

# G127-06/07

## 507.3

**Proponent:** Laura Blaul, Orange County Fire Authority, representing the California Fire Chief's Association

**Revise as follows:**

**507.3 Sprinklered, one story.** The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building, of other than Type V construction, shall not be limited when 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.

### Exceptions:

- ~~1.~~ Buildings and structures of Type I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.2 and 903.3.1.1 and NFPA 230.
2. 1. The automatic sprinkler system shall not be required in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that:
  - ~~2.1.~~ 1.1. Exit doors directly to the outside are provided for occupants of the participant sports areas; and
  - ~~2.2.~~ 1.2. The building is equipped with a fire alarm system with manual fire alarm boxes installed in accordance with Section 907.
- ~~3.~~ 2. Group A-1 and A-2 occupancies of other than Type V construction shall be permitted, provided:
  - ~~3.1.~~ 2.1. All assembly occupancies are separated from other spaces as required for separated uses in Section 508.3.3.4 with no reduction allowed in the fire-resistance rating of the separation based upon the installation of an automatic sprinkler system;
  - ~~3.2.~~ 2.2. Each Group A occupancy shall not exceed the maximum allowable area permitted in Section 503.1; and
  - ~~3.3.~~ 2.3. All required exits shall discharge directly to the exterior.

**Reason:** The current exception allows for unlimited height storage buildings based on several considerations including construction type (I or II) when in compliance with the requirements for nonsprinklered one story F-2 / S-2 occupancies that are provided with fire sprinklers and meet the provisions of NFPA 230 for general storage. This allowance for unlimited height is in addition to the allowance for an unlimited area building. The exception utilized the term "rack storage facilities", which is not defined in the code. The lack of clear definitions could result in an interpretation to include other occupancies that have racks in them.

These types of warehouses are generally windowless buildings, or windows are limited to the lower level, thereby severely restricting fire department access to fight a fire or effect rescue from the outside of the building. While the building structure may be constructed of noncombustible materials, the combustible loading from the contents will normally be considerable and will routinely exceed the combustible loading of an equivalent size high-rise office building. This combustible loading combined with the allowable unprotected metal construction may lead to rapid structural failure of a building in a fire scenario, especially in the event that the fire sprinkler system is impaired due to material handling accidents or seismic events.

While this exception does make reference to NFPA 230 for general storage, it does not reference the Fire Code for high piled storage requirements; and specifically the provisions of IFC section 2308.5 for extra-high-rack storage systems. The exception will allow for unlimited height without consideration for the building population.

A current trend among larger distribution center warehouses is the use of pick-racks, which are multi-level catwalks in which personnel work to pick orders, stock racks and repackage shipments. These catwalks can span the height of the racks and, despite not being open to the public may house large populations of employees without the benefits of life safety systems afforded occupants of equivalent height office buildings. Taller storage racks are susceptible to greater movement during seismic events, and while the racks and buildings may be designed to accommodate the movement, the storage within the racks is not. Falling product may injure occupants and damage fire sprinkler piping within the racks, thereby impairing building fire protection systems and creating greater demands on the fire service provider. Redundant water supplies for fire protection afforded a high-rise office building would not be required under this provision. Table 503 and Section 504 adequately address storage buildings for rack storage since the building classification and limitations are based on the use of the building, rather than the fixtures installed within the building.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

# G128-06/07

## 507.3

**Proponent:** Jason T. Thompson, National Concrete Masonry Association (NCMA), representing Masonry Alliance for Codes and Standards (MACS)

**Revise as follows:**

**507.3 Sprinklered, one story.** The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building, of other than Type V construction, shall not be limited when 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.

**Exceptions:**

1. Buildings and structures of Type I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.2 and 903.3.1.1 and NFPA 230.
2. The automatic sprinkler system shall not be required in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that:
  - 2.1. Exit doors directly to the outside are provided for occupants of the participant sports areas; and
  - 2.2. The building is equipped with a fire alarm system with manual fire alarm boxes installed in accordance with Section 907.
3. Group A-1 and A-2 occupancies of other than Type V construction shall be permitted, provided:
  - 3.1. ~~All~~ The assembly occupancies are separated from other spaces as required for separated uses adjacent occupancies in accordance with Section 508.3.3.4 with no reduction allowed in the fire-resistance rating of the separation based upon the installation of an automatic sprinkler system;
  - 3.2 Each Group A occupancy shall be separated from adjacent Group A occupancies by fire barriers having a fire-resistance rating not less than that specified in Table 706.3.9.
  - ~~3.2-3.3.~~ The area of each Group A occupancy shall not exceed the maximum allowable area permitted in Section 503.4 tabular values in Table 503, without area increases in accordance with Section 506; and
  - 3.4. The aggregate area of the assembly occupancies shall not exceed 10 percent of the area of the building;
  - ~~3.3-3.5~~ All required exits shall discharge directly to the exterior.

**Reason:** This code change proposal is a follow up to Code Change Proposal G124-04/05 which was approved as further revised during the ICC Final Action Hearings held last September in Detroit, MI. That Code Change Proposal was one of a series of several code change proposals attempting to address the issue of how to allow certain types of Group A occupancies in one-story unlimited area buildings. In fact, the Masonry Alliance for Code and Standards (MACS) had also submitted a code change proposal on this issue which was designated as G123-04/05. But we decided not to submit a Public Comment during the last code development cycle. However, it is interesting to note that Code Change G124-04/05 was revised by a Public Comment submitted by the proponent to address some of our concerns regarding the minimum required fire-resistance rating for the occupancy separations.

However, some of our other concerns were not adequately addressed from our perspective. They dealt with limiting the allowable area of each Group A assembly occupancy to that of the tabular area values in Table 503 without any increases for open space or automatic sprinklers and to limit the aggregate area of all such Group A assembly occupancies to not more than 10 percent of the total area of the building. These limitations would be consistent with those specified for accessory occupancies in Section 508.3.1. We believe this is the appropriate approach to take for allowing Group A occupancies in unlimited area buildings which, for the most part, they had not been previously allowed in by any of the legacy model codes. The revisions we propose in this code change not only accomplish that but also clarify the section as to how it is intended to apply.

Without putting such limits on the area allowances for the Group A assembly occupancies, it is conceivable that the entire unlimited area building could be occupied by these Group A-1 and A-2 assembly occupancies. In our opinion, if it is desirable to have very large, in essence, unlimited area buildings containing Group A-1 and A-2 occupancies, then the building should be constructed as Type IB construction which permits unlimited areas for these occupancy groups. Since Footnote b to Table 601 would allow the fire-resistance rating of the structural frame and bearing walls to be reduced by 1-hour where supporting a roof only, which would be the case for one story unlimited area buildings, the required fire-resistance rating of the structural frame and the exterior bearing walls need only be 1-hour. Furthermore, Footnote c to Table 601 will allow the required fire-resistive protection of structural members in the roof construction to be omitted where the roof construction is at least 20 feet above the floor immediately below. Therefore, a one story unlimited area building of a Group A-1 or A-2 occupancy could be constructed with only 1-hour fire-resistance rated columns and bearing walls and no fire-resistive protection of the roof or the structural members of the roof construction.

This code change also makes it clear that even the individual Group A-1 and A-2 occupancies located in the building would need to be separated from each other if they were adjacent to one another. This would have been a requirement had not Table 508.3.3 Required Separation of Occupancies been significantly revised during the ICC Final Action Hearings in Detroit, MI based on Code Change Proposal G32-04/05. That table was previously designated as Table 302.3.2 Required Separation of Occupancies in the 2003 International Building Code (IBC) upon which the Code Change Proposal G124-04/05 was based. It would have required a minimum 2-hour fire-resistance rating between a Group A-1 and Group A-2 occupancy. Furthermore, Table 706.3.9 (previously Table 706.3.7) Fire-Resistance Rating Requirements for Fire Barrier Assemblies Between Fire Areas requires Group A occupancies subdivided into fire areas of the same occupancy classification to also be separated by 2-hour fire-resistance rated construction. So that is why we put in the requirement in 3.2 that each Group A occupancy be separated from adjacent Group A occupancies by fire barriers in accordance with Table 706.3.9.

We believe that this code change completes the package of what we see as a code change in process which is still evolving from the actions taken at the ICC Final Action Hearings last September in Detroit.

**Cost Impact:** The code change proposal will increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

## G129 – 06/07

### 507.3

**Proponent:** Jay Hall, Virginia Dept. of Housing and Community Development, representing the Virginia Building and Code Officials Association

**Revise as follows:**

**507.3 Sprinklered, one story.** The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building, of other than Type V construction, shall not be limited when 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.

## Exceptions:

1. Buildings and structures of Type I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.2 and 903.3.1.1 and NFPA 230.
2. The automatic sprinkler system shall not be required in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that:
  - 2.1. Exit doors directly to the outside are provided for occupants of the participant sports areas; and
  - 2.2. The building is equipped with a fire alarm system with manual fire alarm boxes installed in accordance with Section 907.
3. Group A-1 and A-2 occupancies of other than Type V construction shall be permitted, provided:
  - 3.1. ~~All assembly Group A-1 and A-2 occupancies are separated from other spaces with fire barriers having a fire resistance rating of not less than that indicated in Table 706.3.9. as required for separated uses in Section 508.3.3.4 with no reduction allowed in the fire resistance rating of the separation based upon the installation of an automatic sprinkler system;~~
  - 3.2. Each Group A occupancy shall not exceed the maximum allowable area permitted in Section 503.1; and
  - 3.3. All required exits shall discharge directly to the exterior.

**Reason:** As the original proponent of this language in the 2005 code change cycle, it was our intention to reference the prior version of Table 508.3.3 (Table 302.3.2). The amended version of Table 508.3.3 will not provide separation between Group A occupancies within unlimited area buildings. Additionally, a reference to section 706.3.9 would eliminate the need for language stating that " no reduction allowed for installation of an automatic sprinkler system".

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

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## G130-06/07

### 508.1

**Proponent:** Philip Brazil, PE, Reid Middleton, Inc., representing himself

#### Revise as follows:

**508.1 General.** Where a building or portion thereof contains two or more occupancies or uses, the building or portion thereof shall comply with the applicable provisions of this section. The provisions of Section 508 shall not reduce requirements for fire barriers, fire partitions, smoke barriers and fire-resistance-rated horizontal assemblies specified elsewhere in this code or the *International Fire Code*.

**Reason:** Section 508.3 requires each portion of a building to be individually classified in accordance with Section 302.1 on classification of occupancies. When a building contains more than one occupancy group, it is required to comply with the provisions for accessory occupancies (Section 508.3.1), nonseparated occupancies (Section 508.3.2), or separated occupancies (Section 508.3.3). The effect of this is to permit groups of occupancies to comply with the provisions for accessory occupancies or nonseparated occupancies both of which do not require separations of occupancies by fire barriers. There are approximately 60 code sections in the IBC and IFC requiring fire barriers that are not necessarily associated with separated occupancies. There are also code sections requiring other forms of fire containment assemblies (i.e., fire partitions, smoke barriers and fire-resistance-rated horizontal assemblies) that are also not necessarily associated with separated occupancies. The proposal will prevent a code user from concluding that an exemption from the requirement for a fire barrier by application of the provisions for accessory occupancies or nonseparated occupancies does not also mean an exemption from requirements elsewhere in the IBC or IFC for fire containment assemblies. Refer to the reason statement with code change proposal FS40-03/04 for further information on fire barriers in the IBC and IFC.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

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## G131-06/07

**508.2, 508.2.1, 508.2.2, 508.2.2.1, 508.2.3, 407.2.1, 407.2.3, 706.3.6, 706.3.8, 706.5, [F] 903.2.13 (IFC 903.2.13), [F] Table 903.2.13 (IFC Table 903.2.13), 3410.6.18 (IEBC [B] 1301.6.19), Table 3410.6.18 (IEBC [B] Table 1301.6.19)**

**Proponent:** Philip Brazil, PE, Reid Middleton, Inc., representing himself

#### Revise as follows:

**508.2 Incidental uses.** Incidental use areas uses shall comply with the provisions of this section.

**Exception:** Incidental ~~use areas~~ uses within and serving a dwelling unit are not required to comply with this section.

**508.2.1 Occupancy classification.** An incidental use area shall be classified in accordance with the occupancy of that portion of the building in which it is located or the building shall be classified as a mixed occupancy and shall comply with Section 508.3.

**508.2.2 Separation.** Incidental ~~use areas~~ uses shall be separated or protected, or both, in accordance with Table 508.2.

**508.2.2.1 Construction.** Where Table 508.2 requires a fire-resistance-rated separation, the incidental ~~use areas~~ use shall be separated from the remainder of the building by a fire barrier constructed in accordance with Section 706 or a horizontal assembly constructed in accordance with Section 711, or both. Where Table 508.2 permits an automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. The partitions shall extend from the floor to the underside of the fire-resistance-rated floor/ceiling assembly or fire-resistance-rated roof/ceiling ceiling assembly above or to the underside of the floor or roof sheathing, or sub deck above. Doors shall be self- or automatic closing upon detection of smoke. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80.

**508.2.3 Protection.** Where an automatic fire-extinguishing system or an automatic sprinkler system is provided in accordance with Table 508.2, only the areas of the incidental ~~uses~~ areas need be equipped with such a system.

**407.2.1 Spaces of unlimited area.** 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 for patient sleeping units, treatment rooms, hazardous or incidental ~~use areas~~ uses as defined in accordance with Section 508.2.
2. The open space is protected by an automatic fire detection system installed in accordance with Section 907.
3. The corridors onto which the spaces open, in the same smoke compartment, are protected by an automatic fire detection system installed in accordance with Section 907, or the smoke compartment in which the spaces are located is equipped throughout with quick-response sprinklers in accordance with Section 903.3.2.
4. The space is arranged so as not to obstruct access to the required exits.

**407.2.3 Mental health treatment areas.** Areas wherein mental health patients who are not capable of self-preservation are housed, or group meeting or multipurpose therapeutic spaces other than incidental ~~use areas~~ uses as defined in accordance with Section 508.2, under continuous supervision by facility staff, shall be permitted to be open to the corridor, where the following criteria are met:

1. Each area does not exceed 1,500 square feet (140 m<sup>2</sup>).
2. The area is located to permit supervision by the facility staff.
3. The area is arranged so as not to obstruct any access to the required exits.
4. The area is equipped with an automatic fire detection system installed in accordance with Section 907.2.
5. Not more than one such space is permitted in any one smoke compartment.
6. The walls and ceilings of the space are constructed as required for corridors.

**706.3.6 Incidental use areas.** The fire barrier separating incidental ~~use areas~~ uses from other spaces in the building shall have a fire-resistance rating of not less than that indicated in Table 508.2.

**706.3.8 Separation of mixed ~~Separated~~ occupancies.** Where the provisions of Section 508.3.3 are applicable, the fire barrier separating mixed occupancies shall have a fire-resistance rating of not less than that indicated in ~~Section~~ Table 508.3.3 based on the occupancies being separated.

**706.5 Continuity.** Fire barriers shall extend from the top of the floor/ceiling assembly below to the underside of the floor or roof slab or deck above and shall be securely attached thereto. Such fire barriers shall be continuous through concealed spaces, such as the space above a suspended ceiling. The supporting construction for fire barrier walls shall be protected to afford the required fire-resistance rating of the fire barrier supported, except for 1-hour ~~fire-resistance-rated incidental use area separations as~~ fire barriers required by Table 508.2 in buildings of Type IIB, IIIB and VB construction. Hollow vertical spaces within a fire barrier shall be fireblocked in accordance with Section 717.2 at every floor level.

**Exceptions:**

1. The maximum required fire-resistance rating for assemblies supporting fire barriers separating tank storage as provided for in Section 415.6.2.1 shall be 2 hours, but not less than required by Table 601 for the building construction type.
2. Shaft enclosures shall be permitted to terminate at a top enclosure complying with Section 707.12.

**[F] 903.2.13 (IFC 903.2.13) Other required suppression systems.** In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.13 also require the installation of a suppression system for certain buildings and areas.

**[F] TABLE 903.2.13 (IFC TABLE 903.2.13)  
ADDITIONAL REQUIRED SUPPRESSION SYSTEMS**

SECTION	SUBJECT
508.2	Incidental use areas <del>uses</del>

(Portion of table not shown do not change)

**3410.6.18 (IEBC 1301.6.19) Incidental use.** Evaluate the protection of incidental ~~use areas~~ uses in accordance with Section 508.2. Do not include those where this code requires suppression throughout the building including covered mall buildings, high-rise buildings, public garages and unlimited area buildings. Assign the lowest score from Table 3410.6.18 for the building or fire area being evaluated. If there are no specific occupancy areas in the building or fire area being evaluated, the value shall be zero.

**TABLE 3410.6.18 (IEBC TABLE 1301.6.19)  
INCIDENTAL USE AREA VALUES<sup>a</sup>**

(No changes to table text)

**Reason:** The purpose of this proposal is to separate the concept of an incidental use from the area of the building in which it is located. An incidental use is an area of special hazard within a separated occupancy. Its use poses a special hazard to the other uses within the separated occupancy. The provisions for accessory occupancies, nonseparated occupancies and separated occupancies are associated with the provisions for incidental uses. Each set of provisions covers classification of the occupancies, limits on areas and heights, and separations (i.e., fire barriers). Specifying incidental use areas as incidental uses will align them with their associated occupancies each of which has separate requirements applicable to its area.

Section 706.3.6 is being revised because the current language implies that the fire barrier separates incidental use areas from each other not necessarily from other spaces in the building (i.e., main occupancies). Reference to "other spaces" is being done for consistency with the same term in Section 508.3.2.1.

In Section 706.3.8, "mixed occupancies" is changed to "separated occupancies" to recognize that, according to Section 508.3, mixed occupancies consist of accessory occupancies, nonseparated occupancies and separated occupancies.

**Cost Impact:** The code change proposal will not increase the cost of construction.

**Analysis.** While some sections listed are typically the purview of other committees, for consistency, the General Committee will make the determination for entire proposal.

Public Hearing: Committee: AS AM D  
 Assembly: ASF AMF DF

## **G132-06/07**

### **508.2.1, 508.2.3, Table 508.2, 502.1**

**Proponent:** Gregory R. Keith, Professional heuristic Development, representing the Boeing Company

**Revise as follows:**

**508.2.1 Occupancy classification.** An incidental use area shall be classified in accordance with the occupancy of that portion of the building in which it is located ~~or the building shall be classified as a mixed occupancy and shall comply with Section 508.3.~~

**508.2.3 Protection.** Where an ~~automatic fire extinguishing system or an~~ automatic sprinkler system installed in accordance with Section 903.3.1.1 is provided in accordance with Table 508.2, only the incidental use areas need be equipped with such a system.

**TABLE 508.2  
INCIDENTAL USE AREAS**

<b>ROOM OR AREA</b>	<b>SEPARATION AND/OR PROTECTION</b>
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system
Refrigerant machinery rooms	1 hour or provide automatic sprinkler system
Parking garage (Section 406.2)	2 hours; or 1 hour and provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system <sup>a</sup>
Hydrogen cut-off rooms, not classified as Group H	1-hour in Group B, F, M, S and U occupancies. 2-hour in Group A, E, I and R occupancies.
Incinerator rooms	2 hours and automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system
Laboratories and vocational shops, not classified as Group H, located in Group E or I-2 occupancies	1 hour or provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system
Laundry rooms over 100 square feet	1 hour or provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system
<u>Unoccupied</u> storage rooms over 100 square feet	1 hour or provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system
Group I-3 cells equipped with padded surfaces	1 hour
Group I-2 waste and linen collection rooms	1 hour
Waste and linen collection rooms over 100 square feet	1 hour or provide automatic <del>fire extinguishing</del> <u>sprinkler</u> system
Stationary lead-acid battery systems having a liquid capacity of more than 100 gallons used for facility standby power, emergency power or uninterrupted power supplies	1-hour in Group B, F, M, S and U occupancies. 2-hours in Group A, E, I and R occupancies.

For SI: 1 square foot = 0.0929 m<sup>2</sup>, 1 pound per square inch = 6.9 kPa,  
1 British thermal unit per hour = 0.293 watts, 1 horsepower = 746 watts,  
1 gallon = 3.785 L.

a. Or the building shall be classified as a mixed occupancy and shall comply with Section 508.3.

**2. Add new definition as follows:**

**502.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**INCIDENTAL USE AREA.** Those areas containing ancillary functions that are typically associated with a given occupancy and which generally pose a greater level of risk to that occupancy.

**Reason:** This proposal is intended to follow up on the reorganization of the mixed occupancy and use provisions introduced in the 2006 Edition of the *International Building Code*. Specifically, it is intended to clarify incidental use provisions. First, a definition of “incidental use area” has been introduced. The proposed definition emphasizes the fact that incidental uses are functional areas of a given occupancy, not necessarily a separate occupancy. Consistent with that thinking, Section 508.2.1 has been modified to remove the general option to classify incidental uses as separate occupancies. This provision, introduced into the 2003 IBC has proven to confuse the issue and lend to manipulation of mixed use and occupancy requirements. The mixed occupancy classification option would normally be anticipated to apply only to parking garages and storage rooms. This proposal continues to acknowledge the classification option for parking garages through the addition of a specific footnote reference. The storage room design condition has been clarified by declaring that unoccupied storage rooms greater than 100 square feet in area are separated or protected

as incidental uses. By default, occupied storage rooms or areas would be classified as Group S occupancies. Accordingly, smaller storage rooms would likely qualify as accessory occupancies in accordance with the provisions of Section 508.3.1.

Additionally, references to "an automatic fire-extinguishing system" in Section 508.2.3 and Table 508.2 have been deleted in favor of more typical and appropriate "automatic sprinkler system" language. Inasmuch as both terms are currently contained in the table, some interpreters of the code could infer a difference in active fire protection requirements. This erroneous thinking is actually reinforced due to the fact that Section 904 addresses alternative fire-extinguishing systems. In fact, "automatic fire-extinguishing system" is a defined term in Section 902.1 and would include automatic sprinkler systems.

Approval of this proposal will clarify incidental use provisions in the IBC and promote needed uniformity in the treatment of these important areas. This proposal creates objective, realistic and consistent incidental use technical provisions.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee: AS AM D  
 Assembly: ASF AMF DF

## G133-06/07

### 508.2.1, Table 508.2, 508.3.1

**Proponent:** Philip Brazil, PE, Reid Middleton, Inc., Everett, WA, representing himself

**Revise as follows:**

**508.2.1 Occupancy classification.** An incidental use area shall be classified in accordance with the occupancy of that portion of the building in which it is located ~~or the building shall be classified as a mixed occupancy and shall comply with Section 508.3.~~

**TABLE 508.2  
 INCIDENTAL USE AREAS**

ROOM OR AREA	SEPARATION AND/OR
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic fire-extinguishing system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic fire-extinguishing system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Parking garage (Section 406.2)	<del>2 hours; or 1 hour and provide automatic fire-extinguishing System</del>
Hydrogen cut-off rooms, not classified as Group H	1-hour in Group B, F, M, S and U occupancies. 2-hour in Group A, E, I and R occupancies.
Incinerator rooms	2 hours and automatic sprinkler System
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic fire-extinguishing System
Laboratories and vocational shops, not classified as Group H, located in Group E or I-2 occupancies	1 hour or provide automatic fire-extinguishing system
Laundry rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system
<del>Storage rooms over 100 square feet</del>	<del>1 hour or provide automatic fire-extinguishing system</del>
Group I-3 cells equipped with padded surfaces	1 hour
Group I-2 waste and linen collection rooms	1 hour
Waste and linen collection rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system
Stationary lead-acid battery systems having a liquid capacity of more than 100 gallons used for facility standby power, emergency power or uninterrupted power supplies	1-hour in Group B, F, M, S and U occupancies. 2-hour in Group A, E, I and R occupancies.

For SI: 1 square foot = 0.0929 m<sup>2</sup>, 1 pound per square inch = 6.9 kPa,  
 1 British thermal unit per hour = 0.293 watts, 1 horsepower = 746 watts,  
 1 gallon = 3.785 L

**508.3.1 Accessory occupancies.** Accessory occupancies are those occupancies subsidiary to the main occupancy of the building or portion thereof. Aggregate accessory occupancies shall not occupy more than 10 percent of the area of the story in which they are located and shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies. The provisions for accessory occupancies shall not reduce the requirements for incidental use areas in Section 508.2.

**Exceptions:**

1. Accessory assembly areas having a floor area less than 750 square feet (69.7 m<sup>2</sup>) are not considered separate occupancies.

2. Assembly areas that are accessory to Group E occupancies are not considered separate occupancies except when applying the assembly occupancy requirements of Chapter 11.
3. Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 are not considered separate occupancies.

**Reason:** The purpose of this proposal is to reestablish the requirements for incidental use areas by eliminating the option of classifying them as mixed occupancies. Incidental use areas are typically areas of special hazard within occupancies. They are typically not classified as separate occupancies. But a few of the areas listed in Table 508.2 are typically classified as separate occupancies, thus diluting the purpose for the requirements imposed on incidental use areas. The proposal will remove the incidental use areas that are typically classified as separate occupancies (storage rooms and parking garages) and restore the requirements for separation and/or protection specified in Table 508.2 to the remaining incidental use areas. Note that storage rooms are typically classified as Group S-1 or S-2 and parking garages are typically classified as Group S-2.

Section 508.2.1 currently requires an incidental use area to be classified in accordance with the occupancy in which it is located, or to be classified as a mixed occupancy and comply with Section 508.3. Section 508.3 requires each portion of a building to be individually classified in accordance with Section 302.1 on classification of occupancies. When a building contains more than one occupancy group, it is required to comply with the provisions for accessory occupancies (Section 508.3.1), nonseparated occupancies (Section 508.3.2), or separated occupancies (Section 508.3.3). The effect of this is to permit an incidental use area to comply with the provisions for accessory occupancies or nonseparated occupancies. Since incidental use areas are typically not classified as separate occupancies, the separation and/or protection typically required for incidental use areas in the absence of these options is eliminated and the special hazard posed by an incidental use area is not addressed. The other areas within the separated occupancy continue to be exposed to the special hazard but are not protected from it.

Removing storage rooms greater than 100 square feet and parking garages from being classified as incidental use areas will permit them to qualify as accessory occupancies provided they meet the limitations of Section 508.3.1 for accessory occupancies. But that is the case now. This purpose for this proposal is not to change the provisions of the IBC with respect to storage rooms greater than 100 square feet and parking garages. Rather, it is to change the provisions for incidental use areas other than storage rooms greater than 100 square feet and parking garages by restoring the requirements for separation and/or protection specified in Table 508.2.

A prohibition on applying the provisions of Section 508.3.1 for accessory occupancies in order to reduce the requirements of Section 508.2 for incidental use areas is added to Section 508.3.1. Incidental uses are not occupancies but are areas of special hazard within occupancies. Technically, the prohibition is superfluous but it is proposed to ensure that the provisions for accessory occupancies are not misconstrued as a substitute for the requirements for incidental use areas.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

## G134-06/07

### 508.2.2.1, 508.3 through 508.3.3.3

**Proponent:** Philip Brazil, PE, Reid Middleton, Inc., representing himself

#### Revise as follows:

**508.2.2 Separation.** Incidental use areas shall be separated or protected, or both, in accordance with Table 508.2.

**508.2.2.1 Construction.** Where Table 508.2 ~~requires~~ specifies a fire-resistance-rated separation, the incidental use area shall be separated from the remainder of the building by a fire barrier constructed in accordance with Section 706 or a horizontal assembly constructed in accordance with Section 711, or both. Where Table 508.2 permits an automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. The partitions shall extend from the floor to the underside of the fire-resistance-rated floor/ceiling assembly or fire-resistance-rated roof/ceiling assembly above or to the underside of the floor or roof sheathing, or sub deck above. Doors shall be self- or automatic closing upon detection of smoke. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80.

**508.3 Mixed occupancies.** 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 Sections 508.3.1, 508.3.2, 508.3.3 or a combination of these sections.

#### Exceptions:

1. Occupancies separated in accordance with Section 509.
2. Where required by Table 415.3.2, areas of Group H-1, H-2 or and H-3 occupancies shall be located in a separate and detached building or structure.

**508.3.1 Accessory occupancies.** Accessory occupancies are those occupancies subsidiary to the main occupancy of the building or portion thereof. ~~Aggregate accessory occupancies shall not occupy more than 10 percent of the area of~~

the story in which they are located and shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies.

**Exceptions:**

1. Accessory assembly areas having a floor area less than 750 square feet (69.7 m<sup>2</sup>) are not considered separate occupancies.
2. Assembly areas that are accessory to Group E occupancies are not considered separate occupancies except when applying the assembly occupancy requirements of Chapter 11.
3. Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 are not considered separate occupancies.

**508.3.1.1 Occupancy classification.** Accessory occupancies shall be individually classified in accordance with Section 302.1. ~~The Code requirements of this code shall apply to each portion of the building based on the occupancy classification of that the accessory space occupancy,~~ except that the most restrictive applicable provisions of Section 403 and Chapter 9 shall apply to the entire building or portion thereof.

**508.3.1.2 Allowable area and height.** The allowable area and height of the building shall be based on the allowable area and height for the main occupancy in accordance with Section 503.1. The aggregate area of accessory occupancies shall not occupy more than 10 percent of the area of the story in which they are located and shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies. The height of ~~any each~~ accessory occupancy shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies occupancy.

**508.3.1.3 Separation.** No separation is required between accessory occupancies ~~or~~ and the main occupancy.

**Exception:** Group H-2, H-3, H-4 ~~or~~ and H-5 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.

**508.3.2 Nonseparated occupancies.** Buildings or portions of buildings that comply with the provisions of this section shall qualify be considered as nonseparated occupancies.

**508.3.2.1 Occupancy classification.** Nonseparated occupancies shall be individually classified in accordance with Section 302.1. ~~The Code requirements of this code shall apply to each portion of the building based on the occupancy classification of that space except that the most restrictive applicable provisions of Section 403 and Chapter 9 shall apply to the entire building or portion thereof in which the nonseparated occupancies are located.~~

**508.3.2.2 Allowable area and height.** (No change to text)

**508.3.2.3 Separation.** No separation is required between nonseparated occupancies.

**Exception:** Group H-2, H-3, H-4 ~~or~~ and H-5 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.

**508.3.3 Separated occupancies.** Buildings or portions of buildings that comply with the provisions of this section shall qualify be considered as separated occupancies.

**508.3.3.1 Occupancy classification.** Separated occupancies shall be individually classified in accordance with Section 302.1. Each ~~fire area~~ separated space shall comply with this code based on the occupancy classification of that portion of the building.

**508.3.3.2 Allowable area.** In each story, the building area shall be such that the sum of the ratios of the actual floor building area of each separated occupancy divided by the allowable area of each separated occupancy shall not exceed one.

**508.3.3.3 Allowable height.** Each separated occupancy shall comply with the height limitations based on the type of construction of the building in accordance with Section 503.1. The height, in both feet and stories, of each fire area shall be measured from grade plane. This measurement shall include the height, in both feet and stories, of intervening fire areas.

**Exception:** Special provisions permitted by Section 509.

**Reason:** The purpose of this proposal is to make editorial and technical improvements in the provisions of Section 508 for mixed occupancies. In Section 508.2.2.1, "requires" is changed to "specifies" because Table 508.2 doesn't require anything. It does, however, specify fire barriers, construction capable of resisting the passage of smoke or an automatic fire-extinguishing system for areas with specific hazards.

The revision to the second exception to Section 508.3 will avoid the assumption that there is a choice in the requirements for locating Group H-1, H-2 and H-3 occupancies in separate and detached buildings or structures. There is not. The areas of all such occupancies are required to be located in separate and detached buildings or structures to the extent that they are located on a site and Table 415.3.2 requires that they be so located. A similar revision is proposed in the exception to Section 508.3.1.3.

The limit on the aggregate area of accessory occupancies is relocated from Section 508.3.1 to Section 508.3.1.2 on allowable area and height for which it is applicable.

The change from the "entire building or portion thereof" to the "building or portion thereof in which the nonseparated occupancies are located" in Section 508.3.2.1 is being done to recognize that a building could have more than one separated occupancy each of which could have one or more nonseparated occupancies.

The change from "fire area" to "separated space" in Section 508.3.3.1 is being done to recognize that there could be more than one fire area within a separated occupancy and for consistency with the current use of "space" in Section 508.3.2.1. There are approximately 50 code sections in the IBC requiring fire barriers that are not necessarily associated with separated occupancies. Refer to the reason statement with code change proposal FS40-03/04 for further information.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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## G135-06/07

### 508.2.2.1

**Proponent:** Vickie Lovell, representing the Air Movement and Control Association

**Revise as follows:**

**508.2.2.1 Construction.** Where Table 508.2 requires a fire-resistance-rated separation, the incidental use area shall be separated from the remainder of the building by a fire barrier constructed in accordance with Section 706 or a horizontal assembly constructed in accordance with Section 711, or both. Where Table 508.2 permits an automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. The partitions shall extend from the floor to the underside of the fire-resistance-rated floor/ceiling assembly or fire-resistance-rated roof/ceiling ceiling assembly above or to the underside of the floor or roof sheathing, or sub deck above. Doors shall be self- or automatic closing upon detection of smoke in accordance with Section 715.3.7.3. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80. Where the provisions of Table 508.2 are applied to reduce the fire resistance rating of the fire barrier to 0 hours with an automatic sprinklers system, ducts that have openings that communicates the incidental use area with the remainder of the building shall be required to have a smoke damper.

**Exception:** Where the installation of a smoke damper will interfere with the operation of a required smoke control system smoke dampers are not required.

**Reason:** This change is needed to address a smoke and fire safety concern in Section 508.2.2.1. In a non-sprinklered building, the incidental use areas warrant a fire barrier separation, which is considered to be a substantial fire resistive assembly for separating uses. However, Table 508.2.2.1 permits the total reduction from the most substantial assembly in many uses to the least substantial assembly with the installation of sprinklers – and with little justification that demonstrates equivalency under these conditions. Although sprinklers when successfully activated provide a method of controlling the fire, there are no provisions for the management of smoke in this section as written. And in the situation where the sprinklers do not activate successfully for whatever reason, there are no other safeguards to help contain the fire and smoke to the room of origin. The wisdom of reducing the fire rating of the fire barrier construction to zero and eliminating from the fire dampers that is debatable. However, the fact that there is nothing left in the walls that enclose rooms for furnaces, boilers, refrigerants, laboratories, laundry, linen and waste collection rooms, and storage facilities, to impede the passage of smoke from the incidental use areas to other parts of the building through the HVAC obviously poses a threat to the property and the occupants, even when the sprinklers successfully activate. This proposal clarifies the construction requirements for the protection of the incidental use areas from the remainder of the building.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

# G136-06/07

508.3, 508.3.2, 508.3.2.1, 508.3.2.2, 508.3.2.3, 506.4.1

**Proponents:** Jason T. Thompson, National Concrete Masonry Association (NCMA), representing Masonry Alliance for Codes and Standards (MACS) and Rick Thornberry, P.E., representing the Alliance for Fire and Smoke Containment and Control (AFSC)

## 1. Revise as follows:

**508.3 Mixed occupancies.** 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 Sections 508.3.1, or 508.3.2, ~~508.3.3~~ or a combination of these sections.

### Exceptions:

1. Occupancies separated in accordance with Section 509.
2. Where required by Table 415.3.2, areas of Group H-1, H-2 or H-3 occupancies shall be located in a separate and detached building or structure.

## 2. Delete without substitution:

~~**508.3.2 Nonseparated occupancies.** Buildings or portions of buildings that comply with the provisions of this section shall qualify as nonseparated occupancies.~~

~~**508.3.2.1 Occupancy classification.** Nonseparated occupancies shall be individually classified in accordance with Section 302.1. Code requirements shall apply to each portion of the building based on the occupancy classification of that space except that the most restrictive applicable provisions of Section 403 and Chapter 9 shall apply to the entire building or portion thereof.~~

~~**508.3.2.2 Allowable area and height.** The allowable 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.~~

~~**508.3.2.3 Separation.** No separation is required between occupancies.~~

~~**Exception:** Group H-2, H-3, H-4 or H-5 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.~~

(Renumber subsequent sections)

## 3. Revise as follows:

**506.4.1 Mixed occupancies.** In buildings with mixed occupancies, ~~the allowable area per story ( $A_a$ ) shall be based on the most restrictive provisions for each occupancy when the mixed occupancies are treated according to Section 508.3.2.~~ When the occupancies are treated according to Section 508.3.3 as separated occupancies, the maximum total building area shall be such that the sum of the ratios for each such area on separated occupancy in all floors stories as calculated according to Section ~~508.3.3.2~~ 508.3.2.2 shall not exceed 2 for two-story buildings and 3 for buildings three stories or higher.

**Reason:** This code change proposal deletes the nonseparated occupancies option for addressing mixed occupancy buildings. Our reason for proposing the deletion of this option is based on the new Table 508.3.3 Required Separation of Occupancies because it allows for nonseparated occupancies within the table itself. If the nonseparated occupancies option remains in the code, then there will be very few cases where the separated occupancies option in Section 508.3.3 would actually be used. In fact it is conceivable that it could be used even where the table designates the letter "N" which means that there is no separation requirement. This would be a meaningless application of the separated occupancies option because there would be no fire-resistive separation between the occupancies so designated. However, that is the way it is supposed to work with the nonseparated occupancies in Section 508.3.2.

A review of Table 508.3.3 will quickly reveal that there are many cases where occupancy separations are not required. The significant cases occur with the Group A and Group E occupancies where there is no occupancy separation required between a Group A and a Group E occupancy, nor is there an occupancy separation between any of the sub-occupancy classifications in the Group A occupancies, such as A-1, A-2, etc. Nor are there any occupancy separations required between any of the Group I sub-occupancy classifications or the Group R sub-occupancy classifications. Furthermore, no occupancy separations are required between Group B, F-2, M, and S-1 occupancies nor are any occupancy separations required between any of the Group H sub-occupancy classifications except for the H-1 which is not permitted to be in a building with any other occupancy classification. So what does that leave as far as requiring occupancy separations by the table that is supposed to specify required separation of occupancies?

We believe this proves our point that there is no need to have a nonseparated occupancies option with the current Table 508.3.3. Possibly another approach would be to revise Table 508.3.3 so that all of the Ns are replaced with a number to indicate that at least some degree of fire-resistance is required to separate occupancies under the separated occupancies option in Section 508.3.3. At least under the 2003 IBC it was clear as to the separated and nonseparated occupancies based on Table 302.3.2 of that edition of the IBC which specified a minimum fire-resistance rating for every occupancy combination unless the combination was not permitted. It is also interesting to note that the exception to current Section

508.3.2.3 Separation in the nonseparated occupancies option would still require Group H-2, H-3, H-4, and H-5 occupancies to be separated from all other occupancies in accordance with Section 508.3.3 Separated Occupancies, yet Table 508.3.3 would not require any occupancy separations between the H-3, H-4, and H-5 occupancies. We believe that Section 508 is definitely broken so we offer this at least as a partial fix.

**Cost Impact:** The code change proposal will increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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## G137-06/07

### 508.3.1

**Proponent:** Gregory R. Keith, Professional heuristic Development, representing the Boeing Company

**Revise as follows:**

**508.3.1 Accessory occupancies.** Accessory occupancies are those occupancies subsidiary to the main occupancy of the building or portion thereof. Aggregate accessory occupancies shall not occupy more than 10 percent of the area of the story in which they are located and shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies.

**Exceptions:**

- ~~1. Accessory assembly areas having a floor area less than 750 square feet (69.7 m<sup>2</sup>) are not considered separate occupancies.~~
- ~~2. Assembly areas that are accessory to Group E occupancies are not considered separate occupancies except when applying the assembly occupancy requirements of Chapter 11.~~
- ~~3. Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 are not considered separate occupancies.~~

**Reason:** This proposal is intended to follow up on the reorganization of the mixed occupancy and use provisions introduced in the 2006 Edition of the *International Building Code*. Specifically, it is intended to clarify accessory occupancy provisions. It is proposed to eliminate the three current exceptions. These exceptions are a result of the somewhat vague nature of accessory use areas contained in previous editions of the IBC. As such, they are at odds with the current accessory occupancy provisions. Specifically, Section 508.3.1.1 states, "Accessory occupancies shall be individually classified in accordance with Section 302.1. Code requirements shall apply to each portion of the building based on the occupancy classification of that accessory space, except that the most restrictive applicable provisions of Section 403 and Chapter 9 shall apply to the entire building or portion thereof." Traditionally, the exceptions have been employed to allow such buildings to have allowable areas based on the main occupancy of the building and to avoid occupancy separations. The reality is that each of these goals can be achieved using current provisions, without the exceptions. The key difference is that if there are any specific requirements that are normally associated with a given occupancy, they must be acknowledged. Exception 1 is almost moot inasmuch as assembly uses (whether they are accessory or not) less than 750 square feet, would seldom be classified as separate occupancies. New Section 303.1, Exceptions 2 and 3 already appropriately address this condition. If it is truly felt that all inclusive educational and religious occupancies be permitted, such provisions should be contained within the specific occupancy sections in Chapter 3. It should be noted that a similar proposal was defeated during the previous code development cycle. The 2006 IBC accessory occupancy provisions clarify that they are intended only to define a mixed occupancy design option. They are not intended to relieve any pertinent code requirement. Approval of this proposal will clarify accessory occupancy provisions in the IBC and promote needed uniformity in the treatment of these important areas.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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## G138-06/07

### 508.3.1, 508.3.1.2

**Proponent:** Gregory R. Keith, Professional heuristic Development, representing the Boeing Company

**Revise as follows:**

**508.3.1 Accessory occupancies.** Accessory occupancies are those occupancies subsidiary to the main occupancy of the building or portion thereof. ~~Aggregate accessory occupancies shall not occupy more than 10 percent of the area of the story in which they are located and shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies.~~

## Exceptions:

1. Accessory assembly areas having a floor area less than 750 square feet (69.7 m<sup>2</sup>) are not considered separate occupancies.
2. Assembly areas that are accessory to Group E occupancies are not considered separate occupancies except when applying the assembly occupancy requirements of Chapter 11.
3. Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 are not considered separate occupancies.

**508.3.1.2 Allowable area and height.** The allowable area and height of the building shall be based on the allowable area and height for the main occupancy in accordance with Section 503.1.

The aggregate area of accessory occupancies shall not occupy more than 10 percent of the area of the story in which they are located and accessory occupancies shall not exceed the tabular values in Table 503, without increases in accordance with Section 506 for such accessory occupancies.

The height of any accessory occupancy shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies.

**Reason:** This proposal is intended to follow up on the reorganization of the mixed occupancy and use provisions introduced in the 2006 Edition of the *International Building Code*. Specifically, it is intended to clarify accessory occupancy provisions. The second sentence of Section 508.3.1, which currently addresses the determination of allowable area for accessory occupancy, has been properly relocated to Section 508.3.1.2 (Allowable area and height). Additionally, Section 508.3.1.2 has been restructured to address each area and height design contingency and applicable increase references have been corrected. The first paragraph of Section 508.3.1.2 will address the determination of the allowable area and height for the overall floor area. The second paragraph will address the allowable area determination procedure for the accessory occupancy or occupancies, while the third paragraph addresses the height determination procedure for the accessory occupancy or occupancies. Appropriate references have been provided.

Approval of this proposal will clarify accessory occupancy provisions in the IBC and promote needed uniformity in the treatment of these important areas.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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## G139–06/07

### 508.3.1.1, 508.3.2.1

**Proponent:** Jeffrey Tubbs, ARUP, Westborough, MA, representing himself

#### Revise as follows:

**508.3.1.1 Occupancy classification.** Accessory occupancies shall be individually classified in accordance with Section 302.1. Code requirements shall apply to each portion of the building based on the occupancy classification of that accessory space, except that the most restrictive applicable provisions of ~~Section 403 and~~ Chapter 9 shall apply to the entire building or portion thereof. In addition, high-rise buildings shall be in accordance with Section 403.

**508.3.2.1 Occupancy classification.** Nonseparated occupancies shall be individually classified in accordance with Section 302.1. Code requirements shall apply to each portion of the building based on the occupancy classification of that space except that the most restrictive applicable provisions of ~~Section 403 and~~ Chapter 9 shall apply to the entire building or portion thereof. In addition, high-rise buildings shall be in accordance with Section 403.

**Reason:** To clarify that high-rise building requirements would only apply if the building was a high-rise.

Although the words “as applicable” are in the code, the reference to Section 403 is confusing as to whether the high-rise provisions apply to all buildings using the accessory or non-separated mixed occupancy requirements. The intent is only to apply Section 403 if the building is actually a high-rise.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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## G140–06/07

### 508.3.1.3, 508.3.2.3

**Proponents:** George Thomas, PE, CBO, Pleasanton, CA, representing the California Fire Chiefs Association and Tri-Chapter Code Committee; Laura Blaul and Lorin Neyer, representing the California Fire Chief’s Association

#### Revise as follows:

**508.3.1.3 Separation.** No separation is required between accessory occupancies or the main occupancy.

**Exceptions:**

1. Group H-2, H-3, H-4 or H-5 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.
2. Group R occupancies shall be separated from other accessory occupancies in accordance with Section 508.3.3.4.

**508.3.2.3 Separation.** No separation is required between occupancies.

**Exceptions:**

1. Group H-2, H-3, H-4 or H-5 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.
2. All Group R occupancies shall be separated from other occupancies in accordance with Section 508.3.3.4

**Reason:** The 2006 IBC, like the 2000 and 2003 editions, requires that a one-hour fire rated separation be provided between all dwelling units in Group R occupancies. Some interpret that since the code requires a separation between dwelling units it is logical that there also should be a one-hour separation between dwelling units and other use groups within the same building. The code however does not explicitly state that a fire rated separation between that portion of a building used for Group R and any other uses be provided except for Groups H2, H3, H4 and H5. Table 508.3.3 requires occupancy separations with one hour or more fire resistance to be located between Group R and all other occupancies. In multiple family dwellings, Section 419.3 requires that walls separating dwelling units must be constructed as fire partitions having a fire-resistance rating not less than 1-hour. It is logical that where dwelling units are located in mixed use buildings containing other occupancies that the occupancy separations required by Table 508.3.3 should not be eliminated through the use of the non-separated occupancy provisions of Section 508.3.2.

**Cost Impact:** The code change proposal will increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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## G141-06/07

### 508.3.2.2

**Proponent:** Gerald Anderson, City of Overland Park, KS

**Revise as follows:**

**508.3.2.2 Allowable area and height.** ~~The allowable 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.~~ The height of any occupancy shall be limited to the height specified in Table 503 for the type of construction.

**Reason:** The purpose of this code change is to allow greater flexibility in the design of non-separated mixed uses. As the code is currently written the most restrictive area and height for the occupancy groups must be applied to the entire building. With this code change my intent is to treat the height of the occupancy similarly to the way we do with separated mixed uses. When applying the non-separated mixed use provisions there are several scenarios where a mixed occupancy would be allowed on the same floor, yet if you stacked these same occupancies they would be prohibited unless other safety features were added. For example, a day care (group E) wants to move into a two story type VB building, having 2000sq ft on the first floor and approximately 1000 sq ft on the second floor. The day care will occupy the first floor while the upper floor is to be used as an administrative office. In applying Section 508.3.2.2 as currently written the code would require that we apply the height and area to the entire building thus Type III construction type would be the minimum allowed for a two story group E. The problem is obvious, if the building was not a two story building there would be no issues, for the area would be well within that prescribed in Table 503 for a Type VB building. With the change I am proposing the code would allow the code official to look at the second floor as a B use and the first floor as an E use. Type VB would allow a B occupancy to be located on the second floor and a one story E occupancy. The most restrictive area limitation (group E) would be applied to the whole building.

Another example: There is a two story type II B building. An I-2 is proposed for the first floor and a group B (medical office) is proposed for the second floor. No occupancy separation has been proposed. If we apply the provisions of Section 508.3.2.2 we would quickly see that this is not going to work because the most restrictive use is the I-2 and this use is first allowed in Type IIA buildings. (Area per floor is not a factor). Again, if this was a one story building these two occupancies could operate side by side with no separation however, by stacking the B on the I, we have somehow created a problem that requires greater protection. With my proposal I am suggesting that we limit the area of the building per that which is prescribed for the I-2 occupancy for the specified construction type. The height of the occupancy is then limited to that which is specified in Table 503 for that given occupancy.

**Cost Impact:** This code change proposal may actually lower cost.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

# G142– 06/07

## 508.3.3.3

**Proponent:** Gregory R. Keith, Professional heuristic Development, representing the Boeing Company

**Revise as follows:**

**508.3.3.3 Allowable height.** Each occupancy shall comply with the height limitations based on the type of construction of the building in accordance with Section 503.1. ~~The height, in both feet and stories, of each fire area shall be measured from grade plane. This measurement shall include the height, in both feet and stories, of intervening fire areas.~~

**Exception:** Special provisions permitted by Section 509.

**Reason:** The stricken language was originally intended to modify the former (2003) separated use provisions. In the context of the new (2006) organization and format, the information is redundant. The basic provision of Section 508.3.3.3 requires the allowable height in feet and stories be determined in accordance with the fundamental provisions of Section 503.1. The concern of the stricken language is currently addressed in the definition of HEIGHT, BUILDING in Section 502.1. The additional language could confuse interpreters by indicating that the height requirements for separated occupancies are determined differently than for individual occupancies. It should be noted that the proposed language is identical to that approved by the membership in Detroit as a portion of the mixed occupancy and use reformatting exercise. Approval of this proposal will clarify the provisions for the determination of allowable height requirements in separated occupancies.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee: AS AM D  
 Assembly: ASF AMF DF

# G143–06/07

## Table 508.3.3

**Proponent:** Jason T. Thompson, National Concrete Masonry Association (NCMA), representing Masonry Alliance for Codes and Standards (MACS)

**Revise table as follows:**

**TABLE 508.3.3  
 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)**

OCCUPANCY	A <sup>e</sup> , E		I		R <sup>d</sup>		F-2, S-2 <sup>c,d</sup> , U <sup>d</sup>		B <sup>b</sup> , F-1, M <sup>b</sup> , S-1		H-1		H-2		H-3, H-4, H-5 <sup>a</sup>	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
A <sup>e</sup> , E <sup>e</sup>	N 1	N 2	1 2	2	1	2	N 1	1 2	1	2	NP	NP	3	4	2	3 <sup>a</sup>
I	--	--	N 2	N 2	1 2	NP 2	1 2	2	1 2	2	NP	NP	3	NP 4	2	NP 3
R <sup>d</sup>	--	--	--	--	N 1	N 2	1	2	1	2	NP	NP	3	NP 4	2	NP 3
F-2, S-2 <sup>c,d</sup> , U <sup>d</sup>	--	--	--	--	--	--	N 1	N 1	1	2	NP	NP	3	4	2	3 <sup>a</sup>
B <sup>b</sup> , F-1, M <sup>b</sup> , S-1	--	--	--	--	--	--	--	--	N 1	N 2	NP	NP	2	3 4	1	2 <sup>a</sup> 3
H-1	--	--	--	--	--	--	--	--	--	--	N	NP	NP	NP	NP	NP
H-2	--	--	--	--	--	--	--	--	--	--	--	--	N	NP	1	NP 3
H-3, H-4, H-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N	NP 3

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

a. For Group H-5 occupancies, see Section 903.2.4.2.

b. Occupancy separation need not be provided for storage areas within Groups B and M if the:

1. Area is less than 10 percent of the floor area;
2. Area is equipped with an automatic fire-extinguishing system and is less than 3,000 square feet; or
3. Area is less than 1,000 square feet.

c. Areas used only for private or pleasure vehicles shall be allowed to reduce separation by 1 hour.

d. See Section 406.1.4.

e. Commercial kitchens need not be separated from the restaurant seating areas that they serve.

**Reason:** This code change proposal basically accomplishes two objectives: 1) it eliminates the "N"s in the table where they are currently indicated for the various occupancy combinations and substitutes at least a 1 hour fire-resistance rating or a higher rating as appropriate, and 2) it increases some of the current fire-resistance ratings for various occupancy separation combinations including the deletion of the sprinkler 1-hour reduction for the H occupancies other than the H-1 which is not permitted in a mixed occupancy building.

The purpose of Table 508.3.3 is to specify minimum fire-resistance ratings for separated occupancies which are required by the separated occupancies option in Section 508.3.3 Separated Occupancies. However, there are a significant number of entries in the table that are designated by the letter "N" which means there is no fire-resistance rated separation requirement. Yet there is already a nonseparated occupancies option in Section 508.3.2 Nonseparated Occupancies. Obviously, this creates quite a dilemma for someone attempting to use these provisions of the code or for the enforcement official who must interpret and apply them. If it is desirable to retain the nonseparated occupancies option in Section 508.3.2, then it becomes necessary to modify Table 508.3.3 to eliminate the "N"s and substitute some hourly fire-resistance rating which would be commensurate with the differential fire and life safety hazard being separated between the adjacent occupancies in the building.

Therefore, this code change proposal eliminates the "N"s in the table where appropriate (except where there would not be a separation required between the same adjacent occupancies) and substitutes hourly fire-resistance ratings. These new ratings, in our judgment reflect the necessary level of fire resistive protection required to separate the adjacent occupancies based on the overall life safety and property protection risks from not only a fire load perspective, but also from a life loss risk perspective. We believe that a fundamental criterion for determining fire-resistance ratings of occupancy separations is that there is a need to incorporate a factor of safety in the occupancy separation ratings which results in a fire-resistance rating that exceeds the comparable fire loading of the occupancy. In other words, if an occupancy has a low fire loading (less than 10 pounds per square foot), the fire loading would be equated to a 1-hour fire-resistance rating. However, if the occupancy also had a high life safety risk, such as an assembly occupancy or an institutional occupancy, then at least an additional 1 hour should be added as a factor of safety to reflect that occupancy risk. And for the case of the Group I occupancies, for example, the minimum separation specified, regardless of whether it is a sprinklered or nonsprinklered occupancy (since there may be existing nonsprinklered Group I occupancies that may be adjacent to new Group I occupancies), is 2 hours. That is consistent with the minimum occupancy separations required by the Life Safety Code (NFPA 101) for institutional type occupancies.

One of the significant increases in the required fire-resistance ratings occurs for the Group I occupancies. Not only is there a general increase in the required fire-resistance ratings for the combination of Group I occupancy separations, but there is also no 1 hour reduction credit given for the installation of an automatic sprinkler system. Basically, this results in all Group I occupancies being required to have a minimum 2-hour fire-resistance rated separation from any other occupancy including subgroups of the Group I occupancy. This is consistent with NFPA 101 The Life Safety Code for their equivalent of institutional occupancies which include healthcare occupancies and detention and correctional occupancies, as examples. These are generally mandated by the federal government where these institutional occupancies receive some type of federal aid which impacts virtually every such institutional occupancy in the country. Therefore, this would eliminate a potential conflict between the IBC and the Life Safety Code which is enforced throughout the country by virtually every state for institutional occupancies.

Also as noted above, the 1-hour sprinkler trade-off has been omitted for the H-2, H-3, H-4, and H-5 occupancies. This is mainly because no technical justification was provided when Code Change G32-04/05 was proposed and eventually approved as modified during the last code development cycle to justify eliminating that provision which had been previously contained in the Exception to previous Section 302.3.2 Separated Uses. We also believe it is appropriate to retain the higher fire-resistance ratings when separating Group H occupancies from other less hazardous occupancies in a building because of the significant fire loads and other life hazard risks that they pose to the building and its occupants. We don't believe that it is appropriate to reduce the occupancy separations based on the installation of an automatic sprinkler system in those cases. This provides for an additional level of fire protection since the automatic sprinkler systems are already mandated for these occupancies of any size.

We have also simplified the H-1 occupancy column by eliminating both the sprinklered and nonsprinklered columns and combining them into one column without a designation since they are always not permitted to be in mixed occupancy buildings regardless of whether the building is sprinklered.

We also believe that further refinements could be made to this table by expanding it to include various suboccupancy classifications such as for the A's, the I's, and the R's, and to possibly better differentiate between the H-3, H-4, and H-5 occupancies. It may also be helpful to break apart the entries that are combined for the Group B, F-1, M, and S-1 occupancies since, in our opinion, they represent different hazard and risk levels based on a combination of fire loading and life safety risks. They are significantly different and should not be combined in the table as they currently are. However, we felt that this would be a good first step to improve and clarify the table and make it more user friendly and appropriate for the separated occupancies option in Section 508.3.3. Therefore, we respectfully request the Committee to approve this code change proposal as an interim fix to a complex problem that truly needs fixing.

**Cost Impact:** The code change proposal will increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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## G144-06/07

### Table 508.3.3

**Proponent:** Jason T. Thompson, National Concrete Masonry Association (NCMA), representing Masonry Alliance for Codes and Standards (MACS)

Revise table as follows:

**TABLE 508.3.3  
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)**

OCCUPANCY	A <sup>e</sup> , E		I		R <sup>d</sup>		F-2, S-2 <sup>c,d</sup> , U <sup>d</sup>		B <sup>b</sup> , F-1, M <sup>b</sup> , S-1		H-1		H-2		H-3, H-4, H-5	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
A <sup>e</sup> , E <sup>e</sup>	<del>N</del> 1	<del>N</del> 2	1	2	1	2	<del>N</del> 1	1	1	2	NP	NP	3	4	2	3 <sup>a</sup>
I	--	--	<del>N</del> 2	<del>N</del> 2	1	NP	1	2	1	2	NP	NP	3	NP	2	NP
R <sup>d</sup>	--	--	--	--	<del>N</del> 1	<del>N</del> 2	1	2	1	2	NP	NP	3	NP	2	NP
F-2, S-2 <sup>c,d</sup> , U <sup>d</sup>	--	--	--	--	--	--	<del>N</del> 1	<del>N</del> 1	1	2	NP	NP	3	4	2	3 <sup>a</sup>
B <sup>b</sup> , F-1, M <sup>b</sup> , S-1	--	--	--	--	--	--	--	--	<del>N</del> 1	<del>N</del> 2	NP	NP	2	3	1	2 <sup>a</sup>
H-1	--	--	--	--	--	--	--	--	--	--	N	NP	NP	NP	NP	NP
H-2	--	--	--	--	--	--	--	--	--	--	--	--	<del>N</del>	<del>NP</del>	1	NP
H-3, H-4, H-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<del>N</del> 1	NP

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

a. For Group H-5 occupancies, see Section 903.2.4.2.

b. Occupancy separation need not be provided for storage areas within Groups B and M if the:

1. Area is less than 10 percent of the floor area;
2. Area is equipped with an automatic fire-extinguishing system and is less than 3,000 square feet; or
3. Area is less than 1,000 square feet.

c. Areas used only for private or pleasure vehicles shall be allowed to reduce separation by 1 hour.

d. See Section 406.1.4.

e. Commercial kitchens need not be separated from the restaurant seating areas that they serve.

**Reason:** The purpose of Table 508.3.3 is to specify minimum fire-resistance ratings for separated occupancies which are required by the separated occupancies option in Section 508.3.3 Separated Occupancies. However, there are a significant number of entries in the table that are designated by the letter "N" which means there is no fire-resistance rated separation requirement. Yet there is already a nonseparated occupancies option in Section 508.3.2 Nonseparated Occupancies. Obviously, this creates quite a dilemma for someone attempting to use these provisions of the code or for the enforcement official who must interpret and apply them. If it is desirable to retain the nonseparated occupancies option in Section 508.3.2, then it becomes necessary to modify Table 508.3.3 to eliminate the "N"s and substitute some hourly fire-resistance rating which would be commensurate with the differential fire and life safety hazard being separated between the adjacent occupancies in the building. In the 2003 edition of the IBC the nonseparated occupancies option was easy to understand and apply since it was very straight forward. The previous Table 302.3.2 Required Separation of Occupancies (predecessor to Table 508.3.3) specified a minimum fire-resistance rating for every occupancy combination. There were no cases where an occupancy separation was not specified except for where another occupancy was not permitted in the building which was only the case for the H-1 occupancy classification.

Therefore, this code change proposal eliminates the "N"s in the table where appropriate (except where there would not be a separation required between the same adjacent occupancies) and substitutes hourly fire-resistance ratings. These new ratings, in our judgment reflect the necessary level of fire resistive protection required to separate the adjacent occupancies based on the overall life safety and property protection risks from not only a fire load perspective, but also from a life loss risk perspective. We believe that a fundamental criterion for determining fire-resistance ratings of occupancy separations is that there is a need to incorporate a factor of safety in the occupancy separation ratings which results in a fire-resistance rating that exceeds the comparable fire loading of the occupancy. In other words, if an occupancy has a low fire loading (less than 10 pounds per square foot), the fire loading would be equated to a 1-hour fire-resistance rating. However, if the occupancy also had a high life safety risk, such as an assembly occupancy or an institutional occupancy, then at least an additional 1hour should be added as a factor of safety to reflect that occupancy risk. And for the case of the Group I occupancies, for example, the minimum separation specified, regardless of whether it is a sprinklered or nonsprinklered occupancy (since there may be existing nonsprinklered Group I occupancies that may be adjacent to new Group I occupancies), was 2 hours. That is consistent with the minimum occupancy separations required by the Life Safety Code (NFPA 101) for institutional type occupancies.

If this code change is implemented, then it will restore sense and utility to the separated occupancies option in Section 508.3.3. Otherwise, we would strongly suggest that the nonseparated occupancies option in Section 508.3.2 be deleted since it is virtually covered by Table 508.3.3 as it presently exists in the 2006 *International Building Code*.

**Cost Impact:** The code change proposal will increase the cost of construction.

Public Hearing: Committee: AS AM D  
 Assembly: ASF AMF DF

# G145-06/07

## Table 508.3.3

**Proponents:** Don Davies, Salt Lake City Corporation, representing the Utah Chapter ; Stephen Thomas, City of Cherry Hills Village, representing the Colorado Chapter

**Revise table as follows:**

### TABLE 508.3.3 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

(No changes to table text)

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

a. For Group H-5 occupancies, see Section 903.2.4.2.

~~b. Occupancy separation need not be provided for storage areas within Groups B and M if the:~~

~~1. Area is less than 10 percent of the floor area;~~

~~2. Area is equipped with an automatic fire-extinguishing system and is less than 3,000 square feet; or~~

~~3. Area is less than 1,000 square feet.~~

~~e. b.~~ Areas used only for private or pleasure vehicles shall be allowed to reduce separation by 1 hour.

~~d. c.~~ See Section 406.1.4.

~~e. d.~~ Commercial kitchens need not be separated from the restaurant seating areas that they serve.

**Reason:** Don Davies. These special exceptions are a carryover from a legacy code prior to the creation of the nonseparated use provision in Section 508.3.2 and the incidental use Table 508.2. The separation or nonseparation of storage areas is better addressed under the provisions of the incidental use table where the separation is not required where a fire extinguishing system is provided. Where the building is not sprinkled then the provisions of a nonseparated use could be applied. Exception #2 is especially problematic in that it conflicts with the incidental use table which does not require the one-hour separation of storage areas when automatic fire-extinguishing system is provided. If a storage area exceeding 3,000 square feet is a problem to B and M occupancies then it should pose the same hazard to all occupancies. An additional conflict now occurs in the new occupancy separation table 508.3.3 which does not require any separation of storage areas "S" occupancy from "B" and "M" occupancies. As an exception to the table the exception which originally negated the requirement for a separation would now require the separation which makes no sense. In the context of the I.B.C. these provisions are no longer necessary.

Stephen Thomas. When this table was revised, the separation between a Group B or M occupancy and a Group S-1 occupancy was eliminated. However, footnote b was maintained. Based on this change, the footnote is no longer necessary since storage areas can be classified as a separate occupancy and are no longer required to be separated. Therefore, the footnote is not necessary.

**Cost Impact:** Don Davies. The code change proposal will not increase the cost of construction. On the surface it appears that the elimination of the exceptions would require the separations and impose a greater cost but since other provisions of the code already eliminate the separations there is no additional cost.

Stephen Thomas. The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

# G146-06/07

## Table 508.3.3

**Proponent:** Don Davies, Salt Lake City Corporation, representing the Utah Chapter

**Revise as follows:**

### TABLE 508.3.3 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

(No changes to table text)

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

- a. For Group H-5 occupancies, see Section 903.2.4.2.
- b. Occupancy separation need not be provided for storage areas within Groups B and M if the:
  - 1. Area is less than 10 percent of the floor area;
  - 2. ~~Area is equipped with an automatic fire-extinguishing system and is less than 3,000 square feet; or~~
  - 3. 2. Area is less than 1,000 square feet.
- c. Areas used only for private or pleasure vehicles shall be allowed to reduce separation by 1 hour.
- d. See Section 406.1.4.
- e. Commercial kitchens need not be separated from the restaurant seating areas that they serve.

**Reason:** This footnote goes counter to all the other provisions of the code to require a fire barrier separation in spite of fire sprinkling. Storage rooms as incidental use areas in Table 508.3.3 do not require a fire barrier separation once an automatic fire extinguishing system is provided. There is nothing unique to "B" and "M" occupancies that would require the separation when the storage area exceeds 3,000 square feet when the building is sprinkled. The revised occupancy separation table 508.3.3 does not require a fire barrier separation between S storage areas and B and M occupancies even without a fire extinguishing system. This provision which is a carry over from a legacy code is no longer necessary within the context of the I.B.C.

**Cost Impact:** The code change proposal will not increase the cost of construction. On the surface it appears that the elimination of the exceptions would require the separations and impose a greater cost but since other provisions of the code already eliminate the separations there is no additional cost.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

## G147-06/07

### Table 508.3.3

**Proponent:** Stephen Thomas, City of Cherry Hills Village, representing the Colorado Chapter

**TABLE 508.3.3  
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)**

(No changes to table text)

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

- a. For Group H-5 occupancies, see Section 903.2.4.2.
- b. Occupancy separation need not be provided for Group S storage areas within Groups B and M if the:
  - 1. Area is less than 10 percent of the floor area;
  - 2. Area is equipped with an automatic fire-extinguishing system and is less than 3,000 square feet; or
  - 3. Area is less than 1,000 square feet.
- c. Areas used only for private or pleasure vehicles shall be allowed to reduce separation by 1 hour.
- d. See Section 406.1.4.
- e. Commercial kitchens need not be separated from the restaurant seating areas that they serve.

**Reason:** When this table was revised, the separation between a Group B or M occupancy and a Group S-1 occupancy was eliminated. However, footnote b was maintained. At first glance, it appears that the footnote is no longer needed. However, there is a possibility that a storage area classified as a Group S-2 occupancy could be located next to a B or M Occupancy. Therefore, this proposal clarifies the intent that this footnote still applies to these occupancies. An alternate proposal has been submitted that would delete the entire footnote if the committee feels that it is no longer necessary to have.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF