correctional treatment centers.

1227.11 GARBAGE-SOLID WASTE AND TRASH STOR-AGE. Rooms or screening enclosures shall be provided for the washing and cleaning of garbage containers and for the storage of garbage, trash, and other solid wastes. Such rooms or screening enclosures shall include the following:

- 1. A concrete floor with a curb and with a drain connected to the sewer.
- 2. Steam or hot-water and cold-water supply.
- 3. A minimum floor area of .5 square feet (0.046 m²) per bed, but not less than 25 square feet (2.32 m²), the least dimension of which shall be 4 feet (1219 mm).
- 4. A method of limiting access to the material except by authorized persons.

BASIC SERVICES

1227.12 NURSING SERVICE SPACE.

- 1227.12.1 Patient bedrooms. Patients shall be accommodated only in rooms with the following minimum floor area, exclusive of toilet rooms, wardrobes, entrance vestibules, and fixed furnishings or equipment.
 - 1. Single-patient rooms: 110 square feet (10.22 m²).
 - 2. Multi-patient rooms: 80 square feet (7.43 m²) per bed.
- 1227.12.2 Distance. A minimum distance of 3 feet (914 mm) shall be provided between beds and 4 feet (1219 mm) between the foot of beds and walls or fixed objects in multipatient rooms, and 3 feet (914 mm) in single-patient rooms.
- 1227.12.3 Airborne infection isolation rooms. Single rooms shall be provided for the isolation of patients with airborne communicable disease at a ratio of one room for each 35 beds, and for each major fraction thereof. At least one airborne infection isolation room shall be provided. Airborne infection isolation rooms shall be labeled with the words "Airbone Infection Room" on or adjacent to the anteroom side of the door between the isolation room and the anteroom.
 - 1227.12.3.1 Alternates. Alternate designs for modifications to isolation rooms in operation prior to the effective date of this section may be utilized when it can be demonstrated that the alternate design meets performance requirements, without compromising any health or life-safety requirement.

1227.12.3.2 Anteroom doors. Airborne infection isolation room(s) shall have self-closing and latching devices on all anteroom doors.

1227.12.3.3 Anteroom. A separate anteroom shall be provided between the airborne infection isolation room and the corridor, which shall constitute the primary entrance to the negative pressure isolation room. This anteroom shall have a handwashing fixture, work counter at least 3 feet (914 mm) long, cabinets and space to gown and to store clean and soiled materials. There shall be a view window from the anteroom to the isolation room and means to allow for airflow from the anteroom into the negative pressure isolation room. Doors shall be aligned to allow large equipment to be wheeled into the airborne infection isolation room unless a secondary door complying with Section 1227.12.3.4 is provided. One anteroom may serve no more than two airborne infection isolation rooms.

1227.12.3.4 Secondary entry. When a secondary entry is provided directly from the corridor to the negative-pressure isolation room, secondary doors shall be provided with locking devices which are readily openable from the room side and which are readily openable by the facility staff on the other side. When key locks are used on isolation rooms, keys shall be located at the nurses' station in a prominent readily accessible location.

1227.12.3.5 Adjoining toilet facilities. Each isolation room shall have its own toilet room facilities with an emergency nurse call system, a lavatory, a shower providing a seat or a space for a shower chair and a toilet equipped with a bedpan flushing attachment with a vacuum breaker.

1227.12.3.6 Sealed-tight room. Airborne infection isolation room perimeter walls, ceiling, floors, doors and penetrations shall be sealed tightly to minimize air infiltration from the outside or from other spaces.

1227.12.4 Protective environment rooms. Protective environment rooms for the protection of certain immunosuppressed patients may be provided by the facility. Protective environment rooms shall be labeled "Protective Environment Room" on or adjacent to the anteroom side of the door between the isolation room and the anteroom.

1227.12.4.1 Anteroom doors. Airborne infection isolation room(s) shall have self-closing and latching devices on all anteroom doors.

1227.12.4.2 Anteroom. A separate anteroom shall be provided between the protective environment room and the corridor or adjoining space which shall constitute the only entrance to the protective environment isolation room. This anteroom shall have a handwashing fixture, work counter at least 3 feet (914 mm) long, cabinets and space to gown and to store clean and soiled materials. There shall be a view window from the anteroom to the positive-pressure isolation room. There shall be means to allow for airflow from the protective environment room into the anteroom. Anteroom doors shall be aligned so that large equipment can be

wheeled into the isolation room. One anteroom may serve no more than one protective environment room.

Exception: Alternate designs for protective environment rooms, without individual anterooms, may be approved by the enforcement agency when it can be demonstrated that the alternate design meets the requirements of the California Mechanical Code and does not compromise or alter any health or fire-protection component, assembly or system.

- 1227.12.4.3 Toilet room(s). Adjoining toilet room facilities shall meet the requirements of Section 1227.12.3.5.
- 1227.12.4.4 Sealed-tight room. Protective environment room perimeter walls, ceiling, floors, doors and penetrations shall be sealed tightly to minimize air infiltration from the outside or from other spaces.
- 1227.12.5 Identification. Each patient room shall be labeled with an identification number, letter or combination of the two.
- **1227.12.6 Seclusion rooms.** Seclusion rooms shall comply with the requirements of Section 1224.4.4.1 and the following:
 - 1227.12.6.1 Seclusion rooms. Provide for disturbed/special patients at a ratio of one room for each 30 beds and for each major fraction thereof. At least one seclusion room shall be provided in each nursing service unit.
 - 1227.12.6.2 Viewing windows. Seclusion rooms shall be provided with viewing windows to allow full and unobstructed visual observation of the patient. They shall be located near the nurses' station and toilet room facilities.
 - 1227.12.6.3 Appendages and equipment. Rooms shall be free of appendages and equipment which could facilitate suicide or self-mutilation.
- 1227.12.7 Nurses' station. A nurses' station shall be provided within each nursing unit.
 - 1227.12.7.1 Components. Nurses' stations shall be provided with a cabinet, a desk, space for records, a bulletin board, a telephone, and a specifically designated and lockable and illuminated medicine storage compartment, and a handwashing fixture. If a separate medicine room is provided, it shall have a lockable door and a medicine sink. This sink cannot replace the required nurses' station handwashing fixture.
 - 1227.12.7.2 Size. Nurses' stations serving 25 or less beds shall have a minimum floor area of 100 square feet (9.29 mm²). Nurses' stations servicing more than 25 beds shall have a minimum floor area of 125 square feet (11.6 m²). The minimum dimension of any nurses' station shall not be less than 8 feet (2438 mm).
 - 1227.12.7.3 Distance. The distance between the nurses' station entrance and the center of the doorway of the most remote patient bedroom shall not exceed 90 linear feet (27432 mm).

Exception: This section does not preclude designs based on primary nursing concepts incorporating

more than one single nursing station of less than 100 square feet (9.29 m^2) each and an additional work space or station for unit clerk/receptionist junctions.

1227.12.7.4 Correctional officer. A separate space for the correctional officer may adjoin the nurses' station but shall not be included in the minimum square footage requirement for a nurses' station.

1227.12.8 Utility rooms. Utility rooms shall be provided in each nursing unit. Soiled and clean utility or holding rooms shall be separated and have no direct connection.

1227.12.8.1 Clean utility room. Clean utility rooms shall contain a work counter, handwashing fixture and storage facilities unless the room is used only for storage and holding as part of a system for distribution of clean and sterile supplies, in which case the work counter and handwashing fixture may be omitted.

1227.12.8.2 Soiled workroom or soiled holding room. Soiled utility rooms shall contain a flushing-rim clinical sink or equivalent flushing-rim device, handwashing fixture, work counter, waste receptacles and linen hampers unless the room is used only for the temporary holding of soiled materials, in which case the flushing-rim clinical sink, handwashing fixture and work counter may be omitted. However, if the flushing-rim clinical sink is omitted, other provisions for disposal of liquid waste shall be provided.

1227.12.9 Treatment and exam rooms. If treatment rooms or exam rooms are provided, they shall comply with Sections 1227.4.4 and 1227.4.5.

1227.12.10 Toilet and bath facilities. Separate toilet room facilities shall be provided for the use of patients and personnel.

1227.12.10.1 Bathroom facilities. Provide for patients in the nursing unit in at least the following ratios:

Bathtubs or showers

1:12 patients

(Minimum one bathtub on each floor providing skilled nursing or intermediate care services)

Lavatories

1:8 patients

(Fixtures shall be equipped without aerators and may have conventional controls. Gooseneck spouts shall not be used)

Toilets

1:6 patients

Fixtures serving individual patient rooms shall not be considered as meeting the required ratios for bedrooms not served by individual adjoining toilet rooms or bathrooms.

Changes in these ratios for wards or units in which bed patients only are to be cared for may be permitted by the enforcing agency.

1227.12.11 Patient/nurse call system. A patient/nurse call system shall be provided in compliance with Table 1224.4.6.5 and the provisions of Section 517.123 of the California Electrical Code.

1227.13 PHARMACEUTICAL SERVICE SPACE.

1227.13.1 Licensed pharmacy. A licensed pharmacy shall be provided and shall comply with the provisions of Section 1250.

1227.13.1.1 Entrance and waiting. If the pharmacy dispenses directly to inmates from the correctional institution, an entrance and a waiting area separate from the inpatient areas shall be provided.

1227.14 DIETETIC SERVICE SPACE.

1227.14.1 Dietetic service space. The dietetic service space shall accommodate the provisions of Section 1225.4.2.

Exceptions:

- 1. Unless the dietetic service in the correctional institution is found acceptable to the licensing agency.
- 2. A contractual arrangement for dietetic services with another health facility is acceptable to the licensing agency.

1227.15 OFFICES. Office spaces shall be provided for the provisions of nursing, physician, psychiatric and psychological services.

1227.15.1 Consultation/interviews. Consultation/interview rooms shall be provided.

1227.15.2 Conference/group activities. Separate rooms or spaces shall be provided for conferences and group activities.

Exception: If conference room or space is available to the correctional treatment facility staff in the correctional institution, this room or space need not be duplicated.

1227.16 ADMINISTRATION SPACE.

1227.16.1 Administration. An administration area shall be provided which shall provide for the following functions:

- 1. Waiting area.
- 2. Offices for the administrator and clerical personnel.

1227.16.2 Records. Spaces shall be provided which accommodate the following functions:

- 1. Work area for sorting and recording records, for either paper or electronic media.
- 2. Secure storage area for medical records, for either paper or electronic media.

1227.17 CENTRAL STERILE SUPPLY.

1227.17.1 *Minimum requirements.* A central supply and sterilizing area shall be provided. Rooms and spaces shall accommodate the following services and equipment:

- 1. Soiled work area. A receiving and gross cleaning area which shall contain workspace and equipment for cleaning medical and surgical equipment and for disposal of or processing of soiled material.
- 2. Clean work area. A clean work area which shall contain work space, and equipment for sterilizing medical and surgical equipment and supplies.

3. Sterilizing space.

Exception: Items 1 through 3 do not apply to facilities with contractual arrangements for outside autoclaving and sterilizing services.

4. Storage. Space for sterile supplies and unsterile supplies.

1227.17.2 Sterilizers and autoclaves. All sterilizers and autoclaves which emit steam exhaust shall be vented to the outside of the building. Such vents shall be independent from the plumbing vent system.

Exception: Small instrument sterilizers.

1227.18 STORAGE.

1227.18.1 General storage. Correctional treatment centers shall provide combined general and specialized storage space in accordance with the following:

1–10 beds
120 square feet (11.15 m²)
minimum

11–100 beds
12 square feet (1.11 m²) per bed
over 100 beds
1,200 square feet (111.48 m²)
plus 5 square feet (0.46 m²) per
bed for each bed over 100

1227.18.2 Specialized storage. Specialized storage spaces shall include the following:

- 1. Linen. Separate and enclosed facilities for clean and soiled linen in each nursing unit. The clean linen storage space shall have a minimum area of 10 square feet (0.93 m²) and may be within the clean utility room. The soiled linen collection space shall have an area of no less than 10 square feet (0.93 m²), and may be within the soiled utility room.
- 2. Supply. One supply storage space having a minimum area of 15 square feet (1.39 m²) shall be provided in each nursing unit. Supply storage may be within the clean utility room used only as part of a system for distributing clean and sterile supplies.
- 3. Wheelchairs. A room or space shall be provided in each nursing unit for wheelchairs and stretchers. The wheelchair and stretcher space shall have a minimum area of 15 square feet (1.39 m²).
- 4. Storage. Sterile and unsterile supplies shall be stored separately.

1227.19 EMPLOYEE DRESSING ROOMS AND LOCKERS.

1227.19.1 Minimum facilities. Correctional treatment centers shall provide the following:

1. Dressing rooms. Separate dressing rooms for male and female personnel with lockers, lavatory and toilet(s).

Exception: If provided for the correctional treatment center staff in adjacent correctional institutions, dressing rooms and lockers need not be duplicated.

1227.20 HOUSEKEEPING ROOM.

1227.20.1 A securely lockable housekeeping room with service sink and supply storage spaces shall be provided in each nursing unit.

OPTIONAL SERVICES

1227.21 SERVICE SPACES. Service spaces, such as laboratory, radiology and any other services approved by the licensing agency, shall comply with the applicable space requirements of Sections 1224 and 1225. Service spaces shall also comply with applicable provisions of the California Building Standards Administrative Code (Part 1).

1227.22 OUTPATIENT SERVICES. The following shall be provided or made available to a outpatient service space.

1227.22.1 Waiting. Waiting area(s) shall be provided with access to toilet room facilities and a drinking fountain both meeting the requirements of Sections 1231.3.1, 1231.3.2 and 1231.3.3.

1227.22.1.1 Holding cell. If a temporary holding cell or room is used for this purpose, it shall comply with Section 1231.2.2.

Exception: The minimum floor area shall be 80 square feet (7.43 m^2) .

1227.23 24-HOUR MENTAL HEALTH CARE SERVICES.

1227.23.1 Program/dining space. Provide within the Correctional Treatment Center for use by mental health treatment program patients, as is consistent with security requirements. Program/dining space shall be provided with a minimum floor area of 30 square feet (2.79 m²) per patient served at a given time.

1227.23.2 Mental health treatment. Correctional treatment centers providing a mental health treatment program shall include one safety room for every 30 mental health treatment program beds and for each major fraction thereof, and one observation room providing direct observation of every portion of the room for every 15 mental health beds and for each major fraction thereof. At least one safety room and one observation room shall be provided.

П

1227.23.3 Safety rooms. Safety rooms shall be constructed so as to provide video camera observation capability. Safety rooms shall comply with the design criteria requirements of Section 1231.2.5 for a safety cell.

SECTION 1228 ACUTE PSYCHIATRIC HOSPITALS

1228.1 Scope. The provisions of this section shall apply to acute psychiatric hospitals.

1228.2 Application. New buildings and additions, alterations or repairs to existing buildings subject to licensure shall comply with applicable provisions of the California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code (Parts 3, 4, 5, 6 and 9 of Title 24) and this section.

Note: Refer to the applicable exceptions under Section 1224.2.

1228.2.1 Functional program. Refer to California Administrative Code (Part 1 of Title 24), Section 7-119, Functional Program, for requirements. Projects associated with acute psychiatric hospitals and with psychiatric nursing units in general acute-care hospitals shall include a Patient Safety Risk Assessment.

1228.3 Definitions. The definitions provided under Section 1224.3 apply to this section except as modified below:

ACUTE PSYCHIATRIC HOSPITAL. Acute psychiatric hospital means a hospital having a duly constituted governing body with overall administrative and professional responsibility and an organized medical staff which provides 24-hour inpatient care for mentally disordered, incompetent or other patients referred to in Division 5 (commencing with Section 5000) or Division 6 (commencing with Section 6000) of the Welfare and Institutions Code, including the following basic services: medical, nursing, rehabilitative, pharmacy and dietary services.

BASIC SERVICES. Basic services mean those essential services required by law for licensure as an acute psychiatric hospital including medical, nursing, rehabilitative, pharmaceutical, dietary and support services.

HOSPITAL. Hospital, where used in this section, means an acute psychiatric hospital.

SALLY PORT. A compartment provided with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time.

1228.4 GENERAL CONSTRUCTION. Acute psychiatric hospitals shall comply with the provisions under Section 1224.4, General Construction, where applicable, except as supplemented, amended or modified below. Specific application shall respond to the patient injury and suicide prevention component of the Patient Safety Risk Assessment prepared under California Administrative Code (Part 1 of Title 24), Section 7-119.

1228.4.1 Reserved.

1228.4.2 Reserved.

1228.4.3 Reserved.

1228.4.4 Support areas for patients.

1228.4.4.1 Examination and treatment rooms.

1228.4.4.1.1 Examination room. Examination rooms in acute psychiatric hospitals shall meet the requirements of Section 1224.4.4.1.1 as amended below:

1228.4.4.1.1.1 Location. Examination rooms shall be permitted to serve several nursing units and shall be permitted to be on a different floor, unless prohibited by specific sections of this code or by the Patient Safety Risk Assessment.

1228.4.4.1.1.2 Space requirements. Examination rooms shall have a minimum clear floor area of 120 square feet (11.15 m^2) .

1228.4.4.1.2 Treatment room. Where provided, refer to Section 1224.4.4.1.2.

1228.4.4.1.3 Airborne infection isolation exam/ treatment room. Where provided, refer to Section 1224.4.4.1.3.

1228.4.4.1.4 Seclusion room. Refer to Section 1224.4.4.1.4.

1228.4.4.1.5 Quiet room. Where provided, a quiet room for a single patient who requires a period of solitude but does not require a seclusion room, shall have a minimum clear floor area of 80 square feet (7.43 m^2) .

1228.4.4.2 Administrative center(s) or nurse station(s). Refer to Section 1224.4.4.2.

1228.4.4.3 Specimen and blood collection facilities. Where provided, refer to Section 1224.4.4.3.

1228.4.4.4 Medication station. Refer to Section 1224.4.4.4.

1228.4.4.5 Nourishment area or room. Refer to Section 1224.4.4.5.

1228.4.4.6 Clean utility/work room. Refer to Section 1224.4.4.6.

1228.4.4.7 Soiled utility/work room. Refer to Section 1224.4.4.7.

1228.4.5 Outpatient waiting rooms. Where provided, refer to Section 1224.4.5.

1228.4.6 Miscellaneous requirements. Refer to Section 1224.4.6 for requirements regarding station outlets, gas and vacuum systems, hyperbaric facilities, laboratories, and nurse call systems.

1228.4.7 Corridors. Refer to Section 1224.4.7.

1228.4.8 Doors and door openings. Refer to Section 1224.4.8 with the following modifications and amendments:

- Where indicated by the Patient Safety Risk Assessment, toilet room doors shall be equipped with keyed locks that allow staff to control access to the toilet room.
- 2. Use of door closers is to be avoided unless required by other sections of this code.
- 3. Door hinges shall be designed to minimize accessible anchor points (e.g., cut hinge type, piano hinge, concealed hinge, etc.).
- 4. Except for specifically designed ligature-resistant hardware, door lever handles shall point downward when in the latched and in the unlatched position.
- 5. All hardware shall have tamper-resistant fasteners.

1228.4.9 Windows and screens.

- 1. Windows located in patient care areas, or areas used by patients, shall limit the opportunities for patients to inflict harm to themselves or others.
 - 1.1. All glazing (interior and exterior) shall be fabricated with polycarbonate or laminate on the inside of the glazing or with any glazing that meets or exceeds the requirements for Class 1.4

per ASTM F1233-08 (2013), Standard Test Method for Security Glazing Material and Systems

Exception: Use of tempered glass for interior borrowed lights shall be permitted where allowed by the Patient Safety Risk Assessment.

- 1.2. Where window treatments are provided, they shall be designed without accessible anchor points.
- 1.3. Where operable windows are provided in patient rooms or suites, openings shall be limited to prevent the passage of a 4-inch (102 mm) sphere.
- 2. Anchorage for windows and window assemblies (including frames, hinges and locking devices) shall be designed to resist impact loads applied from the inside and shall be tested in accordance with ANSI Z97.1, Safety Glazing Materials Used in Buildings.
- 3. A minimum net glazed area of not less than 8 percent of the floor area of each indoor activity space and dining space shall be provided.

1228.4.10 Ceiling heights. Refer to Section 1224.4.10 unless noted otherwise.

1228.4.11 Interior finishes. Interior finishes shall comply with Section 1224.4.11 as amended in this section. Special design consideration shall be given to injury and suicide prevention in the context of the Patient Safety Risk Assessment

1228.4.11.1 Reserved.

1228.4.11.2 Reserved.

1228.4.11.3 Reserved.

1228.4.11.4 Ceilings. Refer to Section 1224.4.11.4 with the following modifications and amendments:

Ceilings shall be monolithic in seclusion rooms, exam/treatment rooms, patient bedrooms, patient toilet rooms, or patient bathing facilities.

- 1. In these rooms, the ceiling shall be secured from patient access.
- 2. Mechanical, electrical, and plumbing systems, other than terminal elements serving the room (e.g., diffusers, registers, luminaires, etc.), shall be concealed above the ceiling.

1228.4.12 Courts. Refer to Section 1224.4.12.

1228.4.13 Elevators. Refer to Section 1224.4.13.

1228.4.14 Garbage, solid waste and trash storage. Refer to Section 1224.4.14.

1228.4.15 Housekeeping room. Refer to Section 1224.4.15.

1228.4.16 Laundry and trash chutes. Refer to Section 1224.4.16.

1228.4.17 Telephones. Refer to Section 1224.4.17.

1228.4.18 Grab bars. Refer to Section 1224.4.18 with the following modifications and amendments:

- 1. Grab bars, including those that are part of fixtures such as soap dishes, shall be sufficiently anchored to sustain a concentrated load of 250 pounds (113.4 kg).
- 2. Grab bars shall be graspable and shall be ligature resistant.

1228.4.19 Noise control. Refer to Section 1224.4.19.

1228.4.20 Built-in furnishings. Built-in furnishings in areas accessible to patients shall comply with the following requirements:

- 1. Built-in furnishings with doors or drawers shall not be provided.
- 2. Open shelves shall be fixed with tamper-resistant hardware.
- 3. When provided, clothing rods or hooks shall be ligature resistant.
- 4. The following are not permitted:
 - 4.1. Towel bars.
 - 4.2. Shower curtain rods.
 - 4.3. Lever handles, except where a specifically designed ligature-resistant lever handle is used.

1228.4.21 Building systems.

1228.4.21.1 Lighting. Lighting in areas identified in the Patient Safety Risk Assessment as high- and medium-risk areas shall be tamper resistant. Refer to California Electrical Code.

1228.4.21.2 Receptacles. When electrical receptacles are provided in a patient bedroom, the receptacles shall be in compliance with California Electrical Code.

1228.4.22 Handwashing stations. All handwashing fixtures that are accessible to patients, including those located in patient rooms and patient toilet rooms, shall include ligature-resistant features that do not compromise compliance with the hot and cold water supply controls, laminar flow, and sink requirements of the California Plumbing Code. Handwashing fixtures within patient rooms and patient toilet rooms in psychiatric nursing units are not required to be equipped with gooseneck spouts and the discharge point may be less than 5 inches (127 mm) above the fixture rim.

1228.5 Communication system. Refer to Section 1224.5.

BASIC SERVICES

1228.6 Reserved.

1228.7 Reserved.

1228.8 Reserved.

1228.9 Reserved.

1228.10 Reserved.

1228.11 Reserved.

1228.12 Reserved.

1228.13 PSYCHIATRIC REHABILITATION ACTIVITIES SERVICE SPACE. The psychiatric rehabilitation activities service space may be centralized for common use or may be located in each nursing unit in response to the Patient Safety Risk Assessment. The following areas are required in the psychiatric rehabilitation activities service space:

1228.13.1 Patient care areas.

1228.13.1.1 Indoor activity rooms.

- 1. At least two separate activity rooms, one appropriate for group recreation and one for quiet activities to serve as a patient lounge, shall be provided.
- 2. Space requirements. The combined area of these rooms shall have a minimum of 25 square feet (2.32 m²) per patient bed, with at least 120 square feet (11.15 m²) of clear floor area for each of the two spaces.

1228.13.1.2 Outdoor activity area. An outdoor activity area shall be provided. Outdoor areas shall meet the following requirements:

- 1. Fences and walls shall be designed to:
 - 1.1. Be installed with tamper-resistant hardware.
 - 1.2. Have a minimum height of 10 feet (3048 mm) above the outdoor area elevation.
 - 1.3. Be anchored and constructed to withstand the body force of a 350-pound (158-kg) person.
- 2. If provided, gates or doors in the fence or wall shall:
 - 2.1. Swing away from the outdoor activity area.
 - 2.2. Have the hinge installed on the outside of the outdoor activity area.
 - 2.3. Be provided with a locking mechanism that has been coordinated with egress requirements of Section 1004.5, Outdoor areas.
- 3. Lights shall not be accessible to patients. Lighting in the outdoor activity area shall not be pole mounted.
- 4. If provided, security cameras shall not be accessible to patients and cameras shall view the entire outdoor activity area.
- 5. If provided, furniture shall be secured from movement. Furniture shall not be placed in locations where it can be used to climb the fence or wall.

1228.13.1.3 General support areas.

- 1. Space for staff conferences, patient evaluation and progress reports.
 - 1.1. Staff conference room. A conference and treatment planning room shall be provided.
 - 1.2. Office space separate from the activities area.

- 2. Where outpatients are treated, there shall be a waiting area compliant with the requirements of Section 1228.4.5.
- 1228.13.2 Physical therapy service space. Where provided, the physical therapy service space shall comply with Section 1224.35.2.
- 1228.13.3 Occupational therapy service space. Where provided, occupational therapy service space shall comply with Section 1224.35.3.
- 1228.13.4 Speech pathology and/or audiology service space. Where provided, the speech pathology service space shall comply with Section 1224.35.4.
- 1228.14 PSYCHIATRIC NURSING SERVICE SPACE. Psychiatric nursing units shall comply with the requirements of this section. If the nursing unit is a locked unit, the primary access point to the unit shall be through a sally port. For "secure treatment facilities," alternate designs for locked unit access without individual sally ports may be approved by the enforcement agency when it can be demonstrated that the alternate design meets performance requirements without compromising any health or life-safety requirement.
 - 1228.14.1 Patient rooms. Each patient bedroom shall meet the following standards:
 - 1228.14.1.1 Capacity. Maximum room capacity shall be two patients.
 - Exception: Where renovation of existing individual acute psychiatric hospital patient rooms is undertaken in facilities built under the 2013, or prior, California Building Code, maximum room capacity shall be no more than the present capacity, to a maximum of eight patients per patient room. Placement of beds shall not be more than three deep from the exterior window.
 - **1228.14.1.2** Space requirements. Patient bedrooms shall have a minimum clear floor area of 100 square feet (9.29 m²) for single-bed rooms and 80 square feet (7.43 m²) per bed for multiple-bed rooms.
 - 1228.14.1.3 Windows. Each patient bedroom shall have a window in accordance with Section 1228.4.9.

1228.14.1.4 Reserved.

- **1228.14.1.5 Outside exposure.** Refer to Section 1224.14.1.5.
- 1228.14.1.6 Handwashing stations. Handwashing stations shall comply with Section 1228.4.22. Handwashing stations are required in patient toilet rooms. Handwashing stations are not required in patient bedrooms.

1228.14.1.7 Patient toilet room.

- 1. Each patient shall have access to a toilet room without having to enter a corridor.
 - Exception: Corridor access to the patient toilet room shall be permitted at pediatric or adolescent patient bedrooms and in specific patient bedrooms where the use of corridor access is part of the hospital's written Patient

- Safety Risk Assessment and management program.
- 2. One toilet room shall serve no more than two patient bedrooms and no more than four patients.
- 3. The toilet room shall contain a toilet and a handwashing station.
- 1228.14.1.8 Patient storage. Each patient shall have in their room a separate wardrobe, locker, or closet for storing personal effects. Shelves for folded garments shall be used instead of arrangements for hanging garments.
- 1228.14.1.9 Privacy. Visual privacy in multibed rooms (e.g., cubicle curtains) is not required in psychiatric nursing units.
- 1228.14.1.10 Grab bars. Grab bars provided in accessible patient toilet rooms shall comply with Section 1228.4.18.
- 1228.14.1.11 Room identification. Each patient room shall be labeled with an identification number, letter or combination of the two.
- 1228.14.2 Service areas. Provision for the services listed below shall be in or immediately accessible to each psychiatric nursing unit. The size and location of each service area will depend upon the numbers and types of beds served. Identifiable spaces are required for each of the indicated functions. If a service area is specifically permitted to serve more than one nursing unit, there shall be at least one such service area located on each nursing unit floor.
 - 1228.14.2.1 Administrative center(s) or nurse station(s). Refer to Section 1224.4.4.2.
 - 1228.14.2.1.1 Documentation area. A separate charting area with provisions for acoustic and patient file privacy shall be provided.
 - 1228.14.2.1.2 Handwashing station(s). Refer to Section 1228.4.22 for the definition of handwashing station. Handwashing stations in high- or mediumpatient-risk areas shall be ligature resistant.
 - 1228.14.2.2 Office(s) for staff. Office(s) for staff shall be provided.

1228.14.2.3 Support areas for staff.

- 1. Staff lounge facilities. Staff lounge facilities may be combined between units.
- 2. Staff toilet rooms.
- 3. Staff storage locations. Securable closets or cabinet compartments for the personal effects of nursing personnel shall be immediately accessible to the administrative center or nurse station.
- 1228.14.2.4 Multipurpose room(s). Multipurpose rooms shall be provided for staff, patients, patients' families for patient visits, conferences, reports, education, training sessions, and consultation. These rooms shall be readily accessible to each nursing unit. One such room may serve several psychiatric nursing units.

1224.14.2.5 Examination and treatment room. Refer to Section 1228.4.4.1.1.

1228.14.2.6 Clean utility/workroom. Refer to Section 1228.4.4.6.

1228.14.2.7 Soiled utility/workroom. Refer to Section 1228.4.4.7.

1228.14.2.8 Medication station. Refer to Section 1228.4.4.4.

1228.14.2.9 Clean linen storage. Each psychiatric nursing unit shall contain a designated area for clean linen storage. This may be within the clean utility room or a separate closet.

1228.14.2.10 Nourishment area. Refer to Section 1228.4.4.5.

1228.14.2.11 Ice-making equipment. Each nursing unit shall have equipment to provide ice for treatments and nourishment. Ice-making equipment may be in the clean utility/workroom or at the nourishment station. Ice intended for human consumption shall be from self-dispensing icemakers.

1228.14.2.12 Equipment and supply storage. Equipment and supply storage is required, refer to Section 1224.14.2.12. Location of the storage areas shall not present a risk to the patient population as indicated in the functional program.

1228.14.2.13 Gurneys or wheel chairs. Storage for gurneys or wheelchairs is required, refer to Section 1224.14.2.13. Storage areas may be located within the nursing unit or outside but readily accessible to the unit.

1228.14.2.14 Patient bathing facilities. A bathtub or shower shall be provided for each six patient beds not otherwise served by bathing facilities at patient bedrooms.

1228.14.2.15 Common patient toilet room(s). In addition to the toilet rooms serving bed areas, common patient toilet rooms shall be located adjacent to multipurpose room(s) and within or directly accessible to each common patient bathing facility.

1228.14.2.16 Emergency equipment storage. Emergency equipment storage shall be provided at each nursing unit that is under visual observation of staff.

1228.14.2.17 Housekeeping room. One housekeeping room shall be permitted to serve more than one nursing unit on a floor. Refer to Section 1228.4.15.

1228.14.2.18 Grab bars. Grab bars in common patient toilets and bathing facilities shall be installed in accordance with Section 1228.4.18.

SPECIAL PATIENT CARE ROOMS

1228.14.3 Airborne Infection Isolation (AII) room(s). There shall be at least one airborne infection isolation (AII) room provided for each 50 beds, and for each major fraction thereof. Airborne infection isolation rooms for pediatric/adolescent and forensic supplemental service nursing units shall be calculated independently from, and shall not be shared with each other or any other psychiat-

ric nursing unit. Refer to Section 1224.14.3 and the general construction requirements of Section 1228.4.

1228.14.4 Protective environment room(s). If provided, refer to Section 1224.14.4 and the general construction requirements of Section 1228.4.

1228.14.5 Seclusion room(s). There shall be at least one seclusion room provided for each 24 licensed beds, and for each major fraction thereof. At least one seclusion room shall be provided. A seclusion room may be shared by psychiatric nursing units. Seclusion rooms for pediatric/adolescent and forensic supplemental service nursing units shall be calculated independently from, and shall not be shared with each other or any other psychiatric nursing unit. Refer to the general construction requirements of Section 1228.4.

1228.14.6 Quiet room. A quiet room shall be provided in each psychiatric nursing unit for a patient who needs to be alone for a short period of time but does not require a seclusion room. Refer to Section 1228.4.4.1.5.

1228.14.7 Visitor/consultation room(s). Visitor/consultation rooms shall be provided at a room-to-bed ratio of one consultation room for each 12 psychiatric beds, or major fraction thereof with a minimum of one, in each psychiatric nursing unit. Additionally, the following requirements shall be met:

- 1. Visitor/consultation room(s) shall have a minimum clear floor area of 100 square feet (9.29 m²).
- 2. The room(s) shall be designed for acoustical and visual privacy. Refer to Table 1224.4.19, Sound Transmission Limitations in Hospitals.

1228.14.8 Conference room. A conference and treatment planning room shall be provided for use by the psychiatric nursing unit.

1228.14.9 Space for group therapy. An enclosed private space with a minimum clear floor area of at least 225 square feet (20.90 m²) shall be available for group therapy activities.

1228.15 Reserved.

1228.16 Reserved.

1228.17 Reserved.

1228.18 Reserved.

1228.19 PHARMACEUTICAL SERVICE SPACE. Pharmaceutical service space shall comply with the provisions of Section 1224.19.

1228.20 DIETETIC SERVICE SPACE. Refer to Section 1224.20, Dietetic Service Space for requirements, as modified below:

1228.20.1 Dining area. Provide dining space(s) for ambulatory patients, staff, and visitors. Separate patient dining room(s) of 20 square feet (1.86 m^2) per patient bed shall be provided. These spaces shall be separate from the food preparation and distribution areas.

SUPPORT SERVICES

1228.21 ADMINISTRATIVE SPACE. Refer to Section 1224.21.

1228.22 CENTRAL STERILE SUPPLY. Refer to Section 1224.22.

1228.23 STORAGE. Refer to Section 1224.23, Storage, for requirements and the additional requirements below:

1228.23.1 Patient storage facilities. A staff-controlled secured storage area shall be provided for patient's effects that are determined to be potentially harmful (e.g., razors, nail files, cigarette lighters).

1228.24 MORGUE.

1228.24.1 Acute-care Psychiatric Hospitals with a licensed bed capacity of 50, or more, shall provide a morgue with autopsy facilities.

Exception: This may not be required if it can be demonstrated to the licensing agency that morgue and autopsy facilities are available locally.

1228.24.2 Minimum requirements. Refer to Section 1224.24.2.

1228.25 EMPLOYEE DRESSING ROOMS AND LOCK-ERS. Refer to Section 1224.25.

1228.26 HOUSEKEEPING ROOMS. Refer to Section 1224.26. 1228.27 LAUNDRY. Refer to Section 1224.27.

SUPPLEMENTAL SERVICES

1228.28 ELECTROCONVULSIVE THERAPY SERVICE SPACE. If electroconvulsive therapy (ECT) is provided in the facility, the requirements in Section 1224.28.6 shall be met.

1228.29 Reserved.

1228.30 PEDIATRIC AND ADOLESCENT PSYCHIAT-RIC UNIT. Pediatric and adolescent psychiatric unit patient areas shall be separate and distinct from adult psychiatric unit patient areas. The requirements of Section 1228.14, Psychiatric Nursing Service Space shall apply to pediatric and adolescent units as amended below:

1228.30.1 Patient bedroom.

1228.30.1.1 Capacity. Maximum bedroom capacity shall be four patients.

1228.30.1.2 Space requirements. Patient bedroom areas (with beds or cribs) shall meet the following requirements:

- 1. For single-bed rooms, a minimum clear floor area of 100 square feet (9.29 m²).
- 2. For multiple-bed rooms, a minimum clear floor area of 80 square feet (7.43 m²) per bed and 60 square feet (5.57 m²) minimum clear floor area per crib.

1228.30.2 Patient toilet room.

- 1. Each patient shall have access to a toilet room, either from the patient room or from the corridor outside the patient room.
- 2. Where access is provided via a corridor, the following requirements shall be met:
 - 2.1. The toilet room shall be located in the nursing unit.
 - 2.2. The toilet room shall be located no more than 150 feet (45.72 m) from the bedroom.

1228.30.3 Activity areas.

1228.30.3.1 Space requirements.

- The combined area for activity space shall have 35 square feet (3.25 m²) of clear floor area per patient bed.
- 2. A separate dining space shall be provided and shall have a minimum of 15 square feet (1.39 m²) of clear floor area per patient bed.

1228.30.3.2 Outdoor areas. Pediatric and adolescent outdoor areas shall be separate from adult outdoor areas. Refer to Section 1228.13.1.2.

1228.30.4 Support areas for the pediatric and adolescent psychiatric unit. Storage space shall be provided for toys, equipment, extra cribs and beds, and cots or recliners for parents who may stay overnight.

1228.31 FORENSIC PSYCHIATRIC UNIT. Where provided, a forensic psychiatric unit shall be separate and distinct from other patient areas. The requirements of Section 1228.14, Psychiatric Nursing Service Space shall apply to forensic units as amended below:

1228.31.1 Sally port. Forensic units shall have security vestibules or sally ports at the unit entrance. For "secure treatment facilities", alternate designs for locked unit access without individual sally ports, may be approved by the enforcement agency when it can be demonstrated that the alternate design meets performance requirements, without compromising any health or life-safety requirement.

1228.31.2 Pediatrics and adolescents. Forensic unit areas for pediatrics and adolescents shall be separated from adult areas. Refer to Section 1228.30.

1228.31.3 Space requirements. Specialized program requirements may result in additional treatment areas, police and courtroom space, and security considerations. When a forensic unit is provided, the needs of the patient population and special requirements shall be specifically addressed in the Patient Safety Risk Assessment.

1228.32 Reserved.

1228.33 Reserved.

1228.34 Reserved.

1228.35 Reserved.

1228.36 Reserved.

1228.37 Reserved.

1228.38 INTERMEDIATE-CARE SERVICE SPACE. Where provided, an intermediate-care service unit shall be

where provided, an intermediate-care service unit shall be housed in a separate and distinct nursing unit and shall comply with the applicable requirements of Section 1225 and the general construction provisions of Section 1228.4.

1228.39 OUTPATIENT SERVICE SPACE. Where provided, outpatient service space shall comply with the applicable requirements of Section 1224.39 and the general construction provisions of Section 1228.4.

1228.40 SKILLED NURSING SERVICE SPACE. Where provided, the skilled nursing service unit shall be housed in a separate and distinct nursing unit and shall comply with the

applicable requirements of Section 1225 and the general construction provisions of Section 1228.4.

1228.41 Reserved.

1228.42 CLINICAL LABORATORY SERVICE SPACE. Where provided, clinical laboratory service space shall comply with the requirements of Section 1224.17, Clinical Laboratory Service Space.

1228.43 RADIOLOGICAL SERVICE SPACE. Where provided, Radiology/Imaging Service Space shall comply with the requirements of Section 1224.18, Radiological/Imaging Service Space and the general construction provisions of Section 1228.4.

SECTION 1229 Reserved

SECTION 1230 [BSCC] MINIMUM STANDARDS FOR JUVENILE FACILITIES

1230.1 Design criteria for required spaces.

1230.1.1 Reception/intake admission. In each juvenile hall, space used for the reception of minors pending admission to juvenile hall shall have the following space and equipment:

- 1. Weapons lockers as specified in Section 1230.2.9;
- A secure room for the confinement of minors pending admission to juvenile hall as specified in Section 1230.1.2;

In each juvenile hall, camp and ranch, space used for the reception of minors pending admission to these facilities shall have the following space and equipment:

- 3. Access to a shower;
- A secure vault or storage space for minors, valuables;
- 5. Telephones accessible to minors; and
- 6. Access to hot and cold running water for staff use.

1230.1.2 Locked holding room. A locked holding room shall:

- 1. Contain a minimum of 15 square feet (1.4 m²) of floor area per youth;
- 2. Provide no less than 45 square feet (4.2 m²) of floor space and have a clear ceiling height of 8 feet (2438 mm) or more;
- 3. Contain seating to accommodate all youth as specified in Section 1230.2.8;
- 4. Be equipped with a toilet, wash basin and drinking fountain as specified in Section 1230.2, unless a procedure is in effect to give the youth access to a toilet, wash basin and drinking fountain;
- 5. Maximize visual supervision of youth by staff; and
- 6. Have an outward swinging or lateral sliding door.

1230.1.3 Natural light. Visual access to natural light shall be provided in locked sleeping rooms, single occupancy

sleeping rooms, double occupancy sleeping rooms, dormitories and day rooms. Natural light may be provided by, but is not limited to, skylights or windows in dayrooms, windows in adjacent exterior exercise areas, and in sleeping rooms and/or dormitories.

1230.1.4 Corridors. Corridors in living units shall be at least 8 feet (2438 mm) wide.

Exception: Where room doors are staggered, or if rooms are located on only one side, corridors shall be at least 6 feet (1829 mm) wide.

1230.1.5 Living unit. A living unit shall be a self-contained unit containing locked sleeping rooms, single and double occupancy sleeping rooms, or dormitories, dayroom space, toilet, wash basins, drinking fountains and showers commensurate to the number of youth housed. A living unit shall not be divided in a way that hinders direct access, supervision, immediate intervention or other action if needed. In juvenile halls, the number of youth housed in a living unit shall not exceed 30.

1230.1.6 Locked sleeping rooms. Locked sleeping rooms shall be equipped with an individual or combination toilet, wash basin and drinking fountain. Doors to locked sleeping rooms shall swing outward or slide laterally.

1230.1.7 Single occupancy sleeping rooms. Single occupancy sleeping rooms shall provide the following:

- 1. A minimum of 70 square feet (1.78 m^2) of floor area;
- 2. A minimum clear ceiling height of 8 feet (2438 mm); and,
- 3. The door into this room shall swing outward or slide laterally and be provided with a view panel, a minimum of 144 square inches (92,903 mm²), constructed of security glazing.

1230.1.8 Double occupancy sleeping rooms. Double occupancy sleeping rooms shall provide the following:

- 1. A minimum of 100 square feet (9.3 m^2) of floor area;
- 2. A minimum clear ceiling height of 8 feet (2438 mm) and a minimum width of 7 feet (2134 mm); and,
- 3. The door into this room shall swing outward or slide laterally and be provided with a view panel, a minimum of 144 square inches (92,903 mm²), constructed of security glazing.

1230.1.9 Dormitories. Dormitories shall provide the following:

- 1. A minimum of 50 square feet (4.6 m²) of floor area per minor with the minimum size of a dormitory being 200 square feet (18.6 m²) of floor area and a minimum 8-foot (2438 mm) clear ceiling height;
- 2. Designed for no fewer than four minors;
- 3. Dormitories in juvenile halls shall be designed for no more than 30 minors;
- 4. Camps shall conform to Items 1 and 2.

1230.1.10 Dayrooms. Dayrooms shall contain 35 square feet (3.3 m^2) of floor area per minor. Access must be pro-

vided to toilets, wash basins, drinking fountains and show-

ers as specified in Section 1230.2.

1230.1.11 Physical activity and recreation areas. Indoor / outdoor physical activity and recreation areas shall be designed as follows:

1. Facility capacity

Minimum indoor outdoor recreation space

40 or less

9,000 square feet (836 m²)

41 to 274

 $225 \ square \ feet \ (21 \ m^2)$

perminor up to 61,650 square feet

 $(5727 m^2)$

275 or more

61,650 square feet (5727 m²), plus 145 square

feet (13.47 m²) for each minor beyond 274 [up to a maximum of 87,120 square

feet (8093 m^2)]

TABLE 1230A REQUIRED SPACES AND EQUIPMENT IN JUVENILE FACILITIES

SECTION NUMBERS	REGULATION	HALLS	CAMPS	SPJH
1230.1.1	Reception/intake admission	X		
1230.1.2	Locked holding rooms	X	X^{I}	
1230.1.3	Natural light	X	X	X
1230.1.4	Corridors	X^{I}	X^{I}	X^{I}
1230.1.5	Living units	X		
1230.1.6	Locked sleeping rooms	X^{I}	X^{I}	X^{I}
1230.1.7	Single occupancy sleeping rooms	X^{I}	X^{I}	X^{I}
1230.1.8	Double occupancy sleeping rooms	X^{I}	X^{I}	X^{I}
1230.1.9	Dormitories	X^{I}	X^{I}	X^{I}
1230.1.10	Day rooms	X	X	X
1230.1.11	Physical activity and recreation areas	X	X	
1230.1.12	Academic classrooms	X	X	
1230.1.13	Safety rooms	X^{I}		
1230.1.14	Medical examination rooms	X	X	
1230.1.15	Pharmaceutical storage	X	X	X
1230.1.16	Dining areas	X	X	
1230.1.17	Visiting space	X	X	X
1230.1.18	Institutional storage	X	X	X
1230.1.19	Personal storage	X	X	X
1230.1.20	Safety equipment storage	X	X	X
1230.1.21	Janitorial closet	X	X	X
1230.1.22	Audio monitoring system	X	X	X
1230.1.23	Emergency power	X	X	X
1230.1.24	Confidential interview rooms	X	X	X
1230.1.25	Special-purpose juvenile halls	X		
1230.1.26	Court holding rooms for minors*	X^{I}		
1230.2.1	Toilets/urinals	X	X	X
1230.2.2	Wash basins	X	X	X
1230.2.3	Drinking fountains	X	X	X
1230.2.4	Showers	X	X	X
1230.2.5	Beds	X	X	X
1230.2.6	Lighting	X	X	X
1230.2.7	Padding	X^{l}		
1230.2.8	Seating	X	X	X
1230.2.9	Weapons lockers	X	X^{l}	X

Key:

Halls = Juvenile halls.

Camps = Camps, ranches, forestry camps or boot camps.

SPJH = Special-purpose juvenile halls.

X = Regulation is applicable for all juvenile facilities.

^{* =} For minors in jail, minors in temporary custody in a law enforcement facility and minors in court holding facilities, see Sections 1520, 1540 and 1560 of Title 15, respectively.

X¹ = Regulation is applicable for halls, camps and special-purpose juvenile halls dependent on operational characteristics of the facility.

- 1.1. At least one quarter of the dedicated indoor/ outdoor space shall be a paved or like surface.
- 1.2. The required recreation area shall contain no single dimension less than 40 feet (12.2 m).
- 2. A portion of the dedicated space for physical activity and recreation shall be out-of-doors and be of sufficient size and equipped in such a manner to allow compliance with Title 15, Section 1371, which requires at least one hour per day of outdoor activity for each detained minor.
- 3. Lighting of outdoor recreation areas shall be provided to allow for evening activities and to provide security.
- 4. Access must be provided to a toilet, wash basin and drinking fountain as specified in Section 1230.2.

1230.1.12 Academic classrooms. There shall be dedicated classroom space for every juvenile in every facility. The primary purpose for the academic classroom shall be for education. Each academic classroom shall contain a minimum of 160 square feet (14.9 m²) of floor space for the teachers' desk and work area and a minimum of 28 square feet (2.6 m²) of floor space per minor. A communication system shall be provided in each classroom to allow for immediate response to emergencies. The classroom shall be designed for a maximum of 20 minors.

1230.1.13 Safety room. A safety room shall:

- 1. Contain a minimum of 63 square feet (5.9 m²) of floor area and a minimum clear ceiling height of 8 feet (2438 mm);
- 2. Be limited to one minor;
- 3. Be padded as specified in Section 1230.2.7;
- 4. Provide one or more vertical view panels constructed of security glazing. These view panels shall be no more than 4 inches (102 mm) wide nor less than 24 inches (610 mm) long, which shall provide a view of the entire room;
- 5. Provide an audio monitoring system as specified in Section 1230.1.22;
- 6. Provide access to a toilet, wash basin and drinking fountain outside the room as specified in Section 1230.2; and
- 7. Be equipped with a variable intensity, security-type lighting fixture with controls located outside the room.
- 8. Any wall or ceiling-mounted devices must be designed to prohibit access to the minor occupant.

1230.1.14 Medical examination room. There must be a minimum of one suitably equipped medical examination room in every juvenile facility. Medical examination rooms shall provide the following:

- 1. Space for carrying out routine medical examinations and emergency care and used for no other purpose;
- 2. Privacy for minors;

- 3. Lockable storage space for medical supplies;
- 4. Not less than 144 square feet (13.4m²) of floor space with no single dimension less than 7 feet (2134 mm);
- 5. Hot and cold running water; and
- 6. Smooth, nonporous, washable surfaces.

1230.1.15 Pharmaceutical storage. Provide lockable storage space for medical supplies and pharmaceutical preparations as specified by Title 15, Section 1438.

1230.1.16 Dining areas. Dining areas in juvenile facilities shall contain a minimum of 15 square feet (1.4 m²) of floor space and sufficient tables and seating for each person being fed. Persons being fed include minors, staff and visitors. Dining areas shall not contain toilets or showers in the same room without appropriate visual barrier.

1230.1.17 Visiting space. Space shall be provided in all juvenile facilities for visiting.

1230.1.18 Institutional storage. One or more storage rooms shall be provided to accommodate a minimum of 80 cubic feet (2.3 m³) of storage space per minor. Items to be stored shall be institutional clothing, bedding, supplies and activity equipment.

1230.1.19 Personal storage. Each minor in a juvenile facility shall be provided with a minimum of 9 cubic feet (0.25 m^3) of secure storage space for personal clothing and belongings.

1230.1.20 Safety equipment storage. In all juvenile facilities, a secure area shall be provided for the storage of safety equipment, such as fire extinguishers, self-contained breathing apparatus, wire and bar cutters, emergency lights, etc.

1230.1.21 Janitorial closet. In all juvenile facilities, at least one securely lockable janitorial closet, containing a mop sink and sufficient area for the storage of cleaning implements, must be provided within the security area of the facility.

1230.1.22 Audio monitoring system. In safety rooms, locked holding rooms, locked sleeping rooms, single and double occupancy rooms and dormitories, there must be an audio monitoring system capable of actuation by the minor that alerts personnel.

1230.1.23 Emergency power. There shall be a source of emergency power in all juvenile facilities capable of providing minimal lighting in all living units, activities areas, corridors, stairs and central control points, and to maintain fire and life safety, security, communications and alarm systems (Title 24, Part 2, Chapter 27). Such an emergency power source shall conform to the requirements specified in Title, 24, Part 3, Article 700, California Electrical Code, California Code of Regulations.

1230.1.24 Confidential interview room. Confidential interview rooms shall contain a minimum of 60 square feet (5.6 m^2) of floor area. In juvenile halls there shall be a minimum of one suitably furnished interview room for each 30 minors. In camps there shall be a minimum of one suitably furnished interview room for each facility. This

interview room shall provide for confidential consultations with minors.

1230.1.25 Special-purpose juvenile halls. Special-purpose juvenile halls shall conform to all minimum standards for juvenile facilities contained in this section with the following exceptions:

- 1. Physical activity and recreation areas as specified in Section 1230.1.11;
- 2. Academic classrooms as specified in Section 1230.1.12;
- 3. Medical examination room as specified in Section 1230.1.14; and,
- 4. Dining areas as specified in Section 1230.1.16.

1230.1.26 Court holding room for minors. A court holding room shall:

- 1. Contain a minimum of 10 square feet (0.93 m²) of floor area per minor;
- 2. Be limited to no more than 16 minors;
- 3. Provide no less than 40 square feet (3.7 m²) of floor area and have clear ceiling height of 8 feet (2438 mm) or more;
- 4. Contain seating to accommodate all minors as specified in Section 1230.2.8;
- 5. Contain a toilet, wash basin and drinking fountain as specified in Section 1230.2; and,
- 6. Maximize visual supervision of minors by staff.

1230.1.27 Program and activity areas. Camp and ranch facilities shall include adequate space for specific programs in addition to recreation and exercise areas.

1230.2 Design criteria for furnishings and equipment.

1230.2.1 Toilet/urinals. In living units, toilets must be available in a ratio to minors as follows:

1. Juvenile halls

1:6;

2. Camps

1:10; and

3. Locked holding rooms

1:8:

One toilet and one urinal may be substituted for every 15 males.

Note: Toilet areas shall provide privacy for the minor without mitigating staff's ability to supervise.

1230.2.2 Wash basins. In living units, wash basins must be available in a ratio to minors as follows:

1. Juvenile halls

1:6;

2. Camps

1:10; and

3. Locked holding rooms

1:8:

Wash basins must be provided with hot and cold or tempered water.

1230.2.3 Drinking fountains. In living areas and indoor and outdoor recreation areas, drinking fountains must be accessible to minors and to staff.

1. The drinking fountain bubbler shall be on an angle which prevents waste water from flowing over the drinking bubbler; and,

2. The water flow shall be actuated by a mechanical means.

1230.2.4 Showers. In living units, showers shall be available to all minors on a ratio of at least one shower or bathtub to every six minors. Showers shall be provided with tempered water.

Note: Shower areas shall provide privacy for the minor without mitigating staff's ability to supervise.

1230.2.5 Beds. Beds shall be at least 30 inches (762 mm) wide and 76 inches (1930 mm) long and be of the solid bottom type or constructed of concrete. Beds shall be at least 12 inches (305 mm) off the floor and spaced no less than 36 inches (914 mm) apart. Bunk beds must have no less than 33 inches vertically between the solid bottoms. In secure facilities, the bunks shall be securely anchored and flushed against the floor and/or wall.

1230.2.6 Lighting. Lighting in locked sleeping rooms, single occupancy rooms, double occupancy rooms, dormitories, day rooms and activity areas shall provide not less than 20 footcandles (216 lux) of illumination at desk level. Night lighting is required in these areas to provide good visibility for supervision and be conducive to sleep.

1230.2.7 Padding. In safety rooms, padding shall cover the entire floor, door, walls and everything on the walls to a clear height of 8 feet (2438 mm). Benches or platforms are not to be placed on the floor of this room.

All padded rooms must be equipped with a tamperresistant fire sprinkler as approved by the State Fire Marshal. All padding must be:

- 1. Approved for use by the State Fire Marshal;
- 2. Nonporous to facilitate cleaning;
- 3. At least $\frac{1}{2}$ inch (12.7 mm) thick;
- 4. Of a unitary or laminated construction to prevent its destruction by teeth, hand tearing or small metal objects;
- 5. Firmly bonded to all padded surfaces to prevent tearing or ripping; and,
- 6. Without any exposed seams susceptible to tearing or ripping.

1230.2.8 Seating. Seating shall be designed to the level of security. When bench seating is used, 18 inches (457 mm) of bench is seating for one person.

1230.2.9 Weapons lockers. Weapons lockers are required in all secure juvenile facilities and shall be located outside the secure area of the facility. Weapons lockers shall be equipped with individual compartments, each with an individual locking device.

1230.2.10 Security glazing. Security glazing shall comply with the minimum requirements of one of the following test standards: American Society for Testing and Materials, ASTM F1233-98, Class III glass, or; California Department of Corrections, CDC 860-94d, Class C glass or; H.P. White Laboratory, Inc., HPW-TP-0500.02, Forced Entry Level III.

SECTION 1231 [BSCC] LOCAL DETENTION

1231.1 Definitions.

BOARD OF STATE & COMMUNITY CORRECTIONS means the Board of State & Community Corrections, which acts by and through its executive officer, deputy directors and field representatives.

LIVING AREAS means those areas of a facility utilized for the day-to-day housing and activities of inmates. These areas do not include special-use cells such as sobering, safety and holding or staging cells normally located in receiving areas.

LOCAL DETENTION FACILITY is any city, county, city and county, or regional jail, camp, court holding facility or other correctional facility, whether publicly or privately operated, and court holding facility used for the confinement of adults or of both adults and minors, but does not include that portion of a facility for the confinement of both adults and minors which is devoted only to the confinement of minors. The types of local detention facilities are as follows:

Court holding facility means a local detention facility constructed within a court building after January 1, 1978, used for the confinement of persons solely for the purpose of a court appearance for a period not to exceed 12 hours.

Temporary holding facility means a local detention facility constructed after January 1, 1978, used for the confinement of persons for 24 hours or less pending release, transfer to another facility or appearance in court.

Type I facility means a local detention facility used for the detention of persons usually pending arraignment for not more than 96 hours, excluding holidays, after booking. Such a Type I facility may also detain persons on court order either for their own safe-keeping or sentenced to a city jail as an inmate worker, and may house inmate workers sentenced to the county jail provided such placement in the facility is made on a voluntary basis on the part of the inmate. As used in this section, an inmate worker is defined as a person assigned to perform designated tasks outside of his or her cell or dormitory, pursuant to the written policy of the facility, for a minimum of four hours each day on a five-day scheduled work week.

TYPE II FACILITY means a local detention facility used for the detention of persons pending arraignment, after arraignment, during trial and upon a sentence of commitment.

TYPE III FACILITY means a local detention facility used only for the detention of convicted and sentenced persons.

TYPE IV FACILITY means a local detention facility or portion thereof designated for the housing of inmates eligible, under Penal Code Section 1208, for work/education furlough and/or other programs involving inmate access into the community.

RATED CAPACITY means the number of inmate occupants for which a facility's single-and double-occupancy cells or

dormitories, except those dedicated for medical or disciplinary isolation housing, were planned and designed in conformity to the standards and requirements contained herein and in Title 15, C.C.R.

1231.2 Design criteria for required spaces.

1231.2.1 Reception and booking. Facilities where booking and housing occur shall have the following space and equipment:

- 1. Weapons locker as specified in Section 1231.3.12.
- 2. A cell or room for the confinement of inmates pending their booking, complying with Section 1231.2.2.
- 3. A sobering cell as described in Section 1231.2.4 if intoxicated, inmates who may pose a danger to themselves or others are held. For those facilities that accept male and female intoxicated inmates two sobering cells shall be provided.
- 4. Access to a shower within the secure portion of the facility.
- 5. Provide access to a secure vault or storage space for inmate valuables.
- 6. A safety cell or cells as described in Section 1231.2.5 if the program statement identifies the need for such a cell.
- 7. Telephones which are accessible to the inmates.
- 8. Unobstructed access to hot and cold running water for staff use.

1231.2.2 Temporary holding cell or room. A temporary holding cell or room shall:

- 1. Contain a minimum of 10 square feet (0.93 m²) of floor area per inmate;
- 2. Be limited to no more than 16 inmates;
- 3. Be no smaller than 40 square feet (3.7 m²) and have a clear ceiling height of 8 feet (2438 mm) or more;
- 4. Contain seating to accommodate all inmates as required in Section 1231.3;
- 5. Contain a toilet, wash basin and drinking fountain as specified in Section 1231.3;
- 6. Maximize visual supervision of inmates by staff; and
- 7. When located in a temporary holding facility, the cell or room shall be equipped with a bunk if inmates are to be held longer than 12 hours.

1231.2.3 Temporary staging cell or room. A temporary staging cell or room shall:

- 1. Be constructed for the purpose of holding inmates who have been classified and segregated in accordance with Sections 1050 and 1053 of Title 15, Division 1, California Code of Regulations.
- 2. Be limited to holding inmates up to four hours.
- 3. Be limited to no more than 80 inmates.
- 4. Contain a minimum of 10 square feet (0.93 m²) of floor area per inmate and a clear ceiling height of 8 feet (2438 mm) or more.

711

- 5. Be no smaller than 160 square feet (14.9 m^2) .
- 6. Contain seating to accommodate all inmates as required in Section 1231.3.
- 7. Contain toilet, wash basin and drinking fountain as specified in Section 1231.3.
- 8. Maximize visual supervision of inmates by staff.

1231.2.4 Sobering cell. A sobering cell shall:

- 1. Contain a minimum of 20 square feet (1.9 m²) of floor area per inmate;
- 2. Be limited to eight inmates;
- 3. Be no smaller than 60 square feet (5.6 m²) and have a clear ceiling height of 8 feet (2438 mm) or more;
- 4. Contain a toilet, wash basin and drinking fountain as specified in Section 1231.3;
- 5. Have padded partitions located next to toilet fixture in such a manner that they provide support to the user;
- 6. Maximize visual supervision of inmates by staff;
- 7. Be padded on the floor as specified in Section 1231.3; and,
- 8. Have accessible a shower in the secure portion of the facility.

1231.2.5 Safety cell. A safety cell shall:

- 1. Contain a minimum of 48 square feet (4.5 m²) of floor area with no one floor dimension being less than 6 feet (1829 mm) and a clear ceiling height of 8 feet (2438 mm) or more;
- 2. Be limited to one inmate;
- 3. Contain a flushing ring toilet, capable of accepting solid waste, mounted flush with the floor, the controls for which must be located outside of the cell;
- 4. Be padded as specified in Section 1231.3;
- 5. Be equipped with a variable intensity, security-type lighting fixture which is inaccessible to the inmate occupant, control of which is located outside of the cell;
- 6. Provide one or more vertical view panels not more than 4 inches (102 mm) wide nor less than 24 inches (610 mm) long which shall provide a view of the entire room;
- 7. Provide a food pass with lockable shutter, no more than 4 inches (102 mm) high, and located between 26 inches (660 mm) and 32 inches (813 mm) as measured from the bottom of the food pass to the floor; and,
- 8. Any wall or ceiling mounted devices must be inaccessible to the inmate occupant.

1231.2.6 Single-occupancy cells. Single-occupancy cells shall:

1. Have a maximum capacity of one inmate;

- 2. Contain a minimum of 60 square feet (5.6 m²) of floor area in Type I facilities and 70 square feet (6.5 m²) of floor area in Type II and Type III facilities;
- 3. Have a minimum clear ceiling height of 8 feet (2438 mm) and a minimum width of 6 feet (1829 mm);
- 4. Contain a toilet, wash basin and drinking fountain as specified in Section 1231.3; and
- 5. Contain a bunk, desk and seat as specified in Section 1231.3.

Exception: A Type I facility does not require a desk and seat.

1231.2.7 Double-occupancy cells. Double-occupancy cells shall:

- 1. Have a maximum capacity of two inmates;
- 2. Contain a minimum of 60 square feet (5.6 m²) of floor area in Type I facilities and 70 square feet (6.5 m²) of floor area in Type II and Type III facilities;
- 3. Have a minimum clear ceiling height of 8 feet (2438 mm) and a minimum width of 6 feet (1829 mm);
- 4. Contain a toilet, wash basin and drinking fountain as specified in Section 1231.3; and
- 5. Contain two bunks, and at least one desk and seat as specified in Section 1231.3.

Exception: A Type I facility does not require a desk and seat.

1231.2.8 Dormitories. Dormitories shall:

- 1. Contain a minimum of 50 square feet (4.7 m²) of floor area per inmate for a single-bed unit; a minimum of 70 square feet (7 m²) for a double-bed unit; and a minimum of 90 square feet (9.3 m²) for triple-bed unit and have a minimum ceiling height of 8 feet (2438 mm);
- 2. Be designed for no more than 64 inmates and no fewer than four inmates;
- 3. Provide access to water closets separate from the wash basin and drinking fountains as specified in Section 1231.3; and
- 4. In other than Type I facilities, provide storage space for personal items and clothing for each occupant.

1231.2.9 Dayrooms.

Dayrooms or dayroom space shall:

- 1. Contain 35 square feet (3.3 m²) of floor area per inmate in width in front of cells/rooms;
- 2. Contain tables and seating to accommodate the maximum number of inmates;
- 3. Provide access to water closets, wash basins and drinking fountains as specified in Section 1231.3;
- 4. Provide access to a shower or showers as specified in Section 1231.3; and
- 5. Be provided to all inmates in Type II and Type III facilities (except those housed in special-use cells) and to inmate workers in Type I facilities.

Dayroom space as described in this section may be a part of a single occupancy cell used for administrative segregation or a dormitory, in which case the floor area of the cell or a dormitory must be increased by the square footage required for the dayroom.

1231.2.10 Exercise area. An outdoor exercise area or areas must be provided in every Type II and Type III facility. The minimum clear height must be 15 feet (4572 mm) and the minimum number of square feet of surface area will be computed by multiplying 80 percent of maximum rated population by 50 square feet (4.7 m²) and dividing the result by the number of one-hour exercise periods per day.

The exercise area must contain or provide free access to a toilet, wash basin, and drinking fountain as provided in Section 1231.3.

There must be at least one exercise area of not less than 600 square feet (55.7 m^2). The design shall facilitate security and supervision appropriate to the level of custody.

Type IV facilities shall have an outdoor recreation area or access to community recreation facilities.

1231.2.11 Correctional program/multipurpose space. An area for correctional programming must be provided in every Type II and Type III facility. The program area and furnishings shall be designed to meet the needs specified by the facility's program statement.

Type IV facilities shall have multipurpose space for games and activities, dining, visiting, TV meetings and quiet space for study and reading, such that activities do not conflict with each other.

TABLE 1231A REQUIRED SPACES AND EQUIPMENT IN JUVENILE FACILITIES

	TYPE I	TYPE II	TYPE III	TYPE IV	COURT HOLDING	TEMPORARY HOLDING
Reception/booking	x	x	*	*		*
Temporary holding cells or room	x	x	*	*	x	х
Detoxification cell	*	х				
Safety cell	*	*				
Single-occupancy cell	x	x	*			
Dormitories	*	х	х	х		
Day room	*	х	х			
Exercise area		х	х	x^{I}		
Shower area/delousing room	х	х				*
Program/multipurpose space		х	х	х		
Medical exam room ²		х	х			
Pharmaceutical storage space	х	х	х	х		*
Medical care housing		*	*			
Hair care space		х	х			
Commissary ³			x	x^3		
Dining facility ⁴	*	x	x	*		
Visiting space	х	х	х	х		
Attorney interview rooms	x	x	x		х	х
Confidential interview rooms		х	*			
Safety equipment storage	x	x^2	x	х	x	х
Janitor closet	x	x	x	х	х	х
Storage rooms	x	<i>x</i> ⁵	x	х	х	х
Audio/video-monitoring systems	х	х	x^6	*	х	х
Laundry facility		х		x^7		
Fire-detection alarm system	x	x	x	х	x	x
Emergency	x	x	x	х	х	х

- x Required.
- * Required when program statement identifies need.
- 1. Not required if community recreation facilities are available.
- 2. Not required if the inmate population is less than 25.
- 3. Not required if community access is available.
- 4. Not required if meals are served in day room.
- $5. \ \textit{Must be securely lockable and located within the security area.}$
- 6. Required in areas housing prisoners of higher than minimum security.
- 7. Not required if community access is permitted.

1231.2.12 Medical examination room. There must be a minimum of one suitably equipped medical examination room in every facility which provides on-site health care. The examination room shall be designed in consultation with the responsible physician/health authority. Such a medical examination room shall:

- Be located within the security area and provide for privacy of the inmates;
- 2. Provide not less than 100 square feet (9.3 m²) of floor space with no single dimension less than 7 feet (2134 mm);
- 3. Provide hot and cold running water;
- 4. Provide lockable storage for medical supplies;
- 5. Provide an examination table;
- 6. Provide adequate lighting; and
- 7. Any room where medical procedures are provided must be equipped with hot and cold running water

1231.2.13 Pharmaceutical storage space. Provide lockable storage space for medical supplies and pharmaceutical preparations as referenced by Title 15, California Code of Regulations, Section 1216.

1231.2.14 Medical care housing. There shall be some means to provide medical care and housing of ill and/or infirm inmates. When the program statement for a Type II or Type III facility indicates that medical care housing is needed, such housing must provide lockable storage space for medical instruments and must be located within the security area of the facility accessible to both female and male inmates, but not in the living area of either. The medical care housing unit shall be designed in consultation with the health authority. Medical/mental health areas may contain other than single occupancy cells.

If negative pressure isolation rooms are being planned, they shall be designed to recognized industry standards.

1231.2.15 Reserved.

1231.2.16 Commissary. In all Type II, III and IV facilities, except where community access is available, there shall be provisions made for inmates to purchase items (such as candy, toilet articles, stationery supplies, books, newspapers and magazines, etc.). An area shall be provided for the secure storage of the stock for such inmate canteen items

1231.2.17 Dining facilities. In all Type II, III and IV facilities which serve meals, dining areas shall be provided which will allow groups of inmates to dine together. Such dining areas shall not contain toilets, wash basins or showers in the same room without appropriate visual barrier. Wherever the facility contains a central dining room or rooms, it shall contain a minimum of 15 square feet (1.4 m²) of floor space and sufficient tables and seating for each inmate being fed.

1231.2.18 Visiting space. Space shall be provided in all Types I, II, III and IV facilities for visiting.

1231.2.19 Safety equipment storage. A secure area shall be provided for the storage of safety equipment such as

fire extinguishers, self-contained breathing apparatus, wire and barcutters, emergency lights, etc.

1231.2.20 Janitors' closet. In Type II facilities, at least one securely lockable janitors' closet with sufficient area for the storage of cleaning implements and supplies must be provided within the security areas of the facility. A mop sink shall also be available within the security area of the facility. In court holding, temporary holding, Types I, III and IV facilities, the closet need not be in the security area.

1231.2.21 Storage rooms. One or more storage rooms shall be provided to accommodate a minimum of 80 cubic feet (2.3 m³) of storage area per inmate for inmate clothing and personal property, institutional clothing, bedding and supplies. Court holding, temporary holding and Type I facilities may be excluded from the storage space requirement for personal and institutional clothing unless clothing is issued.

1231.2.22 Audio monitoring system. In court holding, temporary holding, Type I, Type II and Type II facilities there shall be an inmate- or sound-actuated audio monitoring system in temporary holding cells or rooms, temporary staging cells or rooms, sobering cells, safety cells, single and double occupancy cells, dormitories, dayrooms, exercise areas and correctional program/multipurpose space, which is capable of alerting personnel who can respond immediately.

1231.2.23 Laundry facilities. In Type IV facilities, provision shall be made for washing and drying personal clothing by machines, either in the facility or in the community, if access is permitted for same.

1231.2.24 Emergency power. There shall be a source of emergency power in all detention facilities capable of providing minimal lighting in all housing units, activities areas, corridors, stairs and central control points, and to maintain fire and life safety, security, communications and alarm systems. Such an emergency power source shall conform to the requirements specified in Title 24, Part 3, Article 700, California Electrical Code, California Code of Regulations.

1231.2.25 Confidential interview rooms. There must be a minimum of one suitably furnished interview room for confidential interviews in every facility which provides onsite health care. The interview room shall be designed in consultation with responsible custodial staff and health care staff. Such an interview room shall:

- 1. Be located within the security area accessible to both female and male inmates; and
- 2. Provide not less than 70 square feet (6.5 m²) of floor space with no single dimension less than 6 feet (1829 mm).

1231.2.26 Attorney interview space. All facilities except Type IV facilities shall include attorney interview areas which provide for confidential consultation with inmates.

Exception: The design of court holding and temporary holding facilities shall include the following required spaces from Sections 1231.2.2, 1231.2.19, 1231.2.20, 1231.2.21, 1231.2.22, 1231.2.24 and 1231.2.26.

1231.3 Design criteria for furnishings and equipment. Furnishings and equipment shall be as follows:

1231.3.1 Toilets/urinals.

- 1. Toilets/urinals must be provided in single-occupancy cells and double-occupancy cells.
- 2. In dormitories, toilets/urinals must be provided in a ratio to inmates of 1:10.
- 3. Toilets/urinals must be accessible to the occupants of day-rooms and exercise areas.
- 4. In temporary holding cells and temporary staging cells toilets/urinals must be provided in a ratio to inmates of 1:16.
- 5. In sobering cells toilets/urinals must be provided in a ratio to inmates of 1:8.
- 6. One urinal or 2 feet (610 mm) of urinal trough may be substituted for each toilet up to one third of the total number of toilets required, except in those facilities or portions thereof used for females.
- 7. Toilet areas shall provide modesty for inmates with staff being able to visually supervise.

1231.3.2 Wash basins.

- 1. Wash basins must be provided in single occupancy cells and double occupancy cells.
- 2. In dormitories, wash basins must be provided in a ratio to inmates of 1:10.
- 3. Wash basins must be accessible to the occupants of day-rooms and exercise areas.
- 4. In temporary holding cells and temporary staging cells, wash basins must be provided in a ratio to inmates of 1:16.
- 5. In sobering cells, wash basins must be provided in a ratio to inmates of 1:8.
- 6. Wash basins must be provided with hot and cold or tempered water.
- 7. Two feet (610 mm) of wash basin trough may be substituted for each basin required.
- 1231.3.3 Drinking fountains. There must be a minimum of one drinking fountain in every single-occupancy cell, double-occupancy cell, dormitory, temporary holding cell, temporary staging cell, sobering cell, and be accessible to the occupants of day rooms and exercise areas. Additional drinking fountains shall be located in other areas of the facility so that drinking water will be available to inmates and staff. Such drinking fountains must meet the following minimum health requirements:
 - 1. The drinking fountain bubbler shall be on an angle which prevents waste water from flowing over the drinking fountain bubbler.
 - 2. Water flow shall be actuated by mechanical means.
- 1231.3.4 Showers must be available to all inmates on a ratio of at least one shower to every 20 inmates or fraction thereof and must provide hot and cold water or tempered water. Shower stalls/shower areas must be designed and constructed of materials which are impervious to water

and soap so they may be easily cleaned. Shower areas shall provide modesty for inmates with staff being able to visually supervise.

1231.3.5 Beds must be elevated off the floor, have a solid bottom, and a sleeping surface of at least 30 inches (762 mm) wide and 76 inches (1930 mm) long. Multiple beds must have a minimum of 21 inches (533 mm) between bed pans. Except in minimum security areas, beds must be securely fastened to the floor or the wall.

1231.3.6 Lighting. Lighting in housing units, dayrooms and activity areas must be sufficient to permit easy reading by a person with normal vision, and shall not be less than 20 footcandles (215.2 lux) at desk level and in the grooming area. Lighting shall be centrally controlled and/or occupant controlled in housing cells or rooms. Night lighting in these areas shall be sufficient to give good visibility for purposes of supervision. In minimum-security areas, lighting may be supplied by ordinary lighting fixtures, and in areas of higher security, light fixtures must be of secure design.

1231.3.7 Windows. In housing areas of higher than minimum security, exterior windows which are constantly accessible to inmates for escape must be designed and constructed so that if broken out, the net area accessible for escape is no greater than 5 inches (127 mm) in one dimension.

1231.3.8 Cell padding. In sobering cells, the floor and partition shall be padded. In safety cells, padding must cover the entire floor, doors, and walls and everything on them to a clear height of 8 feet (2438 mm).

All such padded cells must be equipped with a tamperresistant fire sprinkler as approved by the State Fire Marshal. All padding must be:

- 1. Approved for use by the State Fire Marshal;
- 2. Nonporous to facilitate cleaning;
- 3. At least $\frac{1}{2}$ -inch (12.7 mm) thick;
- Of a unitary or laminated construction to prevent its destruction by teeth, hand tearing or small metal objects;
- 5. Firmly bonded to all padded surfaces to prevent tearing or ripping; and
- 6. Without any exposed seams susceptible to tearing or ripping.
- 1231.3.9 Mirrors. A mirror of a material appropriate to the level of security must be provided near each wash basin specified in these regulations.
- 1231.3.10 Seating. In temporary holding and temporary staging cells, seating must be securely fixed to the floor and/or wall. When bench seating is used, 18 inches (457 mm) of bench is seating for one person.
- 1231.3.11 Table/seat. In single- and double-occupancy cells, a table and seat for the purpose of writing and dining shall be provided.

Exception: A Type I facility does not require a table and a seat.

1231.3.12 Weapons locker. A secure weapons locker shall be located outside the security perimeter of the facility. Such weapons lockers shall be equipped with individual compartments, each with an individual locking device. Weapons lockers are required in temporary and court holding facilities and in all facilities of higher than minimum security.

Exception: The design of court holding and temporary holding facilities shall include the design criteria for furnishings and equipment from Sections 1231.3.1, 1231.3.2, 1231.3.3, 1231.3.6, 1231.3.10 and 1231.3.12.

- 1231.4 Enclosure of vertical openings. Elevator shafts, vent shafts and other vertical openings shall be enclosed, and the enclosure shall be as set forth in Chapter 7.
- 1231.5 Fire-extinguishing systems. Automatic fire-extinguishing systems, standpipes and basement pipe inlets shall be installed when and as required by Chapter 9.
- 1231.6 Existing Group I occupancies. Existing buildings housing existing protective social-care homes or facilities established prior to the effective date of these regulations may have their use continued if they conform, or are made to conform, to the following provisions.
 - **1231.6.1** Use of floors. The use of floor levels in buildings of Type III, IV or V nonfire-rated construction may be as follows:

Nonambulatory—first floor only;

Ambulatory—not higher than the third-floor level, provided walls and partitions are constructed of materials equal in fire- resistive quality to that of wood lath and plaster in good repair and all walls are firestopped at each floor level.

- 1231.6.2 Enclosure of exits and vertical openings. Except for two-story structures housing ambulatory guests, all interior stairs shall be enclosed in accordance with Chapter 10. In lieu of stairway enclosures, floor separations or smoke barriers may be provided in such a manner that fire and smoke will not spread rapidly to floors above or otherwise impair exit facilities. In these instances, floor separations or smoke barriers shall have a fire resistance equal to not less than ½-inch (12.7 mm) gypsum wall board on each side of wood studs with openings protected by not less than a 1¾-inch (44 mm) solid bonded wood-core door of the self-closing type. All other vertical openings shall be enclosed in accordance with the provisions of Chapter 7.
- 1231.6.3 Exit access. Each floor or portion thereof of buildings used for the housing of existing protective social-care homes or facilities shall have access to not less than two exits in such a manner as to furnish egress from the building or structure in the event of an emergency substantially equivalent to the provisions of Chapter 10.
- 1231.6.4 Corridor openings. Openings from rooms to interior corridors shall be protected by not less than $1^3/_4$ -inch (44 mm) solid-bonded wood-core doors. Transoms and other similar openings shall be sealed with materials equivalent to existing corridor wall construction.

- 1231.6.5 Interior wall and ceiling finishes shall conform to the requirements for a Group R, Division 1 occupancy as specified in Chapter 8.
- **1231.6.6** Automatic sprinkler systems shall be installed in existing protective social-care occupancies in accordance with the provisions of Chapter 9.
- 1231.6.7 Fire alarm systems. Automatic fire alarm systems shall be installed in existing protective social-care homes or facilities in accordance with the provisions of Chapter 9.

Exception: When an approved automatic sprinkler system conforming to Chapter 9 is installed, a separate fire alarm system as specified in this subsection need not be provided.

SECTION 1232 Reserved

SECTION 1233 Reserved

SECTION 1234 Reserved

SECTION 1235 [DPH] SANITARY CONTROL OF SHELLFISH (PLANTS AND OPERATIONS)

- 1235.1 Culling plants. Culling plants shall be located in areas free from unsanitary conditions and faulty sewage disposal. They shall be provided with an ample supply of water under adequate pressure from a source approved by the Department of Health Services for the purpose of hosing down floor and benches and cleaning the shellfish. Floors and premises shall be kept in a clean and sanitary condition.
- 1235.2 Plant arrangement. Unless shellfish are shucked directly into packing containers with no further processing, the shucking and packing processes shall be done in separate rooms. There shall be installed in the partition between the two rooms a delivery window through which the shucked stock is passed to the packing room. Provision shall be made for storing the employees' outer garments, aprons, gloves, etc., in a separate room.
 - Note: In special instances where shucking is done on a small scale for local retail sales, shucking and packing may be permitted in a single room if approved by the Department of Health Services. This single room and all operations shall conform to all requirements of these regulations except that of separate shucking and packing rooms. "Limited" certificates shall be issued in these instances and all containers of shucked shellfish shall be clearly labeled or marked with words "Limited Certificate" and the appropriate certificate number.
- 1235.3 Floors. The floors of all rooms in which shellfish are stored, shucked, washed, packed or otherwise processed shall be constructed of concrete or other equally impervious material, graded to drain quickly, free from cracks or uneven surfaces that might interfere with proper cleaning or drainage, and maintained in clean and satisfactory condition.

- 1235.4 Walls and ceilings. Walls and ceilings shall be maintained in a smooth, clean, washable, light-colored conditions. They shall be impervious to moisture and shall be kept in good repair. Walls contiguous to benches shall, to a height of 2 feet (610 mm) above the bench top, be of smooth concrete, metal or equally nonabsorbent material.
- 1235.5 Screening. The plant shall have all openings effectively screened, unless other effective means are provided to prevent the entrance of flies and other insects.
- 1235.6 Light. Ample light to work by shall be provided in all working rooms. A light intensity of not less than 10 footcandles (108 lux) shall be maintained on all working surfaces when workers are at their working positions.
- 1235.7 Ventilation. Adequate ventilation shall be provided to prevent condensation on ceilings or other surfaces.
- 1235.8 Toilet facilities. Every shellfish culling, shucking, packing or repacking plant shall be provided with clean and adequate toilet facilities conveniently located. No toilet room shall be used for the storage of garments, food products, containers or equipment. Construction and maintenance of toilets shall comply with all local and state regulations.
- 1235.9 Handwashing facilities. An adequate number of lavatories shall be provided at locations convenient to toilet rooms and shellfish handling operations, including running hot and cold water, soap and individual disposal towels. The use of a common towel is prohibited. All employees shall wash their hands thoroughly with running water and soap on beginning work and after each visit to the toilet. Signs to this effect shall be posted in conspicuous places in the plant and in the toilet rooms.
- 1235.10 Sewers and drains. Sewage and other liquid wastes shall be discharged into public sewers wherever possible. Where private sewage or waste disposal systems must be utilized, they shall be constructed in accordance with state and local regulations pertaining thereto. Plant waste systems shall be properly trapped and vented. Waste liquids shall be disposed of in a manner that will not adversely affect the quality of the water in which shellfish are grown or stored. Waste lines from washing machines shall have suitable protection against the possibility of sewage or wastes entering these machines.
- 1235.11 Water supply. Shucking, packing or repacking plants shall be provided with an ample supply of water under adequate pressure from a source approved by the Department of Health Services. The supply shall be accessible to all parts of the plant, adequate in quantity, and of a safe sanitary quality. No cross connections with unapproved supplies or other possible sources of contamination shall be permitted.

SECTION 1236 [DPH] LABORATORY ANIMAL QUARTERS

Laboratory animal quarters shall meet the requirements of Part 12 California Referenced Standards Code, Chapter 12-4A, Section 12-4A-101.

See the 2010 Edition, Title 24, Part 12, Chapter 12-4A.

SECTION 1237 [DPH] WILD ANIMAL QUARANTINE FACILITIES

- 1237.1 Scope. The provisions of this section are intended to provide standards for the quarantine of wild animals.
- 1237.2 Definitions. For the purpose of this chapter, the following terms shall have the meaning indicated:
- **ESCAPEPROOF** is a condition that will prohibit unintended release of wild animals from their quarantine enclosure.
- **HOUSING FACILITY** is a room, building or area used to contain a primary enclosure or enclosures for animal quarantine.
- **PRIMARY ENCLOSURE** is a structure used to immediately restrict an animal or animals to a limited amount of space, such as a room, pen, run, cage or compartment within the quarantine facility.
- **QUARANTINE FACILITY** is a facility for the quarantine confinement of imported wild animals.
- **SPACE CONDITIONING** is the regulation of ambient temperature.
- 1237.3 Construction.
 - 1237.3.1 General. Housing facilities used for quarantine shall be constructed in accordance with these provisions and Group B occupancy requirements.
 - 1237.3.2 Entry. Quarantine housing facilities shall restrict the entry of other animals and unauthorized persons by locking or bolting devices or other equipment methods.
 - Rooms containing primary enclosures shall be entered through double doors that maintain a minimum distance of 4 feet (1219 mm) between doors permitting closure of one door before the second is opened.
 - All animals must be visible through a viewpoint from the entry area.
 - Windows to the outside shall be escapeproof.
 - One handwashing sink shall be provided in each room in which animals are quarantined.
 - 1237.3.3 Special provision. The interior building surfaces of housing facilities shall be smooth and impervious to moisture.
 - 1237.4 Light and ventilation. All portions of the wild animal quarantine facility shall be space conditioned to maintain the health of the wild animals. Ventilation shall be provided in housing facilities so as not to create a health hazard by one or more of the following methods.
 - 1. Openable windows
 - 2. Doors
 - 3. Vents
 - 4. Air conditioning
 - 5. Fans

Uniformly distributed illumination of not less than 50 footcandles (538 lux) at least the level of the cage racks shall be provided.

1237.5 Primary enclosure. Primary enclosures shall be capable of containing quarantined animals and excluding access by other animals. Enclosures shall provide space to allow each animal to make normal postural adjustments with freedom of movement and maintain social activity. Primates shall be provided with a minimum floor space equal to an area of at least three times the area occupied by such primates when standing on four feet.

SECTION 1238 Reserved

SECTION 1239 Reserved

SECTION 1240 [AGR] MEAT AND POULTRY PROCESSING PLANTS

- **1240.1 General construction.** The buildings shall be of sound construction and kept in good repair.
 - 1240.1.1 The doors, windows, skylights and other outside openings of the plant, shall be protected by fitted screens or other devices, such as air screens, against the entrance of flies and other insects.
 - **1240.1.2** Outside doors shall be hung so as to be close fitting when closed.
 - 1240.1.3 Rooms or compartments used for edible products shall be separated and distinct from inedible products departments and from rooms where live poultry are held or slaughtered. Separate rooms shall be provided when required for conducting processing operations in a sanitary manner; and all rooms shall be able to accommodate equipment for processing operations.
 - **Note:** In the event of specific conflict, in federally inspected plants, between the provisions of Title 24 and federal regulations, the federal regulations shall take precedence.
 - 1240.1.4 The rooms and compartments in which any product is prepared or handled shall be free from objectionable odors.
 - 1240.1.5 The outer premises of every official establishment, including docks and areas where cars and vehicles are loaded, and the driveways, approaches, yards, pens and alleys shall be paved.
- 1240.2 Refuse rooms. A separate refuse room shall be required in official establishments where accumulations of refuse occur. Refuse rooms shall be entirely separate from other rooms in the establishment, and shall provide for the following:
 - 1. Tight fitting doors.
 - 2. Ventilation.
 - 3. Drainage.
 - 4. Cleanup facilities.
 - 5. Floors and walls to a height of 6 feet (1829 mm) above the floor shall be impervious to moisture.

- 6. Wall above 6 feet (1829 mm), and ceilings shall be moisture resistant.
- 1240.3 Rooms for holding carcasses for further inspection. Room or other acceptable facilities in which carcasses or parts thereof are held for further inspection shall be in such numbers and such locations as needs of the inspection in the establishment may require. These rooms or facilities shall be equipped with hasps for locking.
- 1240.4 Coolers and freezers. Coolers and freezers shall be of adequate size and capacity and have cooling capability to fully enable compliance with the regulations governing the inspection of meat and poultry and meat and poultry products.
- 1240.5 Boiler room. The boiler room shall be a separate room where necessary to prevent dirt and objectionable odors entering from it into any room where dressed poultry or poultry products are prepared, handled or stored.
- 1240.6 Inspector's office. Office space for the use of government personnel shall be provided. The room or space must meet the approval of the inspection service and provide for the following:
 - 1. Light
 - 2. Heat
 - 3. Ventilation
 - 4. Desk space
 - 5. File cabinets
- **1240.7 Facilities for program employees.** Establishments shall have facilities for program employees.
- 1240.8 Lunch rooms. Lunch rooms or lunch areas separate from the processing, packing or supply rooms shall be provided in establishments where employees eat their lunches.
- 1240.9 Floors. All floors in rooms where exposed products are prepared or handled shall be constructed of, or finished with, materials impervious to moisture. The floors in killing, ice cooling, ice packing, eviscerating, cooking, boning and cannery rooms shall be graded for complete runoff with no standing water.
- 1240.10 Walls, posts, partitions and doors. All walls, posts, partitions and doors in rooms where exposed products are prepared or handled shall be smooth and constructed of materials impervious to moisture to a height of at least 8 feet (2438 mm) above the floor. All surfaces above this height must be smooth and finished with moisture-resistant material.
- **1240.11 Ceilings.** Ceilings must be moisture resistant in rooms where exposed products are prepared or handled, finished and sealed.
- 1240.12 Rails. Rails should be located and passageway space provided so that exposed product does not come in contact with posts, walls and other fixed parts of the building, or with barrels, boxes or other containers trafficked through holding and operation areas.
- **1240.13 Lighting.** There shall be either natural or artificial light or both for all rooms and compartments.

1240.13.1 All rooms in which poultry or livestock are killed, eviscerated or otherwise processed shall have at least 30 foot-candles (323 lux) of light intensity on all working surfaces.

Exceptions:

- 1. At the inspection stations such light intensity shall be at least 50 footcandles (538 lux).
- 2. In all other rooms in which poultry or livestock are not killed, eviscerated or otherwise processed, there shall be provided at least 5 footcandles (54 lux) of light intensity when measured at a distance of 30 inches (762 mm) from the floor.
- 1240.14 Ventilation. There shall be either natural or artificial ventilation, adequate to control odors, vapors, and condensation to the extent necessary to prevent adulteration of product and the creation of insanitary conditions, in all rooms and compartments.
 - 1240.14.1 Freezing rooms, other than those for plate freezers or liquid freezing, shall have forced-air circulation, and freezers and coolers shall be equipped with floor racks or pallets unless other means are used which will assure that products will be maintained in a wholesome condition.
 - **1240.14.2** Toilet rooms shall be ventilated to the outside of the building.

1240.15 Lavatories, toilets and other sanitary facilities.

1240.15.1 Lavatory and toilet accommodations, including but not limited to, running hot and cold water, shall be provided as follows in Table 1240.15.1.

TABLE 1240.15.1

PERSONS OF SAME SEX	TOILET BOWLS REQUIRED		
1 to 15, inclusive	1		
1 to 15, inclusive	2		
1 to 15, inclusive	3*		
1 to 15, inclusive	4*		
For each additional 30 persons in excess of 80	1*		

^{*} Urinals may be substituted for toilet bowls, but only to the extent of onethird of the total number of bowls stated.

- 1240.15.2 Lavatories shall be in or adjacent to toilet and locker rooms and at other places in the plant to provide for the cleanliness of all personnel handling products.
- **1240.15.3** Toilet rooms opening directly into rooms where products are exposed shall have self-closing doors.
- 1240.15.4 Dressing rooms and toilet rooms shall be provided in each establishment and shall be ample in size and readily accessible. They shall be separated from the rooms and compartments in which products are prepared, stored or handled. Where both sexes are employed, separate facilities shall be provided.
- 1240.15.5 Lockers or other facilities shall be provided for employees' wearing apparel and for the storing and

changing of clothing. Lockers shall not be located in rooms where processing operations are conducted.

1240.15.6 Handwashing facilities serving areas where dressed livestock and poultry carcasses and parts and meat and poultry products are prepared shall be operated by other than hand-operated controls, or shall be continuous flow type that provides flow of water for washing hands.

1240.15.7 Catch basins. All catch basins on the premises shall accommodate the provisions of Section 1243.5.

SECTION 1241 [AGR] COLLECTION CENTERS AND FACILITIES

1241.1 General construction.

- 1241.1.1 Collection centers shall have facilities for the storage of carcasses and parts of dead animals and the cleaning and sanitizing of vehicles.
- 1241.1.2 Buildings used for the temporary storage of animal carcasses, packinghouse wastes and other products before transportation to a licensed rendering plant shall be of sound construction and shall be of such construction as to prevent the entrance or harboring of vermin.
- 1241.1.3 The floors, walls, ceilings, partitions and doors shall be of such material, construction and finish as to make them readily cleanable.
- 1241.1.4 The area for the cleaning and sanitizing of vehicles shall be provided with adequate live steam or hot water, producing a temperature of at least 180°F (82°C), or other method for sanitizing vehicles.
- 1241.1.5 Facilities shall be provided for the holding and disposal of solid waste resulting from the cleaning operation. Such facilities shall be accessible and easily cleaned and so constructed as to prevent the entrance or harborage of vermin, flies and other insects.
- 1241.1.6 The cleaning and sanitizing of vehicles shall be done on a slab of concrete or other material approved by the Department, which is sloped to drains so as to permit the rapid runoff of water.
- 1241.1.7 Carcasses and packinghouse waste. The unloading slab shall be of sufficient size to hold all animal carcasses and packinghouse waste material, be constructed of concrete or other material approved by the Department and sloped to drains so as to permit the rapid runoff of water.
- 1241.2 Floors. Floors of rooms in which carcasses and packinghouse wastes are received or stored shall be graded to permit runoff of water with no standing water. In new construction and in renovated buildings where floors are to be resurfaced, the pitch shall not be less than 1/4 inch per foot (2 percent) to drains.
- 1241.3 Lavatories and toilets. Modern lavatory accommodations, including running hot and cold water, shall be provided except where the Department determines that they are not necessary.

SECTION 1242 [AGR] RENDERERS

1242.1 General construction.

- 1242.1.1 Separation from other businesses. Every licensed rendering establishment shall be separate and distinct from any establishments in which any meat, meat byproducts, poultry, or poultry byproducts are handled and from any other business at the discretion of the Department.
- 1242.1.2 The cleaning and sanitizing of vehicles shall be done on a slab of concrete or other material approved by the Department; which is sloped to drains so as to permit the rapid runoff of water.

SECTION 1243 [AGR] HORSEMEAT AND PET FOOD ESTABLISHMENTS

1243.1 Scope. In the event of specific conflict between the provisions of Title 24 and federal regulations, the federal regulations shall take precedence in establishments under federal inspection.

1243.2 General.

1243.2.1 Facilities for program employees. Office space, including light and heat shall be provided by official establishments for the inspector and other program employees. The office space shall be conveniently located and adequately ventilated, heated, cooled, and provided with adequate desk and file space.

1243.2.2 Final inspection places.

- 1243.2.2.1 Final inspection places shall, by size, rail arrangement and other equipment, prevent contamination of edible carcasses or parts by inedible carcasses or parts.
- 1243.2.2.2 Floors. The floors shall be of such construction as to facilitate the maintenance of sanitary conditions and shall have drainage connections. When the final inspection place is part of a larger floor, it shall be separated from the rest of the floor by a curb, railing or otherwise.
- **1243.2.3 Docks and receiving rooms.** Docks and receiving rooms shall be provided.
- 1243.2.4 The floors, walls, ceilings, partitions, posts, doors and other parts of all structures shall be of such material, construction and finish as will make them readily and thoroughly cleanable. The floors shall be kept watertight.
- 1243.2.5 Rails. Rails shall be located and passageway space provided, so that exposed product does not come in contact with post, walls and other fixed parts of the building, or with barrels, boxes and other containers trafficked through holding and operation areas.
- 1243.2.6 The rooms and compartments used for edible products shall be separated and distinct from those used for inedible products.

- 1243.2.7 The rooms and compartments in which any product is prepared or handled shall be free from objectionable odor.
- 1243.2.8 Precaution shall be taken to exclude flies, rats, mice and other vermin from official establishments.
- 1243.2.9 The outer premises of horsemeat and pet food establishments shall meet the requirements of Section 1240.1.5.
- 1243.3 Lighting. There shall be light and ventilation for all rooms and compartments.
- **1243.4 Sanitary facilities and accommodations.** Sanitary facilities and accommodations shall be furnished by every official establishment.
 - 1243.4.1 Dressing rooms and toilet rooms shall be provided in each establishment and shall be ample in size and readily accessible. They shall be separated from the rooms and compartments in which products are prepared, stored or handled. Where both sexes are employed, separate facilities shall be provided.
 - 1243.4.2 Lavatories, including running hot and cold water, shall be placed in or adjacent to toilet and urinal rooms and at other places in the establishment to assure cleanliness of all persons handling any product.
 - **1243.4.3** Facilities shall be provided for cleansing and disinfecting utensils.
 - 1243.5 Catch basins. All catch basins on the premises shall be of such construction and location to ensure they are kept clean and odorless. Catch basins shall not be located in department where any product is prepared, handled or stored.
- **1243.6 Final inspection space.** Such spaces shall be equipped with hot water and a lavatory.

SECTION 1244 Reserved

SECTION 1245 Reserved

SECTION 1246 Reserved

SECTION 1247 Reserved

SECTION 1248 Reserved

SECTION 1249 Reserved

SECTION 1250 [CA] PHARMACIES

1250.1 Application. This section applies to pharmacies listed in Section 1.4.1 regulated by the Department of Consumer Affairs.

- 1250.2 Restrooms. A pharmacy shall maintain a readily accessible restroom. The restroom shall contain a toilet and washbasin supplied with running water.
- **1250.3** Sink. All pharmacies shall be equipped with a sink within the pharmacy for pharmaceutical purposes. The sink shall be supplied with hot and cold running water.
- **1250.4 Compounding area for parenteral solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall:
 - 1. In accordance with Federal Standard 209 (b), Clean Room and Work Station Requirements, Controlled Environment as approved by the Commission, Federal Supply Service, General Service Administration meet standards for Class 100 HEPA (high efficiency particulate air) filtered air such as laminar airflow hood or clean room.
 - 2. Have nonporous and cleanable surfaces, ceilings and ceiling tiles, walls, floors and floor coverings.
 - 3. The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of parenteral solutions.

There shall be sufficient space, well separated from the laminar-flow hood area for the storage of bulk materials, equipment and waste materials.

- 4. A sink with hot and cold running water must be within the parenteral solution compounding area or adjacent to it.
- 5. Any pharmacy that compounds sterile injectable products from one or more nonsterile ingredients must compound the medication in one of the following environments:
 - 5.1 An ISO class 5 laminar airflow hood within an ISO class 7 cleanroom. The cleanroom must have a positive air pressure differential relative adjacent areas.
 - 5.2 An ISO class 5 cleanroom.
 - 5.3 A barrier isolator that provides an ISO class 5 environment for compounding.

Note: For additional pharmacy mechanical standard requirements, see Chapter 5, California Mechanical Code.

SECTION 1251 [CA] VETERINARY FACILITIES

- 1251.1 All premises where veterinary medicine, veterinary dentistry or veterinary surgery is being practiced, and all instruments, apparatus and apparel used in connection with those practices, shall be kept clean and sanitary at all times and shall conform to the standards of this section.
- 1251.2 Indoor lighting for halls, wards, reception areas and examining and surgical rooms shall be adequate for their intended purpose. All surgical rooms shall be provided with emergency lighting.
- 1251.3 A veterinary facility where animals are housed shall contain the following:

- 1. A reception room and office, or a combination of the two.
- 2. An examination room separate from other areas of the facility and of sufficient size to accommodate the doctor, assistant, patient and client.
- 3. A surgery room separate and distinct from all other rooms.
- 4. Housing. In those veterinary hospitals where animals are retained for treatment or hospitalization, the following shall be provided:
 - 4.1. Separate compartments, one for each animal, maintained in a sanitary manner so as to assure comfort.
 - 4.2. Facilities allowing for the effective separation of contagious and noncontagious cases.
 - 4.3. Exercise runs which provide and allow effective separation of animals and their waste products.

Note: Where animals are kept in clinics for 24 hours or more, walking the animal meets this requirement.

1251.4 Practice management.

- 1251.4.1 Veterinary facilities shall maintain a sanitary environment to avoid sources and transmission of infection. This is to include the proper routine of disposal of waste materials and proper sterilization or sanitation of all equipment used in diagnosis or treatment.
- 1251.4.2 Fire precautions shall meet the requirements of local and state fire prevention codes.
- 1251.4.3 The temperature and ventilation of the facility shall be maintained so as to assure the comfort of all patients.
- 1251.4.4 The veterinary facility must have the capacity to render adequate diagnostic radiological services, either in the hospital or through other commercial facilities. Radiological procedures shall be in accordance with state public health standards.
- 1251.4.5 Sanitary methods for the disposal of deceased animals shall be provided and maintained. Where the owner of a deceased animal has not given the veterinarian authorization to dispose of the animal, the veterinarian shall be required to retain the carcass in a freezer for at least 14 days.

SECTION 1252 [CA] BARBER COLLEGES AND SHOPS

- 1252.1 Barber college floors. Floors of barber colleges shall be covered with hardwood, linoleum, asphalt tile or some other washable and nonporous material other than paint.
- 1252.2 Barber shop floors. Floors of barber shops shall be covered with hardwood, linoleum, asphalt tile, carpeting or some other washable material other than paint.
- 1252.3 Barber shop washbasin(s) and lavatory(ies). A barber shop owner shall provide washbasin(s) or lavatory(ies) within the working area of the barber shop.
- 1252.4 Minimum barber shop size. A barber shop shall be a minimum of 8 feet (2438 mm) wide, 8 feet (2438 mm) long, with an 8-foot (2438 mm) ceiling.

1252.5 Barber college premises. In a college of barbering, the room for practical work and demonstrations shall be at least 14 feet (4267 mm) wide for one row of barber chairs and shall be at least 20 feet (6096 mm) wide for two rows of chairs.

SECTION 1253 [CA] SCHOOLS OF COSMETOLOGY, COSMETOLOGICAL ESTABLISHMENTS AND SATELLITE CLASSROOMS

1253.1 Floor space.

1253.1.1 Schools of cosmetology. The minimum floor space in any school of cosmetology premises shall be 3,000 square feet (279 m^2), not less than 2,000 square feet (185.8 m^2) of which shall be provided for the working, practice and classroom areas.

Exception: When the average daily attendance for either day or night school in a school of cosmetology exceeds 50 students for a period of three months, an additional 30 square feet (2.8 m²) of floor space shall be required for each additional student after the first 50, which shall be provided for the working, practice and classroom areas.

1253.1.2 Schools of electrology. The minimum floor space in any school of electrology premises shall be 1,000 square feet (93 m^2), not less than 600 square feet (55.7 m^2) of which shall be provided for the working, practice and classroom areas.

Exception: When the average daily attendance for either day or night school of electrology exceeds 15 students, an additional 30 square feet (2.8 m²) of floor space shall be required for each additional student after the first 15, which shall be provided for working, practice and classroom areas.

1253.1.3 Satellite classrooms. The minimum floor space in any satellite classroom of a school of cosmetology or electrology shall be 1,000 square feet (93 m^2) .

Exception: For each additional student after the first 50, an additional 20 square feet (1.9 m^2) of floor space shall be required.

1253.2 Floor finish. The floors in the toilet area of each school and establishment shall be of nonabsorbent material.

1253.3 Celling height. The minimum ceiling height of the practice and classroom areas of school premises shall be at least 9 feet (2743 mm) in height.

SECTION 1254 [CA] ACUPUNCTURE OFFICES

1254.1 Acupuncture offices. Every acupuncture office shall have a readily accessible bathroom facility which shall be maintained in a clean and sanitary condition at all times. In addition, there shall be a sink with hot and cold running water in or near each treatment room.

HISTORY NOTE APPENDIX

California Building Code Title 24, Part 2, California Code of Regulations (CCR)

HISTORY:

For prior code history, see the History Note Appendix to the *California Building Code* 2013 Triennial Edition, effective January 1, 2014.

- 1. (BSC 05/15, SFM 06/15, DSA-AC 01/15, DSA-SS 02/15, HCD 03/15, OSHPD 02/15 & 04/15, SLC 01/15) Adopt the 2015 edition of the *International Building Code* published by the International Code Council, for incorporation into the 2016 *California Building Code*, CCR Title 24, Part 2 with amendments for State regulated occupancies, effective on January 1, 2017.
- Rulemaking file numbers BSC EF 01-17, HCD EF 01-17: Emergency regulations amend Sections 107.2.7, 110.3.8.1, Table 1607.1, 2304.12.2.5, and 2304.12.2.6. Approved as an emergency on January 27, 2017, effective upon filing with Secretary of State on January 30, 2017.
- 3. Rulemaking file number DSA-SS/CC EF 01-17: Emergency regulations amend Sections 1.9.2.1, 1.9.2.2, 107.2.7, 110.3.8.1, 1616.5.1.2 1616.5.1.5, Table 1607A.1, 2304.12.2.5, and 2304.12.2.6 approved as an emergency on January 27, 2017, effective upon filing with Secretary of State on January 30, 2017.
- 4. Errata to correct editorial errors throughout the code. Effective September 1, 2017.
- 2016 Intervening Cycle update; BSCC 01/16, CDPH 01/16, DSA-SS 02/16, OSHPD 02/16, SFM 01/16 Approved by the California Building Standards Commission on August 14, 2017. Published on January 1, 2018 and effective July 1, 2018.
- 6. 2016 Intervening Cycle update; DSA-AC 01/16 Approved by the California Building Standards Commission on October 17, 2017. Published on January 1, 2018 and effective July 1, 2018.





GET UP TO CODE FAST IN CALIFORNIA

with ICC Significant Changes guides

SIGNIFICANT CHANGES TO THE CALIFORNIA CODES, 2016 EDITIONS

In the fast-paced world of construction, it is critical to have a solid understanding of the latest updates to the California Codes. This series of full-color, illustrated guides will help you gain a clear knowledge of the code itself, what areas have been updated, how they have been revised, and the rationale behind those changes.

Each easy-to-use resource focuses on provisions that have special significance, are utilized frequently, or have had a change in application between the 2013 and 2016 editions. Each change is accompanied by a photograph, real-world application example, table or illustration to assist and enhance readers' understanding. With a summary and discussion of the impact of these changes, each guide's coverage is complete, making it the perfect tool for transitioning from the 2013 to 2016 editions.

FEATURES:

- · a full-color photograph, table or example illustrates each change
- · detailed table of contents, part summaries and change summaries
- · clear notation of deleted code language and new code text
- · logical organization that follows the layout of the code

SIGNIFICANT CHANGES TO THE CALIFORNIA BUILDING CODE, 2016

SOFT COVER #5521S16 | **PDF DOWNLOAD** #8950P733

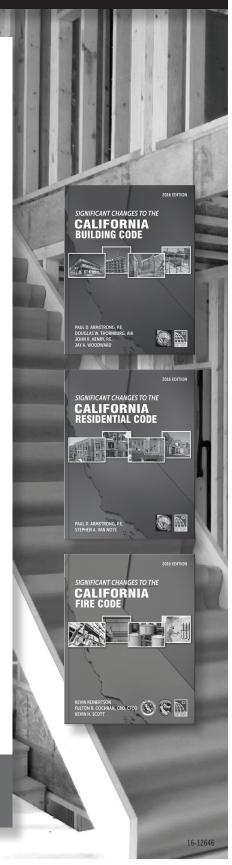
SIGNIFICANT CHANGES TO THE CALIFORNIA RESIDENTIAL CODE. 2016

SOFT COVER #5526S16 | PDF DOWNLOAD #8950P734

SIGNIFICANT CHANGES TO THE CALIFORNIA FIRE CODE, 2016

SOFT COVER #5592S16 | **PDF DOWNLOAD** #8950P735

Order your Significant Changes guides today! 1-800-786-4452 | www.iccsafe.org/books





CalDAG™ 2017

California Disabled Accessibility Guidebook

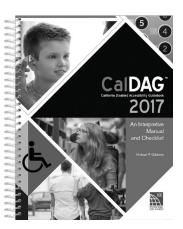
Understanding the latest California accessibility provisions is made easier with this newly updated bestseller. CalDAG is the only book combining and cross-referencing the 2016 *California Building Code* (CBC) regulations with federal 2010 ADA/ADAS requirements!

This comprehensive, detailed and user-friendly resource features:

- More than 250 superb illustrations
- Valuable flowcharts breaking down compliance procedures
- Applicable CBC and ADA/ADAS section numbers for easy reference
- Easy-to-follow checklist format perfect for survey, inspection, or design
- Selected California statutes regarding disabled accessibility compliance

This is a valuable reference for contractors, architects, inspectors, attorneys, and anyone working with the accessibility provisions of the CBC and ADA/ADAS. (566 pages)

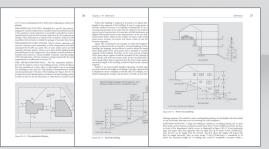
SOFT COVER #9080S17 | PDF DOWNLOAD #8950P805



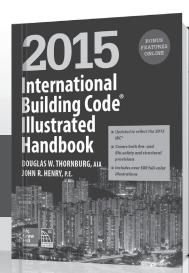
500+ COLOR ILLUSTRATIONS!

2015 International Building Code® Illustrated Handbook

An easy-to-use visual guide to the 2015 IBC®



- ✓ Bonus features online
- ✓ Expanded topics
- ✓ 500+ color illustrations
- ✓ New 7.5" x 9.5" format



Thoroughly revised to reflect the 2015 IBC, this full-color guide makes it easy to understand and apply complex IBC provisions and achieve compliance. With an emphasis on structural and fire- and life-safety requirements by code experts **Douglas W. Thornburg**,

AIA, and John R. Henry, P.E., this practical resource has been designed to save time and money. The Handbook provides all the information you need to get construction jobs done right, on time, and up to the requirements of the 2015 IBC. Access to a suite of online bonus features is included. (992 pages)

HARD COVER #4000S15 I PDF DOWNLOAD #8950P685

Get your Illustrated Guides today! 1-800-786-4452 | www.iccsafe.org/books