F8-06/07
105

Proposed Change as Submitted:

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Revise as follows:

SECTION105
PERMITS

105.1 General. (No change to current text)
105.1.1 Permits required. (No change to current text)
105.1.2 Types of permits. (No change to current text)
105.1.3 Permits for the same location. (No change to current text)

105.2 Application for permit. ~~Application for a permit required by this code shall be made to the fire code official in such form and detail as prescribed by the fire code official. Applications for permits shall be accompanied by such plans as prescribed by the fire code official.~~ To obtain a permit the applicant shall first file an application therefore in writing on a form furnished by the department for that purpose. Such application shall:

1. Identify and describe the work to covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by construction documents and other information as required in Section 105.4.
5. State the valuation of the proposed work.
6. Be signed by the applicant or the applicant's authorized agent.
7. Give such other data and information as required by the fire code official.

105.2.1 Refusal to issue permit. (No change to current text)
105.2.2 Inspection authorized. (No change to current text)
105.2.3 Time limitation of application. (No change to current text)
105.2.4 Action on application. (No change to current text)
105.3 Conditions of a permit. (No change to current text)
105.3.1 Expiration. (No change to current text)
105.3.2 Extensions. (No change to current text)
105.3.3 Occupancy prohibited before approval. (No change to current text)
105.3.4 Conditional permits. (No change to current text)
105.3.5 Posting the permit. (No change to current text)
105.3.6 Compliance with code. (No change to current text)
105.3.7 Information on the permit. (No change to current text)
105.4 Construction documents. Construction documents shall be in accordance with this section.

105.4.1 Submittals. Construction documents and other data shall be submitted in one or more sets with each application for a permit and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

Exception: The fire code official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

105.4.1.1 Examination of documents. The fire code official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the work indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

105.4.2 Information on construction documents. (No change to current text)

105.4.2.1 Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of this code.

105.4.2.2 Site plan. In addition to the requirements for plans in the International Building Code, site plans drawn to scale shall include topography, width of fire apparatus access roads, landscape and vegetation details, locations of structures or building envelopes, existing or proposed overhead utilities, structures and their appendages, roof classification of buildings, and site water supply systems. The fire code official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

105.4.3 Applicant responsibility. (No change to current text)

105.4.4 Approved documents. When the fire code official issues a permit, the construction documents shall be endorsed, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the fire code official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the fire code official or a duly authorized representative.

Construction documents endorsed ~~approved~~ by the fire code official are endorsed ~~approved~~ with the intent that such construction documents comply in all respects with this code. Review and endorsement ~~approval~~ by the fire code official shall not relieve the applicant of the responsibility of compliance with this code.

105.4.4.1 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

105.4.4.2 Phased approval. The fire code official is authorized to issue a permit for the construction of part of a structure, system or operation before the construction documents for the whole structure, system or operation have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for parts of a structure, system or operation shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure, system or operation will be granted.

105.4.5 Corrected documents. (No change to current text)

105.4.6 Retention of construction documents. One set of construction documents shall be retained by the fire code official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws. ~~until final approval of the work covered therein~~. One set of approved construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

105.5 Revocation. (No change to current text)
105.6 and 105.7: (No change to current text)

Reason: Consistency and coordination among the I-Codes is one of the cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established the Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in each code in the International Codes family and improve the correlation among the I-Codes through the code development process. In order to ensure that this correlation process will continue in an orderly fashion, it is also anticipated that future code development and maintenance of the administrative provisions of the I-Codes family will be overseen by a single, multi-discipline code development committee.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes using existing I-Code texts, as noted. The intent of this correlation effort is not to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes. While

some proposed text may be “new” because it was judged by the AHC to be necessary to this particular code, it is not new to the I-Code family, since it already exists in one or more of the International Codes. Unless otherwise noted, there are no technical changes being proposed to these sections. A comparative matrix of current I-Codes Chapter 1 text may be found on the ICC website at www.iccsafe.org/cs/cc/admin/index.html.

This proposal focuses on improvement of the permit provisions of the IFC. A section-by-section discussion follows:

105.2: The purpose of this proposed change is to provide correlation with current Section 105.3 of the *International Building Code, International Existing Building Code* and *International Residential Code* and Section 105.4 of the *International Wildland-Urban Interface Code.* The reformatting into list form will also make the provision more user-friendly and is consistent with the format used in the other I-Codes where this section exists.

A similar correlating proposal has also been submitted to the *International Private Sewage Disposal Code, International Plumbing Code,* and *International Mechanical Code.*

105.4.1: The purpose of this proposed change incorporating the use of an 'exception' is to provide correlation with current Section 106.1 of the *International Building Code*, *International Existing Building Code* and *International Residential Code* and Section 106.3.1 of the *International Fuel Gas Code, International Mechanical Code*, *International Plumbing Code, ICC Electrical Code---Administrative Provisions* and *International Wildland-Urban Interface Code.*

When the work to be done can be briefly and clearly described on the application form and the services of a registered design professional are not required, the exception provides the code official with the latitude to utilize judgement in determining the need for detailed documents.

A similar correlating proposal has been submitted to the *International Private Sewage Disposal Code*.

105.4.1.1: The purpose of this proposed change is to provide a needed administrative provision not currently in the IECC, the source text for which is Section 106.3 of the *International Building Code*, *International Existing Building Code* and *International Residential Code.*

This section provides for examination of the construction documents by the code official or someone assigned by the code official to determine code compliance prior to issuance of a permit.

A similar correlating proposal has also been submitted to the *International Fire Code* and *International Energy Conservation Code.*

105.4.2.1: The purpose of this proposed change is to provide a needed administrative provision not currently in the IFC, the source text for which is Section 106.1.1 of the *International Building Code* and Section 106.1.1.1 of the *International Existing Building.*

This section will provide the fire code official with an important administrative tool which will give control over an important aspect of building design. Since the fire protection contractor may not have been selected at the time a permit is issued for construction of a building, detailed shop drawings for fire protection systems are not available. Because they provide the information necessary to determine code compliance, as specified in the appropriate referenced standard in Chapter 9, this section requires that they must be submitted and approved by the fire code official before the contractor can begin installing the system.

105.4.2.2: The purpose of this proposed change is to provide a needed administrative provision not currently in the IFC, the source text for which is Section 106.2 of the *International Building Code, International Residential Code* and *International Existing Building Code* and Section 106.3 of the *International Wildland-Urban Interface Code.*

Certain code requirements are dependent on the structure’s location on the lot and the topography of the site. As a result, a scaled site plan containing the data listed in this section is required to permit review for code compliance. The section also allows that the fire code official can waive the requirement for a site plan when it is not required to determine code compliance, such as work involving only interior alterations or repairs.

105.4.4: The purpose of this proposed change is to provide correlation with Section 106.3.1 of the *International Building Code, International Residential Code* and *International Existing Building Code.*

This section will provide a useful administrative tool to the fire code official by requiring that stamped documents be issued with the permit and that one set of stamped documents be kept on the job site to serve as the basis for all subsequent inspections because inspections are to be performed with regard to the approved documents, not the code itself.

Endorsing the construction documents as being "Reviewed for Code Compliance" is consistent with the duties ascribed to the fire code official in the code and thereby limits the responsibility of the fire code official to that of functions associated with evaluating design plans for code compliance only. Other aspects of design creation and development are peculiar to the design professions and outside the scope of code compliance, and therefore are not approved or disapproved in any circumstance.

105.4.4.1: The purpose of this proposed change is to provide a needed administrative provision not currently in the IFC, the source text for which is Section 106.3.2 of the *International Building Code*, *International Existing Building Code* and *International Residential Code* and Section 502.2.1 of the *ICC Electrical Code---Administrative Provisions*.

This provision would provide the code official with a useful tool to protect the continuity of permits issued under previous codes or code editions, as long as such permits are being actively executed subsequent to the effective date of the ordinance adopting this edition of the code.

A similar correlating proposal has also been submitted to the *International Fuel Gas Code, International Plumbing Code, International Private Sewage Disposal Code, International Mechanical Code* and *the International Wildland-Urban Interface Code.*

105.4.4.2: The purpose of this proposed change is to provide a needed administrative provision not currently in the IFC, the source text for which is Section 106.3.3 of the *International Building Code*, *International Existing Building Code* and *International Residential Code* and Section 502.2.2 of the *ICC Electrical Code---Administrative Provisions.*

This provision would provide the code official with a useful administrative tool by providing the authority to issue a partial permit to allow for the practice of “fast tracking” a job. The section makes it clear that any construction under a partial permit is “at the holder’s own risk” and “without assurance that a permit for the entire structure will be granted.” The code official is under no obligation to accept work or issue a complete permit in violation of the code, ordinances or statutes simply because a partial permit had been issued. The purpose is to proceed with construction while the design continues for other aspects of the work. The section has been slightly modified from the source texts by adding “systems and operations” to make it more relevant to the IFC.

A similar correlating proposal has also been submitted to the *International Energy Conservation Code* and *the International Wildland-Urban Interface Code.*

105.4.6: The purpose of this proposed change is to provide correlation with Section 106.5 of the *International Building Code*, Section R106.5 of the *International Residential Code* and Section 504.3 of the *ICC Electrical Code---Administrative Provisions*.

It is not unusual for state laws to establish records retention criteria and the goal of this change is to not only make the I-Code family consistent with such laws but also to provide a minimum post-construction retention period since the months immediately following construction completion is typically when most disputes arise that depend on the construction documents for resolution.

A similar correlating proposal has also been submitted to the *International Existing Building Code, International Wildland-Urban Interface Code, International Energy Conservation Code, International Mechanical Code* and *International Plumbing Code.*

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

Committee Action: **Disapproved**

Committee Reason: The proposal is inconsistent with other Ad Hoc Committee proposals with regard to the retention of records. It is also internally inconsistent in Sections 105.4.1 and 105.4.4 regarding the number of sets of plans required, e.g. one set in the former section and two sets in the latter section. Section 105.4.4.1 would allow previous errors to continue. It is unclear as to how the IFC's Operational Permits fit into the proposed process. The term "shop drawing" is not defined.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Rebecca Baker, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes, requests Approval as Modified by this public comment.

Modify proposal as follows:

105.4.1 Submittals. Construction documents and other data shall be submitted in ~~one~~ two or more sets with each application for a construction permit and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

Exception: The fire code official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

105.4.4 Approved documents. When the fire code official issues a construction permit, the construction documents shall be endorsed, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the fire code official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the fire code official or a duly authorized representative.

Construction documents endorsed by the fire code official are endorsed with the intent that such construction documents comply in all respects with this code. Review and endorsement by the fire code official shall not relieve the applicant of the responsibility of compliance with this code.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: The ICC Ad-Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) was tasked with reviewing Chapter 1 administrative provisions in each of the I-Codes and attempting to correlate applicable provisions through the code development process. To speak to the IFC Committee's reasons for disapproval of this code change, an item-by-item discussion follows:

105.4.1: The IFC Committee expressed a concern that there was an inconsistency in the number of sets of construction documents required between Sections 105.4.1 and 105.4.4. The AHC-Admin agrees and proposes that this section be modified to address that inconsistency. Both sections would now require submittal of two sets of documents.

105.4.2.1: The IFC Committee expressed a concern that the term "shop drawing" is not defined in the code. The AHC-Admin considered this concern and believes that the term is sufficiently understood by both fire code officials and contractors such that a definition is not needed. It was also noted that the term is currently used in IFC Section 105.4.3, IBC Sections 106.1.1.1and 2403.2 and IEBC Section 106.1.1.1, all without having a definition. Accordingly, the AHC-Admin believes that proposed Section 105.4.2.1 should remain as proposed.

105.4.1 and 105.4.4: The IFC Committee expressed a concern as to how the IFC's Operational Permits would fit into the revised construction document process. To address this concern, the AHC-Admin proposes a modification to both of these sections which would limit mandatory construction document submittal to accompany applications for construction permits only.

105.4.4.1: The IFC Committee expressed a concern that non-compliant work could be continued under this provision. The AHC-Admin considered this concern and believes that non-compliant work is specifically addressed in current IFC Sections 109 and 111. Proposed Section 105.4.4.1 simply allows work to continue under a lawfully issued permit without causing changes in the event that code updates or amendments take place during the construction period, consistent with Section 106.3.2 of the IBC.

The AHC-Admin believes that the proposal as submitted, with the additional modifications in this Public Comment, will greatly enhance the fire code official's administrative abilities in dealing with the permit process and requests support for an AMPC final action.

Final Action: AS AM AMPC____ D

F14-06/07

106.2.1 (New), 106.2.2 (New)

Proposed Change as Submitted:

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Add new text as follows:

106.2.1 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the fire code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

106.2.2 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the fire code official. The fire code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the fire code official.

Reason: Consistency and coordination among the I-Codes is one of the cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established the Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in each code in the International Codes family and improve the correlation among the I-Codes through the code development process. In order to ensure that this correlation process will continue in an orderly fashion, it is also anticipated that future code development and maintenance of the administrative provisions of the I-Codes family will be overseen by a single, multi-discipline code development committee.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes using existing I-Code texts, as noted. The intent of this correlation effort is not to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes. While some proposed text may be "new" because it was judged by the AHC to be necessary to this particular code, it is not new to the I-Code family, since it already exists in one or more of the International Codes. Unless otherwise noted, there are no technical changes being proposed to these sections. A comparative matrix of current I-Codes Chapter 1 text may be found on the ICC website at www.iccsafe.org/cs/cc/admin/index.html.

This proposal focuses on improved inspection requirements. A section-by-section discussion follows:

106.2.1: The purpose of this proposed change is to provide a needed administrative provision not currently in the IWUIC, the source text for which is Section 109.5 of the *International Building Code* and *International Existing Building Code,* Section 109.3 of the *International Residential Code* and Section 706.2 of the *ICC Electrical Code---Administrative Provisions.*

This section would provide the code official with a useful administrative tool that would make it clear that it is the responsibility of the permit holder to arrange for the required inspections when completed work is ready, thus providing sufficient time for the code official to schedule an inspection visit. It also establishes the responsibility for keeping work open for inspection and providing all means needed to accomplish the inspection.

A similar correlating proposal has also been submitted to the *International Fire Code*, *International Fuel Gas Code, International Plumbing Code*, *International Private Sewage Disposal Code*, and *International Mechanical Code.*

106.2.2: The purpose of this proposed change is to provide a needed administrative provision not currently in the IWUIC, the source text for which is Section 109.6 of the *International Building Code* and *International Existing Building Code,* Section 109.4 of the *International Residential Code* and Section 702.1.8 of the *ICC Electrical Code---Administrative Provisions.*

This section would provide the code official with a useful administrative tool that would enhance the code official's control over projects by establishing that work cannot progress beyond the point of a required inspection without the code official's approval and that any item not approved cannot be concealed until it has been corrected and approved by the code official.

A similar correlating proposal has also been submitted to the *International Fire Code*, *International Fuel Gas Code, International Plumbing Code*, *International Private Sewage Disposal Code*, and *International Mechanical Code.*

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

Analysis: If this code change is approved, the final number of this new section will be correlated with all other approved code changes affecting Section 106 of this code.

Committee Action: **Approved as Submitted**

Committee Reason: Based on the proponent's reason statement and for consistency with the action on WUIC9-06/07 that includes the text proposed here. The added text will reflect current practice.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Paul Hayward, Farmington City, Utah, representing Bonneville Chapter ICC, requests Approval as Modified by this public comment.

Modify proposal as follows:

106.2.1 Inspection requests. It shall be the duty of the holder of the permit or ~~their~~ duly authorized agent to notify the fire code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: If someone is a "duly authorized "agent, for whom are they performing duties or representing? Would it not be the permit holder? The word "their" may be eliminated, since it is extraneous.

Public Comment 2:

Paul Hayward, Farmington City, Utah, requests Approval as Modified by this public comment.

Modify proposal as follows:

106.2.2 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the fire code official. The fire code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or ~~his or her~~ agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the fire code official.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: While we agree with the proposal, the code provision doesn't need to specify gender. It's safe to assume that the permit holder's agent will be either a "his or her" and it reads just the same without the added provision specifying gender.

Final Action: AS AM AMPC____ D

F18-06/07
110.1

Proposed Change as Submitted:

Proponent: Greg Rogers, South Kitsap Fire & Rescue, representing ICC Joint Fire Service Review Committee

Revise as follows:

110.1 General. If during the inspection of a premises, a building or structure or any building system, in whole or in part, constitutes a ~~clear and inimical~~ threat to human life, safety or health, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section and shall refer the building to the building department for any repairs, alterations, remodeling, removing or demolition required.

Reason: Eliminates a word that does not lend itself to clarify the intent of the code provision and is not of common usage and understanding.

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

Committee Action: **Disapproved**

Committee Reason: The current text establishes the degree of hazard and helps the fire code official in interpreting the text.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Paul Hayward, Farmington City, Utah, representing Bonneville Chapter ICC, requests Approval as Modified by this public comment.

Replace proposal with the following:

110.1 General. If during the inspection of a premises, a building or structure or any building system, in whole or in part, constitutes a ~~clear and inimical~~ distinct threat to human life, safety or health, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section and shall refer the building to the building department for any repairs, alterations, remodeling, removing or demolition required.

Commenter's Reason: The word “inimical” is not well understood. The word “distinct” is very well understood. In enforcing safety regulations words that are more commonly understood are in the public interest when the meaning is substantially the same as words that are less easily understood. Also, the threat may indeed be very distinct but not entirely “clear” to all interested parties. To enforce the provision as currently worded in the code, a threat would not only have to be adversarial (inimical) but also clear to all. An owner may elect to have legal counsel clam that the danger was not at all clear to his client, only to the fire authority, who is being heavy handed in their treatment. Saying the danger is “distinct” allows for the same level of enforcement without the problems that have been identified. With all due respect to the committee and their listed reason, the word distinct makes enforcement easier than the word inimical.

Public Comment 2:

Michael G. Kraft, Ohio Division of State Fire Marshal, requests Approval as Modified by this public comment.

Replace proposal with the following:

110.1 General. If during the inspection of a premises, a building or structure or any building system, in whole or in part, constitutes a ~~clear and inimical threat~~ distinct hazard to human life, safety or health, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section and shall refer the building to the building department for any repairs, alterations, remodeling, removing or demolition required.

Commenter’s Reason: As discussed during the public hearing, “distinct hazard” is a well settled legal standard for the appropriate application of fire code provisions.

Final Action: AS AM AMPC____ D

F19-06/07
110.1, 110.1.1

Proposed Change as Submitted:

Proponent: Michael G. Kraft, Division of State Fire Marshal, State of Ohio

Revise as follows:

110.1 General. If during the inspection of a premises, a building or structure or any building system, in whole or in part, constitutes a clear and inimical threat to human life, safety or health, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section and shall refer the building to the building department for any repairs, alterations, remodeling, removing or demolition required.. The fire code official is authorized to placard, post signs, erect barrier tape, or take similar measures as necessary to secure public safety.

110.1.1 Unsafe conditions. Structures or existing equipment that are or hereafter become unsafe or deficient because of inadequate means of egress or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. A vacant structure which is not secured against unauthorized entry as required by Section 311 shall be deemed unsafe. The fire code official is authorized to placard, post signs, erect barrier tape, or take similar measures as necessary to secure public safety.

Reason: The purpose of this code change is to add a new requirement that is an appropriate addition to the code. The additional text proposed to be added to these two sections is an appropriate authorization for the fire code official to effectively deal with these situations and would simply codify the common practice of posting “keep out” signs or similar measures that are typically employed.

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

Committee Action: **Disapproved**

Committee Reason: The subject matter of the proposal is adequately addressed in the current text of IFC Section 311.5

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Michael G. Kraft, Ohio Division of State Fire Marshal requests Approval as Submitted.

Commenter's Reason: The committee's action was inconsistent with F-29. Placing the new text in this section provides the fire code official the more general authority consistent with the authority provided under Section 311 and the committee's action on F-29.

Final Action: AS AM AMPC____ D

F25-06/07
308.3

Proposed Change as Submitted:

Proponent: Michael E. Dell'Orfano, South Metro Fire Rescue, representing Fire Marshal's Association of Colorado

Revise as follows:

308.3 Open flame. A person shall not utilize or allow to be utilized~~,~~ an open flame ~~in connection with a public meeting or gathering for purposes of deliberation, worship, entertainment, amusement, instruction, education, recreation, awaiting transportation or similar purpose in Group A or E occupancies without first obtaining a permit in accordance with Section 105.6~~ decorative device, unless conducted and approved in accordance with this section.

~~**308.3.1 Open-flame cooking devices.** Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.~~

~~**Exceptions:**~~

~~1. One- and two-family dwellings.~~
~~2. Where buildings, balconies and decks are protected by an automatic sprinkler system.~~

308.3.1 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to utilizing an open-flame decorative device.

~~**308.3.1.1 Liquefied-petroleum-gas-fueled cooking devices.** LP-gas burners having an LP-gas container with a water capacity greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity] shall not be located on combustible balconies or within 10 feet (3048 mm) of combustible construction.~~

~~**Exception:** One- and two-family dwellings.~~

308.3.2 Liquid-fueled, open-flame decorative devices. Liquid-fueled, **o**pen-flame decorative devices shall comply with all of the following restrictions:

1. Class I and Class II liquids and LP-gas shall not be used.
2. ~~Liquid- or solid-fueled lighting~~ Devices containing more than 8 ounces (237 ml) of fuel must self-extinguish and not leak fuel at a rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.
3. The device or holder shall be constructed to prevent the spillage of liquid fuel ~~or wax~~ at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) when the device or holder is not in an upright position.
4. The device or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.

Exception: Devices that self-extinguish if tipped over and do not spill fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.

5. The flame shall be enclosed except where openings on the side are not more than 0.375 inch (9.5 mm) diameter or where openings are on the top and the distance to the top is such that a piece of tissue paper placed on the top will not ignite in 10 seconds.
6. Chimneys shall be made of noncombustible materials and securely attached to the open-flame decorative device.

   Exception: A chimney is not required to be attached to any open-flame decorative device that will self-extinguish if the device is tipped over.

7. Fuel canisters shall be safely sealed for storage.
8. Storage and handling of combustible liquids shall be in accordance with Chapter 34.
9. Shades, where used, shall be made of noncombustible materials and securely attached to the open-flame decorative device holder or chimney.
10. Candelabras ~~with flame-lighted candles~~ shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.

308.3.3 Solid-fueled open-flame decorative devices. Solid-fueled open-flame decorative devices shall comply with all of the following restrictions:

1. The device shall be securely supported on a substantial noncombustible base.
2. Shades, where used, shall be made of noncombustible materials and securely attached to the open-flame decorative device holder or chimney.
3. Candelabras shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.

~~**308.3.3**~~ **308.3.4 Location near combustibles.** Open flames ~~such as from candles, lanterns, kerosene heaters, and gas-fired heaters~~ decorative devices shall not be located on or near decorative material or similar combustible materials.

~~**308.3.4**~~ **308.3.5 Aisles and exits.** ~~Candles~~ Open-flame decorative devices shall be prohibited in areas where occupants stand, or in an aisle or exit.

~~**308.3.5**~~ **308.3.6 Religious ceremonies.** When, in the opinion of the fire code official, adequate safeguards have been taken, participants in religious ceremonies are allowed to carry hand-held ~~candles~~ open-flame decorative devices. Hand-held ~~candles~~ open-flame decorative devices shall not be passed from one person to another while lighted.

~~**308.3.6**~~ **308.3.7 Theatrical performances.** Where approved, open-flame decorative devices used in conjunction with theatrical performances are allowed to be used when adequate safety precautions have been taken in accordance with NFPA 160.

~~**308.3.7**~~ **308.3.8 Group A occupancies.** Open-flame decorative devices shall not be used in a Group A occupancy.

Exceptions:

1. Open-flame decorative devices are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:
   1.1. ~~Where necessary~~ For ceremonial or religious purposes in accordance with Section ~~308.3.5~~ 308.3.6.
   1.2. On stages and platforms as a necessary part of a performance in accordance with Section ~~308.3.6~~ 308.3.7.
   1.3. Where ~~candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected~~ liquid- and solid-fueled open-flame decorative devices are used in accordance with Sections 308.3.2 and 308.3.3.
2. Heat-producing equipment complying with Chapter 6 and the *International Mechanical Code*.
3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.

~~308.3.8~~ 308.3.9 Group R-2 dormitories. ~~Candles, incense and similar open-flame-producing items~~ Open-flame decorative devices shall not be allowed in sleeping units in Group R-2 dormitory occupancies.

308.7 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system.

308.7.1 Liquefied-petroleum-gas-fueled cooking devices. LP-gas burners having an LP-gas container with a water capacity greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity] shall not be located on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exception: One- and two-family dwellings.

Reason: The purpose of this code change proposal is to focus the scope of IFC Section 308.3 to the use of open-flame decorative devices in order to provide better clarity and ease of use of this section. This code change proposes to accomplish the following:

1. Format Sections 308.3 and 308.3.1 similar to Section 307 so that the charging paragraph addresses the scope of Section 308.3 and a separate subsection is created to address permits;
2. Relocate open-flame cooking device requirements to a stand-alone Section 308.7;
3. Distinguish between liquid-fueled and solid-fueled open-flame decorative devices to avoid confusion on what requirements apply to different types of “candles”;
4. Focus the requirements of Section 308.3.4 (renumbered) only on open-flame decorative devices (other general items are already covered under IFC Section 305.1);
5. Develop consistent references to open-flame decorative devices and other terminology throughout Section 308.3;
6. Avoid subjective language in Exceptions 1.1 and 1.2 of Section 308.3.8 (renumbered) by deleting the term “necessary”;
7. Create a reference in Exception 1.3 of Section 308.3. (renumbered) back to the liquid- and solid-fueled device requirements (otherwise, requirements for Group A occupancies would be less restrictive than any other occupancy);

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

Committee Action: **Disapproved**

Committee Reason: Section 308.3.1 could be interpreted to require a permit for every candle used indoors. Deletion of the word “candle” will create nothing but confusion and could lead to occupancy group issues. The meaning of the term “decorative” is unclear and could be construed to include aroma therapy

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Michael E. Dell’Orfano, South Metro Fire Rescue, representing Fire Marshal’s Association of Colorado, requests Approval as Modified by this public comment.

Modify proposal as follows:

308.3 ~~Open flame~~ Candles. A person shall not utilize or allow to be utilized ~~an open flame decorative device~~ candles, unless conducted and approved in accordance with this section.

308.3.1 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to utilizing ~~an open-flame decorative device~~ a candle.

308.3.2 Liquid-fueled ~~open flame decorative devices~~ candles. Liquid-fueled ~~open flame decorative devices~~ candles shall comply with all of the following restrictions:

1. Class I and Class II liquids and LP-gas shall not be used.
2. ~~Devices~~ Candles containing more than 8 ounces (237 ml) of fuel must self-extinguish and not leak fuel at a rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.
3. The ~~device~~ candle or holder shall be constructed to prevent the spillage of liquid fuel at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) when the ~~device~~ candle or holder is not in an upright position.
4. The ~~device~~ candle or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.

Exception: ~~Devices~~ Candles that self-extinguish if tipped over and do not spill fuel or was at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.

5. The flame shall be enclosed except where openings on the side are not more than 0.375 inch (9.5 mm) diameter or where openings are on the top and the distance to the top is such that a piece of tissue paper placed on the top will not ignite in 10 seconds.
6. Chimneys shall be made of noncombustible materials and securely attached to the ~~open-flame decorative device~~ candle.

   Exception: A chimney is not required to be attached to any ~~open-flame decorative device~~ candle that will self-extinguish if the device is tipped over.

7. Fuel canisters shall be safely sealed for storage.
8. Storage and handling of combustible liquids shall be in accordance with Chapter 34.
9. Shades, where used, shall be made of noncombustible materials and securely attached to the ~~open-flame decorative device~~ candle holder or chimney.
10. Candelabras shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.

308.3.3 Solid-fueled ~~open-flame decorative devices~~ candles. Solid-fueled ~~open-flame decorative devices~~ candles shall comply with all of the following restrictions:

1. The ~~device~~ candle shall be securely supported on a substantial noncombustible base.
2. Shades, where used, shall be made of noncombustible materials and securely attached to the ~~open-flame decorative device~~ candle holder or chimney.
3. Candelabras shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.

308.3.4 Location near combustibles. ~~Open-flame decorative devices~~ Candles shall not be located on or near decorative material or similar combustible materials.

308.3.5 Aisles and exits. ~~Open-flame decorative devices~~ Candles shall be prohibited in areas where occupants stand, or in an aisle or exit.

308.3.6 Religious ceremonies. When, in the opinion of the fire code official, adequate safeguards have been taken, participants in religious ceremonies are allowed to carry hand-held ~~open-flame decorative devices~~ candles. Hand-held ~~open-flame decorative devices~~ candles shall not be passed from one person to another while lighted.

308.3.7 Theatrical performances. Where approved, ~~open-flame decorative devices~~ candles used in conjunction with theatrical performances are allowed to be used when adequate safety precautions have been taken in accordance with NFPA 160.

308.3.8 Group A occupancies. ~~Open-flame decorative devices~~ Candles shall not be used in a Group A occupancy.

Exceptions:

1. ~~Open-flame decorative devices~~ Candles are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:
   1.1. For ceremonial or religious purposes in accordance with Section 308.3.6.
   1.2 . On stages and platforms as ~~a necessary~~ part of a performance in accordance with Section 308.3.7.
   1.3. Where liquid- and solid-fueled ~~open-flame decorative devices~~ candles are used in accordance with Sections 308.3.2 and 308.3.3 and the flames are protected.
2. Heat-producing equipment complying with Chapter 6 and the *International Mechanical Code*.
3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.

308.3.9 Group R-2 dormitories. ~~Open-flame decorative devices~~ Candles shall not be allowed in sleeping units in Group R-2 dormitory occupancies.

308.7 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system.

308.7.1 Liquefied-petroleum-gas-fueled cooking devices. LP-gas burners having an LP-gas container with a water capacity greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity] shall not be located on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exception: One- and two-family dwellings.

Commenter's Reason: The purpose of this code change proposal is to focus the scope of IFC Section 308.3 on the use of candles in order to provide better clarity and ease of use of this section. As originally submitted, F25-06/07 caused concerns during the Code Hearings in Orlando due to the use of the term “open-flame decorative device”. Therefore, this public comment proposes to change those references to the more common term “candle”. The other major concern was that it now appears that permits are required for candles in

all occupancies. However, F25-06/07 does not change the intent of this section as written in the 2006 IFC. When you read 2006 IFC Section 308.3, it does not attempt to define the scope of the section; it merely states that if you are a Group A or E, you need a permit. This is further supported by the fact that there are Group R-2 candle requirements found in Section 308.3. F25-06/07 does not change the fact that Section 308.3 already applies to all occupancies and only some of them need a permit.

F25-06/07 and this public comment propose to accomplish the following:

1. Format Sections 308.3 and 308.3.1 similar to Section 307 so that the charging paragraph addresses the scope of Section 308.3 and a separate subsection is created to address permits;
2. Relocate open-flame cooking device requirements to a stand-alone Section 308.7;
3. Distinguish between liquid-fueled and solid-fueled candles to avoid confusion on what requirements apply to different types of candles;
4. Focus the requirements of Section 308.3.4 (renumbered) only on candles (other general items are already covered under IFC Section 305.1);
5. Develop consistent references to candles and other terminology throughout Section 308.3;
6. Avoid subjective language in Exceptions 1.1 and 1.2 of Section 308.3.8 (renumbered) by deleting the term "necessary";
7. Create a reference in Exception 1.3 of Section 308.3.8 (renumbered) back to the liquid- and solid-fueled candle requirements (otherwise, requirements for Group A occupancies would be less restrictive than any other occupancy).

Final Action: AS AM AMPC____ D

F28-06/07

308.3.1, 308.3.1.1

Proposed Change as Submitted:

Proponent: Greg Rogers, South Kitsap Fire & Rescue, representing ICC Joint Fire Service Review Committee

Revise as follows:

308.3.1 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction**.**

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system.
3. ~~**308.3.1.1 Liquefied-petroleum-gas-fueled cooking devices.**~~ LP-gas ~~burners~~ cooking devices having LP gas container with a water capacity not greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity]~~ shall not be located on combustible balconies or within 10 feet (3048 mm) of combustible construction~~.

   ~~**Exception:** One- and two-family dwellings.~~

Reason: LP-gas-fueled cooking devices are included in the "open-flame cooking devices" regulated by Section 308.3.1. It has been pointed out that Section 308.3.1.1 is essentially an exception to the prohibition contained in Section 308.3.1 and that the code should be revised to clarify that fact. Also, the term "burners" should be revised for consistent terminology with the charging paragraph.

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

Committee Action: **Approved as Submitted**

Committee Reason: The proposal clarifies the intent and application of the section and eliminates redundancy.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Michael E. Dell'Orfano, South Metro Fire Rescue, representing Fire Marshal's Association of Colorado, requests Approval as Modified by this public comment.

Modify proposal as follows:

308.3.1 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 ft (3048 mm) of any combustible construction.

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system, devices not utilizing LP-gas containers are permitted.
3. LP-gas cooking devices having an LP-gas container with a water capacity not greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

Commenter's Reason: F28-06/07 was approved as submitted during the code hearings in Orlando. This public comment only adds the phrase "devices not utilizing LP-gas containers are permitted" in Exception #2 in order to be consistent with the original intent of the 2006 IFC. Even with sprinkler protection, cooking devices utilizing large LP-gas cylinders are still not allowed.

Final Action: AS AM AMPC____ D

F29-06/07
311.2.1

Proposed Change as Submitted:

Proponent: Michael G. Kraft, Division of State Fire Marshal, State of Ohio

Revise as follows:

311.2.1 Security. Exterior openings and interior openings accessible to other tenants or unauthorized persons shall be boarded, locked, blocked or otherwise protected to prevent entry by unauthorized individuals. The fire code official is authorized to placard, post signs, erect barrier tape, or take similar measures as necessary to secure public safety.

Reason: The purpose of this code change is to specifically authorize the fire code official to post "keep out" type signs when necessary in these situations. This proposed new text simply memorializes the action that many fire service personnel would believe an appropriate tool in this circumstance.

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

Committee Action: **Approved as Submitted**

Committee Reason: Based on the proponent's reason statement. The proposal clarifies the fire code official's authority in posting buildings.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Paul Hayward, Farmington City, Utah, representing Bonneville Chapter ICC, requests Approval as Modified by this public comment.

Modify proposal as follows:

311.2.1 Security. Exterior openings and interior openings accessible to other tenants or unauthorized persons shall be boarded, locked, blocked or otherwise protected to prevent entry by unauthorized individuals. The fire code official is authorized to placard, post signs, erect barrier tape, or take similar measures as necessary to ~~secure~~ enhance public safety.

Commenter's Reason: The word "secure," when dealing with a building, suggests it is unable to be entered, such as erecting plywood across doorways and windows. Barrier tape does not "secure" a building, but it does raise public awareness that the building is not to be entered. "Enhance" provides the same authority to the fire code official. Other words that provide similar meanings are "promote" or "obtain." "Obtain" however, is in the same category as "secure" and is not really what is achieved, while "promote" is closer to "enhance."

While we recognize the problem and desire the code provision reflect the need for the fire code official to be granted additional tools, the new allowance or requirement should be true-to-life in what it accomplishes. Therefore we respectfully suggest the word “enhance” as being more accurate than “secure.”

Final Action: AS AM AMPC____ D

F32-06/07
315.2

Proposed Change as Submitted:

Proponent: Michael G. Kraft, Division of State Fire Marshal, State of Ohio

Revise as follows:

315.2 Storage in buildings. Storage of combustible materials in buildings shall be orderly. Storage shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur. Combustible material storage shall be confined to approved storage areas, such that the presence of incidental storage in any other area of the building does not constitute a hazard.

Reason: This text was a long-standing element of one of the legacy codes, and has been effectively utilized to address storage hazards within buildings. The intent is simply to address inappropriate accumulations of combustible storage that are not located in mechanical areas, or adjacent to electrical service equipment, that would otherwise be regulated by the other provisions in this section, yet still constitute a hazard. Therefore this new text would provide the proper tool to mitigate that hazard.

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

Committee Action: **Disapproved**

Committee Reason: The proposal would be cumbersome to enforce and the added text is too vague. It is unclear as to what constitutes an “approved storage area”. Changing the use of a small room could require specific approval.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Michael G. Kraft, Ohio Division of State Fire Marshal, requests Approval as Submitted.

Commenter's Reason: The proposed text simply returns to the code the easily enforced element of confining excessive combustible storage to an approved storage area. Excessive combustible storage found in areas of the building other than in mechanical rooms or by electrical service equipment is only regulated through the code by virtue of non specific sections.

Final Action: AS AM AMPC____ D

F33-06/07
315.2.5 (New)

Proposed Change as Submitted:

Proponent: Shelley Hunter, South Metro Fire Rescue, representing Fire Marshal’s Association of Colorado

Add new text as follows:

315.2.5 Designation of storage heights. When storage areas do not meet the requirements for high-piled combustible storage or are limited by sprinkler system design densities, the maximum allowable storage height shall be indicated by an approved method.

Reason: The purpose of this code change proposal is to add new requirements to designate the maximum storage height allowed for a storage area. Often rooms or buildings have ceiling heights that would allow storage heights beyond that allowed by the fire code or beyond the limits of the fire protection systems. Designating the maximum storage height would allow business owners and fire code officials to visually identify these requirements easily. Examples may include striping the wall, hanging markers from the ceiling, or posting signs stating the maximum allowable storage heights.

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

Committee Action: **Disapproved**

Committee Reason: The proposal provides no guidance as to what an effective "approved method" might be and makes no distinction between stored commodities. Since regulation of storage heights is personnel-intensive, provisions for employee training should be included. The current code text already provides the fire code official with the authority to regulate storage height.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Michael E. Dell'Orfano, South Metro Fire Rescue, representing Fire Marshal's Association of Colorado, requests Approval as Modified by this public comment.

Modify proposal as follows:

315.2.5 Designation of storage heights. When storage areas do not meet the requirements for high-piled combustible storage or are limited by sprinkler system design densities, and when the fire code official determines that the ceilings heights in the area would encourage excessive storage heights, the maximum allowable storage height shall be indicated by an approved method.

Commenter's Reason: The purpose of this code change proposal is to add new requirements to designate the maximum storage height allowed for a storage area. Often rooms or buildings have ceiling heights that would allow storage heights beyond that allowed by the fire code or beyond the limits of the fire protection systems. Designating the maximum storage height would allow business owners and fire code officials to visually identify these requirements easily. Examples may include striping the wall or rack uprights, hanging markers from the ceiling, posting signs stating the maximum allowable storage heights, or displaying a floor plan with storage heights indicated. During the code hearings in Orlando, F33-06/07 was disapproved due to several concerns that the code change was not needed and too broad. While sufficient authority may be found in the IFC to require similar marking of storage areas, this appears to be a common issue amongst fire departments across the country and this code change will help to bring uniformity along with a specific code section to cite for violations. Also, the addition of the phrase found in this public comment is hoped to better define the types of storage areas that are contemplated.

Public Comment 2:

William Winslow, Washington State Association of Fire Marshals, requests Approval as Modified by this public comment.

Modify proposal as follows:

315.2.5 Designation of storage heights. ~~When storage areas do not meet the requirements for high-piled combustible storage or are limited by sprinkler system design densities,~~ Where piled storage of miscellaneous combustible materials occurs, the maximum allowable storage height shall be indicated by an approved method.

Commenter's Reason: One of the most common fire code violations is the storage of miscellaneous combustible materials above the height allowed by the sprinkler system design. It is very difficult for the owner, the forklift operator, or the fire inspector to know the storage height limit. This confusion can be eliminated by installing a simple sign or by other approved methods.

Final Action: AS AM AMPC____ D

F37-06/07
407.2

Proposed Change as Submitted:

Proponent: Ronald Marts, Telcordia Technologies, representing AT&T, SBC, Ameritech, PacBell, Cincinnati Bell, Qwest, Southern New England Telephone

Revise as follows:

407.2 Material safety data sheets. Material Safety Data Sheets (MSDS) for all hazardous materials shall be either readily available on the premises or readily retrievable through the owner's data base by fax or by email.

Reason: This change updates the code to allow more contemporary means of storage and retrieval.

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

Committee Action: **Disapproved**

Committee Reason: The current text of the section provides all the necessary means for information management required by SARA Title III.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Jeffrey Shapiro, PE, FSFPE, International Code Consultants, representing The Chlorine Institute requests Approval as Modified by this public comment.

Modify proposal as follows:

407.2 Material safety data sheets. Material Safety Data Sheets (MSDS) for all hazardous materials shall be either readily available on the premises in a paper copy, or when approved, shall be permitted to be readily retrievable by electronic access to ~~through~~ the owner's database ~~by fax or by email~~.

Commenter's Reason: This public comment clarifies the original proposal and addresses opposition comments made by a few code officials at the Orlando hearing. Code officials may or may not be aware that the use of electronic databases to satisfy MSDS requirements is very common all along the hazardous materials supply chain. This proposal seeks only to bring the code into line with what industry has been doing for quite some time.

The use of electronic means to handle MSDSs helps businesses keep this material up to date and organized. It also makes the information more readily accessible via electronic searches and avoids the enormous paper-pushing effort that is required to maintain MSDSs in binders or file cabinets.

To address concerns raised by some at the hearing that power interruptions might make MSDSs inaccessible or that hard copies may be needed for EMS emergencies, a condition of local approval has been added to limit the permissibility for using electronic systems. With this change, jurisdictions who feel a strong need for maintaining hard copies on site can enforce the code accordingly. In other jurisdictions, where there is less interest in the issue, approval of this public comment will give businesses the ability to continue using electronic systems without requiring submittal of an alternate method proposal.

Final Action: AS AM AMPC____ D

F40-06/07, Part I
505.1 (IBC [F] 501.2)

Proposed Change as Submitted:

Proponent: Paul Hayward, City of Farmington, UT, representing Bonneville Chapter ICC

PART I – IFC (IBC)

Delete and substitute as follows:

~~**505.1 Address numbers.** New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).~~

505.1 Address identification. New and existing buildings shall be provided with approved address numbers or letters. Each character shall be a minimum 4 inches (102 mm) high and a minimum of 0.5 inch (12.7 mm) wide. They shall be installed on a contrasting background and be plainly visible from the street or road fronting the property. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure.

Reason: The purpose of this change is to provide consistency among the International Building, Fire and Residential Codes. All three codes have different requirements regarding this regulation. Identifying buildings during an emergency is greatly aided by the proper placement of address identification. In emergencies, seconds may mean the different between life and death. In other than emergencies, convenience for persons attempting to locate a business, residence, public agency or other would seem to be a minimum requirement for a building. Sometimes one just can't locate a place without it being identified.

Many jurisdictions have ordinances requiring identification. The requirement is not consistent, nor is it uniform. Some federal agencies require identification on the mail box, but when that is located at the end of a private lane, with several structures located along the lane, it is impossible to determine the correct building from the group of mail boxes. When using mutual aid, emergency responders are at a distinct disadvantage. Their response becomes a true matter of life-safety. Some of the elements of this proposal have been submitted in prior cycles. It has gone before different committees and been rejected for a variety of reasons. A consequence of that action has resulted in an effort to have the proposed wording identical in all three codes. Additionally, provisions not previously considered, such as the height requirement, will now be uniform. Past committee objections have sometimes centered on wording that was not proposed for change, but was to remain as existing text, making the proponent wonder why it was not approved. In order to avoid a similar outcome, this is now a comprehensive approach to repair and maintain a very important requirement, but make it the same in all three codes. This will make it easier for users of the code and provide safety and consistency.

Bibliography: Please see G81-04/05

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

Committee Action: **Disapproved**

Committee Reason: The proposal would delete the current "approved building identification" text that provides enforcement flexibility. The intent of the last sentence of the proposed text is unclear. The proposal should also deal with multiple buildings and common driveways for multiple buildings.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Paul Hayward, Farmington City, Utah, representing Bonneville Chapter ICC, requests Approval as Modified by this public comment.

Replace proposal with the following:

[F] 505.1 Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inch (12.7mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure.

Commenter's Reason: The Committee had several objections to the original proposal. Those concerns have been addressed by retreating back to the original language in the existing IFC and IBC and simply adding the last sentence. There is a problem with buildings that have address numbers that cannot be seen from the public way. Section 505.2 in the Fire Code requires street signs to assist emergency personnel when responding to an address. This simply says that if the building cannot be seen from the public way then another identification means should be employed so that the building may be found.

Some of the discussion at the hearing centered around such things as a PUD or a grouping of university buildings. It is possible to post a site map at the entrance of a PUD, similar to the map the US Forrest Service uses at campground, and most universities have some form of building identification for visitors or new faculty, staff and students. There doesn't seem to be a problem with such an approach.

Previous proposals had a requirement that the signs could not be adversely affected by weather. A fire service person objected, stating that there was NO PROBLEM with any of the rest of the proposal (about 3 cycles back). That provision was removed from the subsequent proposals. *If you read carefully the reason given in Part II you will see that there were inconsistent provisions between the three codes---IFC, IBC and IRC.* Since the code sections to the IFC and IBC are now considered by only one committee, some of the reason for the change has disappeared (size consistency), but the reasons for the last sentence still remain.

The problem comes when a building is remote and hidden from view ad there is NO means to identify its location. That's all; very simple, straight forward and a common sense approach to safety.

PLEASE APPROVE this common sense proposal. It will assist the fire service as well as many others.

Final Action: AS AM AMPC____ D

F40-06/07, Part II
R321.1

Proposed Change as Submitted:

Proponent: Paul Hayward, City of Farmington, UT, representing Bonneville Chapter ICC

Delete and substitute as follows:

PART II – IRC

~~**R321.1 Premises identification.** Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property.~~

R321.1 Address identification. New buildings shall be provided with approved address numbers or letters. Each character shall be a minimum 4 inches (102 mm) high and a minimum of 0.5 inch (12.7 mm) wide. They shall be installed on a contrasting background and be plainly visible from the street or road fronting the property. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure.

Reason: The purpose of this change is to provide consistency among the International Building, Fire and Residential Codes. All three codes have different requirements regarding this regulation. Identifying buildings during an emergency is greatly aided by the proper placement of address identification. In emergencies, seconds may mean the different between life and death. In other than emergencies, convenience for persons attempting to locate a business, residence, public agency or other would seem to be a minimum requirement for a building. Sometimes one just can't locate a place without it being identified.

Many jurisdictions have ordinances requiring identification. The requirement is not consistent, nor is it uniform. Some federal agencies require identification on the mail box, but when that is located at the end of a private lane, with several structures located along the lane, it is impossible to determine the correct building from the group of mail boxes. When using mutual aid, emergency responders are at a distinct disadvantage. Their response becomes a true matter of life-safety. Some of the elements of this proposal have been submitted in prior cycles. It has gone before different committees and been rejected for a variety of reasons. A consequence of that action has resulted in an effort to have the proposed wording identical in all three codes. Additionally, provisions not previously considered, such as the height requirement, will now be uniform. Past committee objections have sometimes centered on wording that was not proposed for change, but was to remain as existing text, making the proponent wonder why it was not approved. In order to avoid a similar outcome, this is now a comprehensive approach to repair and maintain a very important requirement, but make it the same in all three codes. This will make it easier for users of the code and provide safety and consistency.

Bibliography: Please see G81-04/05

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

Committee Action: **Disapproved**

Committee Reason: There was no evidence brought forward to justify the code change proposal. It is important to preserve the consistency that currently exists between the IFC and the IRC as it relates to address identification and the size of the lettering.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Paul Hayward, Farmington City, Utah, representing Bonneville Chapter ICC, requests Approval as Modified by this public comment.

Replace proposal with the following:

R321.1 Address numbers. Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inch (12.7mm).

Commenter's Reason: The Committee Reason states: "There was no evidence brought forward to justify the code change proposal. It is important to preserve the consistency that currently exists between the IFC and the IRC as it relates to address identification and the size of the lettering."

SAY WHAT??

Do you think the following code text of regulations is CURRENTLY CONSISTENT?

IFC:

SECTION 505
PREMESIS IDENTIFICATION

505.1 Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

IRC:

SECTION R321
SITE ADDRESS

R321.1 Premises identification. Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property.

IBC: NOTE: This is the 2006 VERSION with NO black line in the margin indicating a change from the 2003 VERSION.

SECTION 501
GENERAL

501.1 Scope. The provisions of this chapter control the height and area of structures hereafter erected and additions to existing structures.

[F] 501.2 Address numbers. Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inch (12.7mm).

IBC: NOTE: This is the 2003 VERSION that has been changed, but was in effect when F40-07/07 was submitted to the committee.

SECTION 501
GENERAL

505.1 Scope. The provisions of this chapter control the height and area of structures hereafter erected and additions to existing structures.

501.2 Premises identification. Approved numbers or addresses shall be provided for new buildings in such a position as to be clearly visible and legible from the street or roadway fronting the property. Letters or numbers shall be a minimum 3 inches (76 mm) in height with a stroke of minimum 0.5 inch (12.7 mm) of a contrasting color to the background itself.

The 2006 IBC now is the same as the 2006 IFC, but it was because the decision was made that the Fire Code Committee would regulate both sections. CONGRATULATIONS----that shows progress!! But isn't it interesting that as a result of that decision the requirements between the 2003 IBC and the 2006 IBC are different, but there is NO black line in the margin? While this particular item was changed to provide consistency between the IBC and the IFC and is a good change, one can't help but wonder how many other provisions are being changed without the addition of the black line in the margin.

THE PARTICULAR OBJECTION HERE is that the IRC has NO SIZE requirement for the lettering or numbering, yet that was given as a reason for failing to approve the change. Maybe they should have said "To be consistent with what the Fire Code Committee decided at the earlier hearing" and it would make more sense. Still, the IRC IS NOT CONSISTENT with the IBC or the IFC and IT SHOULD BE!!

AS TO THE COMMITTEE REASON, the following could be listed as "inconsistencies:"

No height size of letters in IRC.

No minimum stroke width of letters in IRC.

No requirement on existing dwellings if adding on to the size of the home.

No specification as to "Arabic or alphabetic" numbers or letters.

No requirement for a contrasting background.

Although not a code requirement, a different title: Premises Identification versus Address Numbers.

There are these six items that are NOT the same in both codes. Such regulations need to be fixed, not "disapproved."

This proposal is to MAKE ALL THREE CODES --- IRC, IBC, IFC --- IDENTICAL. This is a "common sense" provision for owners that will assist emergency responders, which is certainly in the public's interest of safety in buildings, as well as helping those looking for a specific home (or place of business) when unfamiliar with the exact dwelling and all they have to rely on is the address. This really needs to be done.

Public Comment 2:

Paul Hayward, Farmington City, Utah, representing Bonneville Chapter ICC, requests Approval as Modified by this public comment.

Replace proposal with the following:

R321.1 Address numbers. Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inch (12.7mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure.

Commenter's Reason: See F40-06/07 Part I for the reason to add the last sentence. Also, this is a very big problem in rural areas where a row of mail boxes identifies all the house-holds on a rural postal route, but gives no clue as to where any one dwelling is located. It's difficult to provide emergency services at the end of the lane next to the mail boxes. Additionally, some folks just want to tack up a piece of cardboard on a tree. The address identification should be a minimum size, stroke, and contrasting color so that it provides the safety contemplated by the code and that is best accomplished by this change.

The fact it must be approved should not provide heartburn to anyone, since that language is already contained in the current and proposed text of the code. This tool will definitely help those seeking to find a remote dwelling, especially in emergencies, when all they have is an address.

If the proposal to Part I is approved, then this change needs to be approved also to promote true consistency.

Final Action: AS AM AMPC____ D

F42-06/07, Part I

507.4 (New)

Proposed Change as Submitted:

Proponent: Sean DeCrane, Cleveland Fire Fighters Association, IAFF Local #93, Cleveland, OH

PART I – IFC

Add new text as follows:

507.4 Lightweight truss identification. Lightweight truss construction shall be identified in accordance with Sections 507.4.1 through 507.4.3.

Exception. Detached one and two family dwellings unless otherwise required by other laws or ordinance.

507.4.1 Lightweight steel trusses. If the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated steel truss system consisting of cold-formed steel chord and web sections using 10 gauge or thinner elements, identifying emblems complying with Section 604.3 shall be permanently affixed to the building.

507.4.2 Lightweight wood trusses. If the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated wood truss with members connected using light gauge (16, 18 or 20 gauge) metal truss plates, identifying emblems complying with Section 604.3 shall be permanently affixed to the building.

507.4.3 Identifying emblems. Identifying emblems shall comply with Sections 604.3.1 through 604.3.6.
507.4.3.1 Color. The emblem shall be of a bright and reflective color, or made of reflective material.

507.4.3.2 Dimensions. The dimensions of the emblem shall be a minimum of 12 inches (305 mm) horizontally by 6 inches (152 mm) vertically.

507.4.3.3 Identification Letters. Letters of an approved size and color shall be printed on the emblem as follows:

1. "F" to signify a floor with truss construction;
2. "R" to signify a roof with truss construction;
3. "F/R" to signify both a floor and roof with truss construction.

507.4.3.4 Location. The emblem shall be permanently affixed on or to the left of the main entrance door on the side of the building from which responding firefighters are most likely to enter, as approved and shall be located at a height between 4 feet (1219 mm) and 6 feet (1829 mm) above the ground.

Reason: One significant threat facing fire fighters today is the wide use of lightweight non-fire rated construction, specifically lightweight truss construction. We have witnessed numerous occasions where fire fighters have been injured and killed in structures using lightweight truss construction. Many of the collapses have occurred in the first few minutes of the incident.

It is acknowledged the use of truss construction, due to its great load bearing ability, has allowed for buildings to be constructed cheaper and with many benefiting features. The issue needing to be addressed is when that building is compromised by fire. Due to the lightweight material these buildings fail far quicker putting the fire fighters at greater risk.

The intent of the code indicates the intention to provide safety to fire fighters and emergency responders during emergency operations. Simply identifying the structures where truss construction is used will actually all the IBC to place code revision to comply with that specific intent.

This requirement is already required statewide in the State of New Jersey.

Bibliography: Special Data Package, Fire Fighter Casualties as a Result of Roof or Floor Collapses in Wood-Frame Buildings, Fire Analysis and Research Division, National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101, March 1998

Cost Impact: The code change proposal will have a minimal (low) effect on the cost of construction.

Committee Action: **Disapproved**

Committee Reason: For consistency with the action on F41-06/07.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Sean DeCrane, Cleveland Fire Fighters Association, IAFF Local #93, requests Approval as Submitted for Part I.

Commenter's Reason: This proposal deals with specifically Lightweight Steel non-rated assembly and Lightweight Wood Trusses. It does not require every building with truss construction to be labeled. With the ever widening use of lightweight truss construction, we are endangering the lives of fire fighters who enter the structure to extinguish the fire. The intent of this proposal is to notify responding fire fighters of the use of non-rated truss construction and to identify the risks involved. This knowledge will indicate the need for extreme caution, and if no lives are at risk, a defensive attack. While opponents discuss the need for pre-planning, there are times where it would not be of use. In times of Mutual Aid response, a responding company from an outside jurisdiction may be one of the first arriving companies. This company would not necessarily have been informed of the known risk. In larger Departments, city neighborhoods can have drastically different types of construction inherent to the particular populace. Non-rated truss construction identification placards would notify these responding companies of the building construction hazard they are facing.

Lightweight truss construction is economically attractive. The proponent's intent is not to eliminate lightweight construction but rather force the industry to protect the structural members from the effects of fire for a defined time period or notify the responding fire fighters of the risk they face when responding to the respective structure.

Final Action: AS AM AMPC____ D

F42-06/07, Part II

507.4 (New)

Proposed Change as Submitted:

Proponent: Sean DeCrane, Cleveland Fire Fighters Association, IAFF Local #93, Cleveland, OH

PART II – IBC GENERAL

Add new text as follows:

SECTION 604
IDENTIFICATION OF UNPROTECTED LIGHTWEIGHT TRUSS CONSTRUCTION

604.1 Lightweight steel trusses. If the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated steel truss system consisting of cold-formed steel chord and web sections using 10 gauge or thinner elements, identifying emblems complying with Section 604.3 shall be permanently affixed to the building.

Exception. Detached one and two family dwellings unless otherwise required by other laws or ordinance.

604.2 Lightweight wood trusses. If the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated wood truss with members connected using light gauge (16, 18 or 20 gauge) metal truss plates, identifying emblems complying with Section 604.3 shall be permanently affixed to the building.

Exception. Detached one and two family dwellings unless otherwise required by other laws or ordinance

604.3 Identifying emblems. Identifying emblems shall comply with Sections 604.3.1 through 604.3.6.

604.3.1 Color. The emblem shall be of a bright and reflective color, or made of reflective material.

604.3.2 Dimensions. The dimensions of the emblem shall be a minimum of 12 inches (305 mm) horizontally by 6 inches (152 mm) vertically.

604.3.3 Identification Letters. Letters of an approved size and color shall be printed on the emblem as follows:

1. "F" to signify a floor with truss construction;
2. "R" to signify a roof with truss construction;
3. "F/R" to signify both a floor and roof with truss construction.

604.3.4 Location. The emblem shall be permanently affixed on or to the left of the main entrance door on the side of the building from which responding firefighters are most likely to enter, as approved and shall be located at a height between 4 feet (1219 mm) and 6 feet (1829 mm) above the ground.

Reason: One significant threat facing fire fighters today is the wide use of lightweight non-fire rated construction, specifically lightweight truss construction. We have witnessed numerous occasions where fire fighters have been injured and killed in structures using lightweight truss construction. Many of the collapses have occurred in the first few minutes of the incident.

It is acknowledged the use of truss construction, due to its great load bearing ability, has allowed for buildings to be constructed cheaper and with many benefiting features. The issue needing to be addressed is when that building is compromised by fire. Due to the lightweight material these buildings fail far quicker putting the fire fighters at greater risk.

The intent of the code indicates the intention to provide safety to fire fighters and emergency responders during emergency operations. Simply identifying the structures where truss construction is used will actually all the IBC to place code revision to comply with that specific intent.

This requirement is already required statewide in the State of New Jersey.

Bibliography: Special Data Package, Fire Fighter Casualties as a Result of Roof or Floor Collapses in Wood-Frame Buildings, Fire Analysis and Research Division, National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101, March 1998

Cost Impact: The code change proposal will have a minimal (low) effect on the cost of construction.

Committee Action: **Disapproved**

Committee Reason: There were concerns that there were many hazards that Fire Departments should be made aware of beyond lightweight trusses. An ad hoc committee was requested to look at the overall issues addressed by this proposal. The IBC general Committee voted against establishing such a committee. The IBC general committee felt that the code change process was an adequate venue to address this subject. There was also concerns related to sign maintenance and how that related to the application of the *International Building Code*.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Sean DeCrane, Cleveland Fire Fighters Association, IAFF Local #93, requests Approval as Submitted for Part II.

Commenter's Reason: This proposal deals with specifically Lightweight Steel non-rated assembly and Lightweight Wood Trusses. It does not require every building with truss construction to be labeled. With the ever widening use of lightweight truss construction, we are endangering the lives of fire fighters who enter the structure to extinguish the fire. The intent of this proposal is to notify responding fire fighters of the use of non-rated truss construction and to identify the risks involved. This knowledge will indicate the need for extreme

caution, and if no lives are at risk, a defensive attack. While opponents discuss the need for pre-planning, there are times where it would not be of use. In times of Mutual Aid response, a responding company from an outside jurisdiction may be one of the first arriving companies. This company would not necessarily have been informed of the known risk. In larger Departments, city neighborhoods can have drastically different types of construction inherent to the particular populace. Non-rated truss construction identification placards would notify these responding companies of the building construction hazard they are facing.

Lightweight truss construction is economically attractive. The proponent's intent is not to eliminate lightweight construction but rather force the industry to protect the structural members from the effects of fire for a defined time period or notify the responding fire fighters of the risk they face when responding to the respective structure.

Final Action: AS AM AMPC____ D

F46-06/07
603.3.2, Table 2703.1.1(1) [IBC Table [F]307.1(1)]

Proposed Change as Submitted:

Proponent: Lynne M. Kilpatrick, Fire Department, City of Seattle, WA

Revise as follows:

603.3.2 ~~Maximum~~ Inside fuel oil storage. Where connected to a fuel-oil piping system, ~~the maximum amount of fuel oil storage~~ a combustible liquid storage system having a maximum capacity of 660 gallons (2498 L) is allowed inside any building in a single control area ~~shall be 660 gallons (2498 L)~~. Where the amount of fuel oil stored inside a ~~building~~ single control area exceeds 660 gallons (2498 L), the storage area shall be in compliance with the *International Building Code* for a Group H-3 Occupancy.

TABLE 2703.1.1(1) [IBC Table [F]307.1(1)]
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA
OF HAZARDOUS MATERIALS POSIG A PHYSICAL HAZARD

a. through h. (No change to current text)

i. Inside any building, ~~the maximum capacity of~~ a combustible liquid storage system that is connected to a fuel-oil piping system ~~shall be~~ and having a maximum capacity of 660 gallons shall be allowed on any floor in a single control area provided such system complies with this code. See Section 603.3.2.

(Portions of table and footnotes not shown do not change)

Reason: This proposal clarifies the intent of Section 603.3.2 which is to allow for a generator tank up to 660 gallons inside a building without requiring the tank system to be located in a Group H Occupancy. If the tank system exceeds 660 gallons then the tank system must be confined to a room or area meeting Group H occupancy requirements. The current code text states that the maximum quantity of fuel-oil storage allowed inside any building cannot exceed 660 gallons.

The change to the table clarifies the intent of the code and allows a single generator fuel tank system up to 660 gallons to be installed anywhere in a building without confining the system to a Group H room or area. It should be noted that the proposed footnote allows the tank system to be installed on any floor of the building and thus the maximum allowable quantity reductions noted in Table 2703.8.3.2 do not apply. As written, the current code text states that the maximum quantity of fuel-oil storage allowed inside any building cannot exceed 660 gallons which is quite unrealistic given the need for fuel for backup generators in virtually every newly constructed building. This code change gives relief to small generator fuel systems which currently are required to be confined to Group H Occupancy rooms or areas if the tank system exceeds 120 gallons in unsprinklered buildings or 240 gallons in sprinklered buildings.

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

Committee Action: **Disapproved**

Committee Reason: The proposal's reason statement mentions generator tanks but the proposal does not. There needs to be better correlation with Table 2703.1.1(1).

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Lynne Kilpatrick, Seattle, Washington Fire Department, requests Approval as Modified by this public comment.

Replace proposal with the following modifications to current text:

1. Revise as follows:

603.3.1 Fuel oil storage in outside, aboveground tanks ~~Maximum outside fuel oil storage above ground~~. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31.

2. Delete and substitute as follows:

~~**603.3.2 Maximum inside fuel oil storage.** Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed inside any building shall be 660 gallons (2498 L). Where the amount of fuel oil stored inside a building exceeds 660 gallons (2498 L), the storage area shall be in compliance with the *International Building Code*.~~

603.3.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.5 or Chapter 34.

603.3.2.1 Quantity limits. One or more fuel-oil storage tanks containing Class II or Class III combustible liquid shall be permitted in a building. The aggregate capacity of all such tanks shall not exceed 660 gallons (2498 L).

Exception: The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11,356 L) of Class II or Class III liquid for storage in protected aboveground tanks complying with Section 3404.2.9.6, when all of the following conditions are met:

1. The entire 3,000 gallon (11,356 L) quantity shall be stored in protected aboveground tanks,
2. The 3,000 gallon (11,356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks, and
3. The tanks shall be located in a room or rooms protected by an automatic sprinkler system complying with Section 903.3.1.1.

603.3.2.2 Restricted use and connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning or generator equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed-piping systems.

603.3.2.3 Applicability of maximum allowable quantity and control area requirements. The quantity of combustible liquid stored in tanks complying with Section 603.3.2 shall not be counted towards the maximum allowable quantity set forth in Table 2703.1.1 (1), and such tanks shall not be required to be located in a control area.

603.3.2.4 Installation. Tanks and piping systems shall be installed and separated from other uses in accordance with IMC Section 915 and IMC Chapter 13, as applicable.

Exception: Protected aboveground tanks complying with Section 3404.2.9.6 shall not be required to be separated from surrounding areas.

603.3.2.5 Tanks in basements. Tanks in basements shall be located not more than two stories below grade plane.

3. Revise table as follows:

TABLE 2703.1.1(1) [IBC Table [F]307.1(1)]
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA
OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD

a. through h. (No change to current text)

i. The maximum allowable quantity shall not apply to fuel oil storage complying with Section 603.3.2. ~~Inside a building, the maximum capacity of a combustible liquid storage system that is connected to fuel-oil piping system shall be 660 gallons provided such system complies with this code.~~

(Portions of table and footnotes not shown remain unchanged)

Commenter's Reason:

1. Title corrected for editorial correlation with the revised section that follows.
2. This public comment responds to issues raised at the Orlando hearing during testimony on the original proposal as modified by a proposed amendment that was distributed and discussed. The proposed revisions resolve a longstanding problem in the IFC involving the apparent conflict between Table 2703.1.1(1), Footnote "i" and Section 603.3.2. The table implies that fuel oil tanks are subject to the MAQ/control area approach, but Section 603.3.2 instead establishes "per building" quantity limits. This revision clarifies that fuel oil tanks covered by 603.3.2 are not subject to the MAQ/control area regulatory scheme.

   The recommended revision also tackles a longstanding problem involving the need for more reasonable size limits for tanks in buildings that serve fuel burning equipment and generators. The intent of this section, through its use of the term "fuel oil," was determined to be related to tanks supplying both fuel oil and generators, and this has been clarified. To address the need for more reasonable quantities, this public comment expands on an idea introduced in the floor modification in Orlando, which recommended increasing permissible quantities when "protected tanks" are used and are located in areas protected by fire sprinklers. Protected tanks represent the highest level of tank construction in widespread use. These tanks have extensive regulations in Chapter 34, and the special UL listing requirements further assure their safety. Included in the special regulations for these tanks are 1) the required ability to survive a 2-hour fire test conducted in accordance with the UL1709 fire exposure protocol, 2) a limitation that all penetrations must be made through the top of the tank (to avoid the risk of a gravity-fed leak that might be associated with a connection below liquid level) and that piping connected to the tank must be provided with anti-siphon controls where needed to prevent a siphon risk,

3) bullet resistance, 4) vehicle impact resistance, and many others. The added safety features more than compensate for the proposed quantity allowance of 3,000 gallons, and by having most of these safety features integral to the tank construction, the level of reliability is very high.

The proposal also correlates the fuel oil equipment requirements in the IFC with applicable requirements in the IMC that are probably often overlooked, and it places a reasonable limit on where tanks can be located in basements.

3. Correlates with Part 2 to clarify that fuel oil tanks installed in accordance with 603.3.2 are not regulated using the MAQ/control area approach.

Final Action: AS AM AMPC____ D

F48-06/07
605.1.1 through 605.1.1.11 (New)

Proposed Change as Submitted:

Proponent: Wayne R. Jewell, CBO, Chairman, ICC Hazard Abatement in Existing Buildings Committee

Add new text as follows:

SECTION 605
ELECTRICAL EQUIPMENT, WIRING AND HAZARDS

605.1 Abatement of electrical hazards. Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the code official responsible for enforcement of the ICC *Electrical Code*. Electrical wiring, devices, appliances and other equipment that is modified or damaged and constitutes an electrical shock or fire hazard shall not be used.

605.1.1 Abatement of electrical hazards associated with water exposure. The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to water and fire.

605.1.1.1 Electrical distribution equipment. Electrical distribution equipment including switches and low-voltage protective components such as molded case circuit breakers and fuses, within assemblies such as enclosures, panelboards, and switchboards that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following equipment, rated 600 Volts or less, shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Enclosed switches
2. Busway
3. Panelboards
4. Switchboards
5. Fire pump controllers

605.1.1.2 Motor circuits. Motor circuits including motor control devices such as motor starters and contactors, overcurrent protection components such as overload relays, circuit breakers, fuses, and the associated support structures, buswork, and wiring that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following motor circuit equipment shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Manual and magnetic motor controllers
2. Motor control centers

605.1.1.3 Power equipment. Power equipment involving low voltage or medium voltage protective devices within an overall switchgear assembly, including any cabling, buswork, insulators, current transformers, electromechanical or electronic relays, and metering that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following power equipment components shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Alternating current high-voltage circuit breakers
2. Low voltage power circuit breakers
3. Protective relays, meters, and current transformers
4. Low and medium voltage switchgear

605.1.1.4 Transformers. Transformers that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following transformer equipment shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Liquid-filled transformers
2. Cast-resin transformers

605.1.1.5 Wire, cable, and flexible cords. Electrical Wire and cable that has been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following electrical wire or cable shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water.
2. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water.

605.1.1.6 Wiring devices, ground fault circuit interrupters (GFCI), and surge protectors. Wiring devices, ground fault circuit interrupters (GFCI), and surge protectors that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

605.1.1.7 Luminaires and ballasts. Luminaires, including fluorescent, high-intensity discharge, and incandescent, and ballasts that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Luminaires that are listed as submersible shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement.

605.1.1.8 Motors. Motors that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Motors that shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment, including insulation, switches, contacts of switches, capacitors and overload protectors, have not sustained damage that requires replacement.

605.1.1.9 Electronic control, signaling and communication equipment. Electronic control, signaling and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Electronic control, signaling and communication equipment shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement.

605.1.1.10 Electrical equipment exposed to fire. Electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, that have been exposed to fire shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Electronic switches, receptacles and fixtures that shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment have not sustained damage that requires replacement.

(Remainder of section does not change)

Reason: The ICC Board approved the development of a new code with the scope including a compilation of current provisions in the I-Codes which address hazards such as those from fire as well as the development of new requirements relative to issues such as hazardous conditions due to structural issues. This would provide a single source code book for all disciplines to be used by building owners to bring their existing building stock up to minimum standards and enforcing agencies when performing inspections of existing buildings. The Hazard Abatement of Existing Buildings Committee (HAEB) was formed to develop this code.

During this 06/07 cycle, the committee is proposing multiple unsafe conditions requirements for inclusion within the text of the existing International Codes, predominately the *International Property Maintenance Code* and the *International Fire Code*. These requirements will later be extracted from these International Codes and placed into a new International Code dealing primarily with unsafe conditions and the abatement thereof. It is intended that the maintenance of these provisions remain with the committee of origin. The draft of this new International Code is currently scheduled to be put through the 07/08 code change process for both public proposals and public comments. The first edition of this new code is currently scheduled for 2009.

The purpose of this proposal is to provide enforceable provisions to the code official that address hazards in electrical equipment that has been exposed to water or fire. These provisions are derived from a publication entitled "Guidelines for Handling Water-Damaged Electrical Equipment," published by the National Electrical Manufacturers Association (NEMA). The NEMA document could not be directly referenced as it does not meet the ICC requirements for referenced standards. The document is not maintained under a consensus process and is not written in mandatory enforceable language.

A section-by-section discussion follows:

605.1.1: This section defines the scope of the section as pertaining to electrical equipment and systems that have been exposed to water and fire.

605.1.1.1: This section describes conditions upon which electrical distribution equipment must be replaced. Protective components, such as circuit breakers, and fuses are necessary for the safe operation of the distribution circuits and should be replaced when exposed to water. The exception to this section allows for repair of certain components of an electrical distribution system provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement. These include enclosed switches, busway, panelboards, switchboards and fire pump controllers.

605.1.1.2: This section describes conditions upon which motor circuits must be replaced. Protective components, such as overload relays, circuit breakers and fuses are necessary for the safe operation of the motor circuits and should be replaced when exposed to water. The exception to this section allows for repair of certain motor circuit components provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement. These include manual and magnetic motor controllers and motor control centers.

605.1.1.3: This section describes conditions upon which power equipment and its associated electrical components must be replaced. Protective components, such as low voltage or medium voltage protective devices within a switchgear assembly, are necessary for the safe operation of the distribution circuits. The exception to this section allows for repair of certain power equipment components provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement. These include alternating current high-voltage circuit breakers, low voltage power circuit breakers, protective relays, meters, and current transformers, and low and medium voltage switchgear.

605.1.1.4: This section describes conditions upon which transformer equipment must be replaced. The ability of a transformer to operate as intended can be impaired by corrosion to the transformer core, flood debris deposited inside the transformer, or contamination of the transformer fluid. The exception to this section allows for repair of certain transformer equipment provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement. These include liquid-filled transformers and cast resin transformers.

605.1.1.5: This section describes conditions upon which wire, cable and flexible cords must be replaced. Metallic components of these components are subject to corrosion and insulation for these components will deteriorate through prolonged water exposure. The exception to this section allows for repair of certain wire or cable provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the wire or cable does not warrant replacement. These include wire or cable, suitable for wet locations, whose ends have not been exposed to water and wire or cable without fillers, also suitable for wet locations, whose ends have not been exposed to water.

605.1.1.6: This section describes conditions upon which wiring devices, GFCI and surge protectors must be replaced. The ability of these components to operate as intended after exposure to water, even after drying, will not be readily apparent. Internal components may be damaged and result in a hazard to the user. Note that any wiring devices, GFCI and surge protectors that have been exposed to water must be replaced without exception.

605.1.1.7: This section describes conditions upon which lighting fixtures and ballasts must be replaced. The ability of lighting fixtures and ballasts to operate as intended can be impaired by corrosion, flood debris and sediment. The exception to this section allows for repair of lighting fixtures that are listed as submersible provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement.

605.1.8: This section describes conditions upon which motors must be replaced. The ability of motors to operate as intended can be impaired by water, flood debris and sediment, which may result in damage to insulation, contacts of switches, capacitors and overload protection devices. The exception to this section allows for repair of motors provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the insulation, switches, contacts of switches, capacitors and overload protectors, have not sustained damage that requires replacement.

605.1.9: This section describes conditions upon which electronic control, signaling and communication equipment must be replaced. The ability of these components to operate as intended can be impaired by corrosion, flood debris and sediment. The exception to this section allows for repair of this equipment provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement.

605.1.10: This section describes conditions upon which electrical components and equipment must be replaced, where they have been exposed to fire. The ability of electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, to operate as intended can be impaired by exposure to fire. The exception to this section allows for repair of these components provided that an inspection report by a qualified individual or agency is submitted to the code official indicating that the level of damage to the equipment does not warrant replacement.

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

Committee Action: **Disapproved**

Committee Reason: The proposal is formatted similar to a handbook or information manual and contains a number of "laundry lists" which can become problematic if brought into code text. While the subject matter is important, this amount of material might serve better in an appendix.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Wayne R. Jewell, Chair, ICC Hazard Abatement in Existing Buildings Committee, requests Approval as Modified by this public comment.

Modify proposal as follows:

APPENDIX H
ELECTRICAL EQUIPMENT, WIRING AND HAZARDS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION H101
ELECTRICAL HAZARDS ASSOCIATED WITH WATER EXPOSURE

~~**605.1.1**~~ **H101.1 Abatement of electrical hazards associated with water exposure.** The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to water ~~and fire~~.

~~**605.1.1.1**~~ **H101.1.1 Electrical distribution equipment.** Electrical distribution equipment including switches and low-voltage protective components such as molded case circuit breakers and fuses, within assemblies such as enclosures, panelboards, and switchboards that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following equipment, rated 600 Volts or less, shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Enclosed switches
2. Busway
3. Panelboards
4. Switchboards
5. Fire pump controllers

~~**605.1.1.2**~~ **H101.1.2 Motor circuits.** Motor circuits including motor control devices such as motor starters and contactors, overcurrent protection components such as overload relays, circuit breakers, fuses, and the associated support structures, buswork, and wiring that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following motor circuit equipment shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Manual and magnetic motor controllers
2. Motor control centers

~~**605.1.1.3**~~ **H101.1.3 Power equipment.** Power equipment involving low voltage or medium voltage protective devices within an overall switchgear assembly, including any cabling, buswork, insulators, current transformers, electromechanical or electronic relays, and metering that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following power equipment components shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Alternating current high-voltage circuit breakers
2. Low voltage power circuit breakers
3. Protective relays, meters, and current transformers
4. Low and medium voltage switchgear

~~**605.1.1.4**~~ **H101.1.4 Transformers.** Transformers that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following transformer equipment shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Liquid-filled transformers
2. Cast-resin transformers

~~605.1.1.5~~ **H101.1.5 Wire, cable, and flexible cords.** Electrical Wire and cable that has been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: The following electrical wire or cable shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water.
2. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water.

~~605.1.1.6~~ **H101.1.6 Wiring devices, ground fault circuit interrupters (GFCI), and surge protectors.** Wiring devices, ground fault circuit interrupters (GFCI), and surge protectors that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

~~605.1.1.7~~ **H101.1.7 Luminaires and ballasts.** Luminaires, including fluorescent, high-intensity discharge, and incandescent, and ballasts that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Luminaires that are listed as submersible shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement.

~~605.1.1.8~~ **H101.1.8 Motors.** Motors that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Motors that shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment, including insulation, switches, contacts of switches, capacitors and overload protectors, have not sustained damage that requires replacement.

~~605.1.1.9~~ **H101.1.9 Electronic control, signaling and communication equipment.** Electronic control, signaling and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Electronic control, signaling and communication equipment shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement.

SECTION H102
ELECTRICAL HAZARDS ASSOCIATED WITH FIRE EXPOSURE

H102.1 Abatement of electrical hazards associated with fire exposure. The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to fire.

~~605.1.1.10~~ **H102.1.1 Electrical equipment exposed to fire.** Electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, that have been exposed to fire shall be replaced in accordance with the provisions of the *International Building Code*.

Exception: Electronic switches, receptacles and fixtures that shall be allowed to be repaired where an inspection report from a registered design professional or approved manufacturer's representative indicates that the equipment have not sustained damage that requires replacement.

Commenter's Reason: The code committee indicated that the subject matter within this proposal is important. However, since "laundry lists" such as this can be problematic if brought into code text, the committee suggested that this material might serve better in an appendix. Therefore, our suggested modification includes the provisions in a new IFC appendix. For substantiation of the proposed requirements, please see the original supporting statement.

Final Action: AS AM AMPC____ D

F53-06/07
608.1, Table 608.1, 608.5, 608.5.2, 608.6.1, 602 (New)

Proposed Change as Submitted:

Proponent: Ronald Marts, Telcordia Technologies, representing AT&T, SBC, Ameritech, PacBell, Cincinnati Bell, Qwest, Southern New England Telephone

1. Revise as follows:

608.1 Scope. Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189L) for flooded lead acid, Nickel Cadmium, and VRLA, or 1000 pounds for Lithium-Ion and Lithium Metal Polymer, used for facility standby power, emergency power, or uninterrupted power supplies shall comply with this section and with Table 608.1.

TABLE 608.1
BATTERY REQUIREMENTS

Requirement	Nonrecombinant Batteries		Recombinant Batteries		Other
	Flooded Lead Acid Batteries	Flooded Nickel Cadmium (Ni-Cd) Batteries	Valve Regulated Lead Acid (VRLA) Batteries	Lithium-Ion	Lithium Metal Polymer
Safety Caps	Venting caps (608.2.1)	Venting caps (608.2.1)	Self-resealing flame-arresting caps (608.2.2)	No caps	No caps
Thermal runaway Management	Not required	Not required	Required (608.3)	Not required	Not Required
Spill Control	Required (608.5)	Required (608.5)	Not required	Not required	Not Required
Neutralization	Required (608.5.1)	Required (608.5.1)	Required (608.5.2)	Not required	Not Required
Ventilation	Required (608.6.1; 608.6.2)	Required (608.6.1; 608.6.2)	Required (608.6.1; 608.6.2)	Not Required	Not Required
Signage	Required (608.7)	Required (608.7)	Required (608.7)	Required (608.7)	Required (608.7)
Seismic Protection	Required (608.8)	Required (608.8)	Required (608.8)	Required 608.8	Required 608.8
Smoke Detection	Required (608.9)	Required (608.9)	Required (608.9)	Required 608.9	Required 608.9

608.5 Spill control and neutralization. An approved method and materials for the control and neutralization of a spill of electrolyte shall be provided in areas containing lead-acid, nickel-cadmium, or other types of batteries with free-flowing liquid electrolyte. For purposes of this paragraph, a "spill" is defined as any unintentional release of electrolyte.

Exception: VRLA, Lithium-Ion, Lithium Metal Polymer, or other types of sealed batteries with immobilized electrolyte shall not require spill control.

608.5.2 Recombinant battery neutralization. For VRLA or other types of sealed batteries with immobilized electrolyte, the method and material shall be capable of neutralizing a spill of 3.0 percent of the capacity of the largest VRLA cell or block in the room to a pH between 7.0 and 9.0.

Exception: Lithium-Ion and Lithium Metal Polymer batteries shall not require neutralization.

608.6.1 Room ventilation. Ventilation shall be provided in accordance with the *International Mechanical Code* and the following:

1 For flooded lead acid, flooded Ni-Cad, and VRLA batteries, the ventilation system shall be designed to limit the maximum concentration of hydrogen to 1.0 percent of the total volume of the room; or
2 Continuous ventilation shall be provided at a rate of not less than 1 cubic foot per minute per square foot (1 $ft^3/min/ft^2$) [$0.0051 m^3/s\ m^2$] of floor area of the room.

Exception: Lithium-Ion and Lithium Metal Polymer batteries shall not require ventilation.

2. Add new definition as follows:

602.1 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.

LITHIUM METAL POLYMER BATTERY. A storage battery that uses an aluminum foil current collector, a vanadium oxide cathode, a solid polymer electrolyte, and a metallic lithium anode. The lithium ions are the charge carriers of the battery.

Reason: This proposed change adds Lithium Metal Polymer (LMP) batteries to Section 608. LMP batteries are currently undergoing tests by several end users for use as stationary battery back-up systems where lead acid and VRLA batteries are currently used.

The LMP battery is similar to the Lithium-ion type in its characteristics (light, energy-dense, no liquid electrolyte, etc.). This technology is becoming more popular for deployment in outdoor cabinets and in buildings as well.

Like Lithium-ion, LMP uses Lithium ions as the charge carrier. However, LMP batteries have a little more Lithium because their anode is a solid thin foil of pure Lithium (encased in a plastic-like polymer that serves as the electrolyte).

Even though LMP batteries should be recycled, they don't pose as much of an environmental hazard as lead-acid or Ni-Cad technologies. There is no gassing (the battery is truly completely sealed), no liquid electrolyte, and no really heavy metals. LMP batteries are one of the best technologies on the market for high temperature environments since they operate internally above 40 degrees C (the touch temperature of the case does not exceed 41 degrees C unless the ambient temperature exceeds that value). This battery technology has no caps and it is literally maintenance free. It is not prone to thermal runaway, and has internal disconnects and external alarms. Spill control is not required since the batteries have no liquid electrolyte. Similarly, neutralization is not required. Ventilation is not required, since there are no caps and no off-gassing. Temperature compensation is not required as the operating float voltage window is large, and heating and cooling are not necessary (internal heaters take care of the battery). Some signage and seismic control is required. Due to the sealed nature of the battery, it is a very low fire hazard. LMPs are Listed for safety to UL 1989, 2054, 60950, and 1642. NFPA 704 fire hazard diamond levels are:

Red (Flammability): 2 (case materials are UL 94 V-0)
Blue (Health): 3
Yellow (Instability): 1
White (water reactivity): 0

The new definition is required in Section 602 for clarity.

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

Committee Action: **Disapproved**

Committee Reason: The proposal would exclude other Lithium Metal Polymer technologies, such as magnesium dioxide cathodes, and the hazards of thermal runaway have not been addressed. Also, the proposed definition includes text that is essentially commentary.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Ronald Marts, Telcordia Technologies, representing AT&T, BellSouth, SBC, PacBell, Ameritech, SNET, Qwest, Cincinnati Bell, requests Approval as Modified by this public comment.

Modify Table 608.1 as follows:

TABLE 608.1
BATTERY REQUIREMENTS

	Non-recombinant Batteries		**Recombinant Batteries**		**Other**
Requirement	**Flooded Lead Acid Batteries**	**Flooded Nickel Cadmium (Ni-Cd) Batteries**	**Valve Regulated Lead Acid (VRLA) Batteries**	**Lithium-Ion**	**Lithium Metal Polymer**
Safety Caps (608.2)	Venting caps (608.2.1)	Venting caps (608.2.1)	Self-resealing flame-arresting caps (608.2.2)	No caps	No caps
Thermal Runaway Management	Not required	Not required	Required (608.3)	Not required	~~Not~~ Required (608.3)
Spill Control	Required (608.5)	Required (608.5)	Not required	Not required	Not Required
Neutralization	Required (608.5.1)	Required (608.5.1)	Required (608.5.2)	Not required	Not Required
Ventilation	Required (608.6.1; 608.6.2)	Required (608.6.1; 608.6.2)	Required (608.6.1; 608.6.2)	Not Required	Not Required
Signage	Required (608.7)	Required (608.7)	Required (608.7)	Required (608.7)	Required (608.7)
Seismic Control	Required (608.8)	Required (608.8)	Required (608.8)	Required 608.8	Required 608.8
Fire Detection	Required (608.9)	Required (608.9)	Required (608.9)	Required 608.9	Required 608.9

2. Modify current text as follows:

608.3 Thermal runaway. VRLA and lithium metal polymer battery systems shall be provided with a listed device or other approved method to preclude, detect, and control thermal runaway.

3. Modify proposed definition as follows:

BATTERY TYPES

LITHIUM METAL POLYMER BATTERY. A storage battery that is comprised of non-aqueous liquid or polymerized electrolytes, which provide ionic conductivity between lithiated positive active material electrically separated from metallic lithium or lithiated negative active material ~~uses an aluminum foil current collector, a vanadium oxide cathode, a solid polymer electrolyte, and a metallic lithium anode. The lithium ions are the charge carriers of the battery~~.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: The original proposal was submitted to include Lithium Metal Polymer (LMP) batteries to Section 608. The committee disapproved the proposed change for three reasons: 1) thermal runaway was not addressed; 2) the proposal could preclude other LMP technologies; 3) definition included text that was commentary.

This revised change addresses thermal runaway in both the table and the text. The change has also been modified to include all LMP technologies, and the definition has been modified to conform to battery industry standards.

Final Action: AS AM AMPC____ D

F54-06/07
608.6.3 (New)

Proposed Change as Submitted:

Proponent: Lynne M. Kilpatrick, Fire Department, City of Seattle, WA

Add new text as follows:

608.6.3 Supervision. Ventilation systems required by Section 608.6.1 and 608.6.2 shall be supervised by an approved central, proprietary, or remote station service or shall initiate an audible and visual signal at a constantly attended on-site location.

Reason: The ventilation systems in 608.6.1 and 608.6.2 are required to insure that the concentration of hydrogen does not exceed 1% or present an explosion hazard. Without a supervised system or a signal at a constantly attended location, the required ventilation systems can fail without warning allowing hydrogen concentrations to build to hazardous levels. The proposed code change adds a new requirement to supervise both the required room and cabinet ventilation systems to ensure that there will be adequate notification of a system failure.

Cost Impact: The code change proposal will increase the cost of the ventilation system.

Committee Action: **Disapproved**

Committee Reason: The proposal provides no justification as to why supervision should be required now after many years of battery operated equipment (e.g., golf carts, etc.) charging for prolonged periods. It also does not specify what aspects of the ventilation system are to be supervised.

Assembly Action: **Approved as Submitted**

Individual Consideration Agenda

This item is on the agenda for individual consideration because an assembly action was successful and a public comment was submitted.

Public Comment:

Stephen McCluer, American Power Conversion, requests Disapproval.

Commenter's Reason: The requirements of this proposal are too broad and vague to be enforceable. This requirement would be absolutely useless for installations using batteries that do not generate hydrogen gas, such as lithium batteries. It is especially onerous on battery cabinets.

Final Action: AS AM AMPC____ D

F57-06/07
701.1, 701.2 (New), 703.1

Proposed Change as Submitted:

Proponent: Wayne R. Jewell, CBO, Chairman, ICC Hazard Abatement in Existing Buildings Committee

Revise as follows:

701.1 Scope. The provisions of this chapter shall specify the requirements for and the maintenance of fire-resistance-rated construction and requirements for enclosing floor openings and shafts in existing buildings. ~~New~~ Construction of new buildings or new floor openings in existing buildings shall comply with the *International Building Code*.

701.2 Unsafe conditions. When any building, structure or portion thereof in which components in this chapter do not operate as intended or do not have the fire resistance required by the code under which the building was constructed, such building, structure or portion thereof shall be deemed unsafe and shall be repaired or replaced to conform to that code or this chapter, as deemed appropriate by the code official.

Exception: When substantiated otherwise by an approved method.

703.1 Inspection and maintenance. The required fire-resistance rating of fire-resistance-rated construction (including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and fire-resistant joint systems) shall be periodically inspected and maintained. Such elements shall be properly repaired, restored or replaced when damaged, altered, breached or penetrated. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self- or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly

Reason: The ICC Board approved the development of a new code with the scope including a compilation of current provisions in the I-Codes which address hazards such as those from fire as well as the development of new requirements relative to issues such as hazardous conditions due to structural issues. This would provide a single source code book for all disciplines to be used by building owners to bring their existing building stock up to minimum standards and enforcing agencies when performing inspections of existing buildings. The Hazard Abatement of Existing Buildings Committee (HAEB) was formed to develop this code.

During this 06/07 cycle, the committee is proposing multiple unsafe conditions requirements for inclusion within the text of the existing International Codes, predominately the *International Property Maintenance Code* and the *International Fire Code*. These requirements will later be extracted from these International Codes and placed into a new International Code dealing primarily with unsafe conditions and the abatement thereof. It is intended that the maintenance of these provisions remain with the committee of origin. The draft of this new International Code is currently scheduled to be put through the 07/08 code change process for both public proposals and public comments. The first edition of this new code is currently scheduled for 2009.

A section-by-section discussion follows:

701.1: This section has been revised to clarify that new buildings or new floor openings in existing buildings are to comply with the requirements for new construction and do not fall under the scope of this chapter.

701.2: This new section is intended to clarify to code officials, designers, contractors and property owners that building's fire resistive construction shall be maintained to the codes that the building were build under. The exception is to recognize that a qualified entity could substantiate an alternative method or material that meets the purpose and intent of the code. This alternative would need to be approved by the code official.

703.1: Periodic inspection requirements were added to this section to allow code officials a code reference when working with property owners. It is an expectation that owners be proactive and inspect their building regularly to assure that the fire resistant construction is being maintained. This is important since many contractors, cable and communication technicians do not recognize the dangers caused by their penetrations. Waiting until a fire occurs is not the time for owners to become aware of the unsafe conditions.

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

Committee Action: **Disapproved**

Committee Reason: The proposed phrase "periodically inspected" offers no guidance as to inspection frequency. Requiring that a building be deemed unsafe for relatively minor deficiencies would be onerous. The proposal would be in conflict with current IFC Section 110 Unsafe Buildings which accomplishes the same thing in a more measured manner. The cost impact could be excessive.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Wayne R. Jewell, Chair, ICC Hazard Abatement in Existing Buildings Committee requests Approval as Modified by this public comment.

Modify proposal as follows:

701.1 Scope. The provisions of this chapter shall specify the requirements for and the maintenance of fire-resistance-rated construction and requirements for enclosing floor openings and shafts in existing buildings. Construction of new buildings or new floor openings in existing buildings shall comply with the *International Building Code*.

701.2 Unsafe conditions. When any building, structure or portion thereof in which components in this chapter do not operate as intended or do not have the fire resistance required by the code under which the building was constructed, remodeled or altered such building, structure or portion thereof shall be deemed unsafe and shall be repaired or replaced to conform to that code or this chapter, as deemed appropriate by the code official.

Exception: When substantiated otherwise by an approved method.

703.1 Inspection and maintenance. The required fire-resistance rating of fire-resistance-rated construction (including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and fire-resistant joint systems) shall be ~~periodically inspected and~~ maintained. Such elements shall be properly repaired, restored or replaced when damaged, altered, breached or penetrated. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self- or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.

Commenter's Reason: During the public hearing the committee had concern with declaring that assemblies which were and are required to have a fire resistance rating were being called unsafe. This use of terms is not new to the IFC as it is used in Section 110 Unsafe Buildings. It is further defined in section 110.1.1 Unsafe Conditions. However, in reading that section the only element that is related to what is proposed here is the wording “or inadequate maintenance” which is then “deemed” to be unsafe.

This new language does two things. First, in section 701.1 it helps to separate the issue of the construction of new floor openings in existing buildings from the need to enclose existing floor openings in existing buildings, which is addressed by Section 704 Floor Openings and Shafts.

Second, the new language of section 701.2 provides a basis of evaluating the conditions and determining a resource to determine the level of fire resistance that is required to be maintained. There were comments about the lack of being able to know which code a building was constructed under and if that is not known how is this used. Well all communities should have some record of when a building was constructed knowing that it should be fairly reasonable to choose a published edition of the code that is close and prior to that year. While this might seem like roulette it is better than trying to make a building constructed 30, 50 or 80 years ago comply with today’s requirements that are sometimes based on the alternatives of a different type of construction or fire protection systems being in place. If all else fails there is the exception for the Fire Code Official to work with the design professionals to resolve the issue.

Other comments were made in regard to the use of “periodic inspection” in section 703.1 and how was that determined. We have further considered those comments of the committee and have restored the prior language and placed the burden for maintenance on the building owner. In so doing it is still a code violation to have fire resistive elements or systems in disrepair within a building.

Final Action: AS AM AMPC____ D

F58-06/07
701.2 (New)

Proposed Change as Submitted:

Proponent: Bill McHugh, Firestop Contractors International Association

Add new text as follows:

701.2 Construction documents. The fire code official shall have the authority to require construction documents and calculations for fire-resistance-rated construction, compartmentation and structural fire protection systems be issued for the installation, rehabilitation or modification of such systems. Construction documents for fire-resistance-rated construction, compartmentation and structural fire protection systems shall be submitted for review and approval prior to system installation.

Reason: The purpose of the proposed code change is to bring consistency in language to important fire and life safety systems.

To modify a fire-resistance-rated construction, compartmentation or structural fire protection system requires attention to the tested and listed systems to be installed. Where fire-resistance-rated construction, compartmentation and structural fire protection systems are installed, they are vital to occupant protection, therefore the reason for the code change.

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

Committee Action: **Disapproved**

Committee Reason: The proposal would be in conflict with current IFC Section 102.4 which references the IBC for the work contemplated by the proposed text.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Bill McHugh, Firestop Contractors International Association, requests Approval as Modified by this public comment.

Modify proposal as follows:

701.2 Construction Documents. The fire code official shall have the authority to require construction documents ~~and calculations~~ for fire-resistance-rated construction~~, compartmentation and structural fire protection systems~~ be issued for the installation, rehabilitation or modification of such systems. Construction documents for fire-resistance-rated construction~~, compartmentation and structural fire protection~~ systems shall be submitted for review and approval prior to system installation in all Group A, E and I occupancies where modification directly affects performance of the fire resistance rated construction system.

Commenter's Reason: Compartmentation Systems consist of fire and smoke resistance-rated construction systems of rated walls and floors that create fire and smoke resistance rated occupancy separations, fire and smoke resistance rated corridors, havens of safety, and fire and smoke resistance rated compartmentation, with openings protected by rolling and swinging fire doors, fire dampers, fire glass and firestopping. Compartmentation systems are critical fire protection components in the International Building Code where they are required, and must operate when called upon by fire and smoke.

Sprinkler systems plus detection and alarms have code requirements that special attention be paid when modification or rehabilitation of a component takes place. FCIA believes that the same requirements should apply to fire and smoke resistance rated compartmentation systems, and that they be treated equally to sprinklers, detection and alarm systems when required by the code.

This concept of requiring construction documents for critical aspects of fire and life safety is not a new concept to the code. The language in this code change copies a concept that already exists in Chapter 9, 901.2, where language is clearly stated for the authority having jurisdiction to require construction documents and calculations for rehabilitation or modification of sprinkler systems required by the code.

Fire and smoke resistance rated construction must be properly designed, installed, inspected and maintained to remain effective over the building life cycle. The compartmentation that remains in buildings to protect occupants in these key occupancies, assembly, healthcare and education, must be given equal attention as other fire protection features in buildings.

We have modified the code change selecting certain occupancies to give the building official clear guidance where this concept should be implemented in the code. Assembly Occupancies have the most people in one place, and justify a greater attention to detail of all fire protection technologies. Institutional Occupancies have the largest number of people without the ability to move on their own as fast as those of us who have the gift of good health and mobility. Education occupancies house our most precious asset, our future generation.

Additionally, although the committee felt this concept is covered in Chapter 1 of the code, it should be noted that not all jurisdictions adapt Chapter 1, meaning local control of administrative responsibility in the code eliminates Chapter 1 in some jurisdictions. This local administrative responsibility occurs nationally in many jurisdictions. Therefore, since Chapter 1 is not universally adapted, this code change is valid and very important for inclusion.

Final Action: AS AM AMPC____ D

F59-06/07
703.1.2, 703.1.3 (New), Chapter 45

Proposed Change as Submitted:

Proponent: Vickie Lovell, representing Air Movement and Control Association

1. Revise as follows:

703.1.2 Smoke barriers and smoke partitions. Required smoke barriers and smoke partitions shall be maintained to prevent the passage of smoke. ~~and~~ All openings shall be protected with approved smoke barrier doors or smoke dampers in accordance with NFPA 105.

703.1.3 Fire walls, fire barriers and fire partitions. Required fire walls, fire barriers and fire partitions shall be maintained to prevent the passage of fire. All openings protected with approved doors or fire dampers shall be maintained in accordance with NFPA 80.

2. Add referenced standard to Chapter 45 as follows:

NFPA

105-03 – Standard for Installation of Smoke Door Assemblies

Reason: The maintenance for smoke doors and smoke dampers is covered by NFPA 105. Additionally the scope of NFPA 80 has been changed and expanded to include the maintenance requirements of fire dampers. This most recent editions of these standards will be voted on in June at the NFPA meeting. A copy of the final document will be provided to ICC staff and the committee is the document passes successfully and is authorized for publication by the NFPA standards Council.

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

Errata: The following (published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings) replaced the original proposal:

Proponent: Vickie Lovell, representing Air Movement and Control Association

1. Revise as follows:

703.1.2 Smoke barriers and smoke partitions. Required smoke barriers and smoke partitions shall be maintained to prevent the passage of smoke. ~~and~~ All openings protected with approved smoke barrier doors or smoke dampers shall be maintained in accordance with NFPA 105.

2. Add new text as follows:

703.1.3 Fire walls, fire barriers and fire partitions. Required fire walls, fire barriers and fire partitions shall be maintained to prevent the passage of fire. All openings protected with approved doors or fire dampers shall be maintained in accordance with NFPA 80.

3. Add referenced standard to Chapter 45 as follows:

NFPA
105-03 – Standard for Installation of Smoke Door Assemblies

Reason: The maintenance for smoke doors and smoke dampers is covered by NFPA 105. Additionally the scope of NFPA 80 has been changed and expanded to include the maintenance requirements of fire dampers. This most recent editions of these standards will be voted on in June at the NFPA meeting. A copy of the final document will be provided to ICC staff and the committee if the document passes successfully and is authorized for publication by the NFPA standards Council.

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

Committee Action: **Approved as Modified**

Modify the proposal as follows:

703.1.2 Smoke barriers and smoke partitions. Required smoke barriers and smoke partitions shall be maintained to prevent the passage of smoke. All openings protected with approved smoke barrier doors or smoke dampers shall be maintained ~~in accordance with NFPA 105~~.

703.1.3 Fire walls, fire barriers and fire partitions. Required fire walls, fire barriers and fire partitions shall be maintained to prevent the passage of fire. All openings protected with approved doors or fire dampers shall be maintained ~~in accordance with NFPA 80~~.

~~**Add referenced standard to Chapter 45 as follows:**~~

~~**NFPA** 105-03 – Standard for Installation of Smoke Door Assemblies~~

Committee Reason: The proposal will provide an important enforcement tool in maintaining the original integrity of smoke resistant and fire resistance rated assemblies. The modifications are due to the proposed updated referenced standards not having been submitted to the committee for review.

Assembly Action: **Disapproved**

Individual Consideration Agenda

This item is on the agenda for individual consideration because an assembly action was successful.

Final Action: AS AM AMPC____ D

F60-06/07
703.5 (New)

Proposed Change as Submitted:

Proponent: Bill McHugh, Firestop Contractors International Association

Add new text as follows:

703.5 Statement of compliance. Before requesting final approval of the installation, where required by the fire code official, the installing contractor shall furnish a written statement to the fire code official that the subject fire-resistance-rated construction, compartmentation and structural fire protection systems have been installed in accordance with approved plans and to qualified or approved processes.

Reason: The purpose of this code change is to bring consistency in this section with other sections of this code. The importance of compartmentation and structural fire protection, where required, is paramount to fire and life safety. Therefore, installers of these systems must certify that they have installed the systems properly

One of the largest complaints about compartmentation is lack of attention to detail. This code change makes the installer contractor prepare a written statement of responsibility, which can result in better quality installations.

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

Committee Action: **Disapproved**

Committee Reason: The proposal is unnecessary. Self-certification should not be a substitute for proper inspections and could result in falsifications.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Bill McHugh, Firestop Contractors International Association, requests Approval as Modified by this public comment.

Modify proposal as follows:

703.5 Statement of Compliance. Before requesting final approval of the installation, where required by the fire code official, the installing contractor shall furnish a written statement to the fire code official that the subject fire-resistance-rated construction, compartmentation and structural fire protection systems have been installed in accordance with approved plans and to qualified or approved processes, in all Group A, E and I occupancies.

Commenter's Reason: Compartmentation Systems consist of fire and smoke resistance construction systems of rated walls and floors that create fire and smoke resistance rated occupancy separations, fire and smoke resistance rated corridors, havens of safety, and fire and smoke resistance rated compartmentation, with openings protected by rolling and swinging fire doors, fire dampers, fire glass and firestopping. Compartmentation systems are critical fire protection components in the International Building Code where they are required, and must operate when called upon by fire and smoke.

Sprinkler systems plus detection and alarms have code requirements that special attention be paid when modification or rehabilitation of a component takes place. FCIA believes that the same requirements should apply to fire and smoke resistance rated compartmentation systems, and that they be treated equally to sprinklers, detection and alarm systems when required by the code.

This concept of requiring construction documents for critical aspects of fire and life safety is not a new concept to the code. The language in this code change copies a concept that already exists in Chapter 901.2.1, where language is clearly stated for the authority having jurisdiction to require a written statement of compliance by the contractor.

Fire and smoke resistance rated construction must be properly designed, installed, inspected and maintained to remain effective over the building life cycle. The compartmentation that remains in buildings to protect occupants in these key occupancies, assembly, healthcare and education, must be given equal attention as other fire protection features in buildings.

We have modified the code change to give the building official clear guidance where this concept should be implemented in the code to include only the most critical occupancies. Assembly Occupancies have the most people in one place, and justify a greater attention to detail of all fire protection technologies. Institutional Occupancies have the largest number of people without the ability to move on their own as fast as those of us who have the gift of good health and mobility. Education occupancies house our most precious asset, our future generation.

Although the committee felt this concept only creates a paper trail, we believe differently. A paper trail does more than just create paper. In the litigious society in which we live, this certificate makes the contractor more culpable if litigation were to arise. Plus, this is common practice in many jurisdictions around the country. This public comment simply reflects what is done in the field already.

Also, we believe this code change doesn't just call for paper trail. The change clearly states that the installation should be performed to 'approved processes'. The Firestop Contractors International Association worked with FM Approvals and Underwriters Laboratories to produce FM 4991, the Standard for Approval of Firestop Contractors, and UL Qualified Firestop Contractor Programs. These programs audit the firestop contractors' quality management processes to give the Authority Having Jurisdiction further assurance that qualified firms are installing fire and life safety systems to provide reliability. Other compartmentation systems components such as fire doors, fire dampers, fire glass, are developing similar programs to bring heightened importance to quality of installation of critical compartmentation systems.

FCIA's intent with this code change was not to focus on a 'paper trail', but to have give the building official the authority to ask what specific processes the contractor is using to assure that fire and life safety systems are properly designed, installed, inspected and maintained….so these critical compartmentation systems work when called upon. FM 4991 and UL Qualified Contractor Programs provide the proof source of qualification of firestopping contractors.

Final Action: AS AM AMPC____ D

F67-06/07
805.1.1.1

Proposed Change as Submitted:

Proponent: Marcelo M. Hirschler, GBH International, representing American Fire Safety Council

Revise as follows:

805.1.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following: (a) mocked-up composites of the upholstered furniture shall have a char length not exceeding 1.5 inches (38 mm) when tested in accordance with NFPA 261 or (b) the components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260 ~~and shall meet the requirements of Class I~~

~~**Exception:** Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.~~

Reason: The proposal deletes the exception because: (a) sprinklers have no effect on controlling smoldering ignition (ignition by cigarettes), since they require an increase in room temperature to act and there will be no increase in room temperature until well after the upholstered furniture which fails the cigarette test has erupted into flames and (b) newly introduced upholstered furniture is very likely to meet smoldering ignition requirements since both the trade association for manufacturers of residential upholstered furniture (UFAC, Upholstered Furniture Action Council or its sister organization, the American Furniture Manufacturers Association) and the trade association for manufacturers of institutional and contract upholstered furniture (BIFMA, Business and Institutional Furniture Manufacturers Association) have been demanding that all their members comply with the smoldering resistance test. UFAC requires NFPA 260 (equivalent to ASTM E 1353 and the UFAC test) and BIFMA requires NFPA 261 (equivalent to ASTM E 1352). This proposal does not affect existing upholstered furniture.

The change to the charging section is for consistency with 805.2.1.1 and 805.3.1.1. This offers an alternative test method (NFPA 261) for approval of cigarette ignition resistance of newly introduced upholstered furniture in Group I-1 occupancies (board and care facilities). The same test method is already permitted for use in Groups I-2 and I-3 occupancies. The difference between NFPA 260 and NFPA 261 is that NFPA 260 tests individual materials while NFPA 261 tests mocked-up composites. In fact, results from NFPA 261 are more likely to be predictive of real fire behavior.

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

Committee Action: **Approved as Submitted**

Committee Reason: Based on the proponent's reason statement. Deletion of the exception recognizes that sprinklers have no effect on a smoldering ignition scenario due to the lack of a temperature increase in the room. See also the action on F66-06/07.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Frank Castelvecchi, PE, County of Henrico, Richmond, Virginia, requests Approval as Modified by this public comment.

Modify proposal as follows:

805.1.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following: (a) mocked-up composites of the upholstered furniture shall have a char length not exceeding 1.5 inches (38 mm) when tested in accordance with NFPA 261 or (b) the components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

> **Exception:** Upholstered furniture belonging to the resident in sleeping rooms and suites, provided that a smoke detector is installed in such rooms. Battery-powered, single station smoke alarms shall be allowed.

Commenter's Reason: With the removal of the sprinkler exception it would be too restrictive to prohibit a resident from bringing family heirloom or old favorite chair with them when they go into an assisted living facility. The residents of these facilities are often reluctant to leave their familiar homes and this restriction removes one more comfort that is available. The proposed exception is modeled on the exception in 805.2.1.1 that allows this in I-2 patient rooms.

Public Comment 2:

Frank Castelvecchi, PE, County of Henrico, Richmond, Virginia, requests Disapproval.

Commenter's Reason: This provision is too restrictive in prohibiting a resident from bringing family heirloom or old favorite chair with them when they go into an assisted living facility. The residents of these facilities are often reluctant to leave their familiar homes and this restriction removes one more comfort that is available.

Insufficient justification was given for removing the sprinklered exception for upholstered furniture in these I-1 use groups where the residents are ambulatory, smoke detectors are provided within the dwelling units to detect smoldering fires while there is plenty of time for reaction and flaming fires would be controlled by the quick response sprinklers.

Final Action: AS AM AMPC____ D

F75-06/07
805.4 (New)

Proposed Change as Submitted:

Proponent: Marcelo M. Hirschler, GBH International, representing American Fire Safety Council

Add new text as follows:

805.4 Group R-2 dormitories and non-transient hotels and motels. The requirements in Sections 805.4.1 through 805.4.2.3 shall apply to dormitories and non-transient hotels and motels classified in Group R-2.

805.4.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of sections 805.4.1.1 through 805.4.1.3

805.4.1.1 Ignition by Cigarettes Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following:

1. Mocked-up composites of the upholstered furniture shall have a char length not exceeding 1.5 inches (38 mm) when tested in accordance with NFPA 261, or
2. The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

805.4.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537, as follows.

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 megajoules (MJ).

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

805.4.1.3 Identification. Upholstered furniture shall bear the label of an approved agency, confirming compliance with the requirements of Sections 805.4.1.1 and 805.4.1.2.

805.4.2 Mattresses. Newly introduced mattresses shall meet the requirements of sections 805.4.2.1 through 805.4.2.3.

805.4.2.1 Ignition by cigarettes. Newly introduced mattresses shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with DOC 16 CFR Part 1632 and shall have a char length not exceeding 2.0 inches (51 mm).

805.4.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows.

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.

   Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 megajoules (MJ).

   Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

805.4.2.3 Identification. Mattresses shall bear the label of an approved agency, confirming compliance with the requirements of Sections 805.4.2.1 and 805.4.2.2.

Reason: Upholstered furniture and mattresses in dormitories and in non-transient hotels and motels should comply with the same requirements on fire performance as institutions (Group I-1, I-2 and I-3 occupancies) and that is what this proposal recommends. The recommended test methods and criteria are identical to those in sections 805.1, 805.2 and 805.3 of the IFC.

This is particularly important now that CPSC is requiring that all residential mattresses sold in the US from July 1, 2007, must comply only with a test equivalent to CA TB 603 (16 CFR 1633). The CA TB 603 or 16 CFR 1633 tests can be "passed" with nothing more than a good ticking (cover fabric) or a barrier and with padding that is not fire safe. Therefore, mattresses that meet CA TB 603 or 16 CR 1633 are unsafe for dormitrories and for non transient hotels and motels, where it is not uncommon to have individuals drunk in bed, falling asleep with a cigarette in their hand, and who have candles too. Nowadays, many travelers bring along 'mood candles' and leave them lit when they go to sleep and the same is true for students in dormitories and residents in non-transient hotels and motels. The proposal recommends the criteria and the test method in CA TB 129 (ASTM E 1590 is technically identical to CA TB 129 but was passed by a consensus standards organization and has no pass/fail criteria), which is a requirement that is met by a fire-safe mattress.

There is still no regulation for upholstered furniture in institutions nationwide, but the proposal is identical to what is being required in California (and has been required for many years). The proposal recommends the criteria and the test method in CA TB 133 (ASTM E 1537 is technically identical to CA TB 133 but was passed by a consensus standards organization and has no pass/fail criteria), which is a requirement that is met by a fire-safe upholstered furniture item.

Several major hotel chains have had informal requirements that their upholstered furniture comply with CA TB 133 and that their mattresses comply with CA TB 129 for many years. It is important that similar requirements apply to those R2 occupancies where the fire risk problem is higher.

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

Analysis: The action on this proposal should be consistent with the action on Code Changes F74- and F76-06/07.

Committee Action: **Disapproved**

Committee Reason: For consistency with the action on F74-06/07. The number of apparent problems with these proposals should be resolved by consensus among the various proponents during the public comment period.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Marcelo M. Hirschler, GBH International, representing American Fire Safety Council requests Approval as Modified by this public comment.

Modify proposal as follows:

805.4 Group R-2 college and university dormitories ~~and non-transient hotels and motels~~. The requirements in Sections 805.4.1 through 805.4.2.3 shall apply to college and university dormitories ~~and non-transient hotels and motels~~ classified in Group R-2.

805.4.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of sections 805.4.1.1 through 805.4.1.3

805.4.1.1 Ignition by Cigarettes Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with NFPA 260 and shall meet the requirements for Class I. ~~one of the following:~~

~~1. Mocked-up composites of the upholstered furniture shall have a char length not exceeding 1.5 inches (38 mm) when tested in accordance with NFPA 261, or~~
~~2. The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.~~

805.4.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537or California Technical Bulletin 133, as follows.

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 megajoules (MJ).

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

805.4.1.3 Identification. Upholstered furniture shall bear the label of an approved agency, confirming compliance with the requirements of Sections 805.4.1.1 and 805.4.1.2.

805.4.2 Mattresses. Newly introduced mattresses shall meet the requirements of sections 805.4.2.1 through 805.4.2.3.

805.4.2.1 Ignition by cigarettes. Newly introduced mattresses shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with DOC 16 CFR Part 1632 and shall have a char length not exceeding 2.0 inches (51 mm).

805.4.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows.

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.

   Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. The total energy released by the single mattress ~~upholstered furniture item~~ during the first 10 minutes of the test shall not exceed 25 megajoules (MJ).

   Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

805.4.2.3 Identification. Mattresses shall bear the label of an approved agency, confirming compliance with the requirements of Sections 805.4.2.1 and 805.4.2.2.

Commenter's Reason: The committee also recommended that consensus be obtained among the various proposals. In view of that, this comment on proposal F75 builds on the acceptance of proposal F76. This comment restricts the scope of the changes from the original sets of occupancies and addresses only “college and university dormitories classified in Group R-2”, just like F76. This is equivalent to a change to proposal F76 that makes the requirements for college and university dormitories consistent with those addressed by the IFC code for other occupancies, namely health care and detention. The committee discussed that college and university dormitories are the higher-risk occupancy types within Group R-2, where the fire record has been poor. Therefore this comment restricts the scope of the initial F76 proposal to those occupancy types. The acceptance of this comment will provide an important enforcement tool for both the fire code official and college and university campus housing authorities in limiting the combustibility of student -owned furnishings that they bring to school with them. Those furnishings include both upholstered furniture and mattresses, which are the high fuel items in dormitories. Proposal F76 addresses upholstered furniture only.

As discussed in other proposals accepted by the committee, sprinklers have no effect on smoldering fires and that is the other change from Proposal F76 addressed in this comment. Moreover, all mattresses sold in the US since 1972 must be smolder resistant and all major manufacturers of upholstered furniture comply with the industry requirements that their products are smolder resistant. This also brings consistency with the committee action on the other IFC occupancies.

If this comment is accepted, the changes approved in F76 are enhanced and are not lost.

Final Action: AS AM AMPC____ D

F76-06/07
805.4 (New)

Proposed Change as Submitted:

Proponent: Nancy Van Voorhees, New York State Office of Fire Prevention and Control

Add new text as follows:

805.4 Group R-2, college and university dormitories. The requirements in Section 805.4.1 shall apply to college and university dormitories classified in Group R-2.

805.4.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of Sections 805.4.1.1 and 805.4.1.2.

805.4.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with NFPA 260 and shall meet the requirements for Class I.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

805.4.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system Installed in accordance with Section 903.3.1.1.

Reason: Upholstered furniture can be a contributing factor in fatal fires in college and university dormitories. It has functioned as the material first ignited or as fuel fostering smoke production and fire development and spread in fatal dormitory fires including fatal fires in New Jersey and Illinois (see: Fire Ruled Accidental In Which Southern Adventist Student Died, Blaze Started On A Third-Floor Couch In Thatcher Hall, http://www.chattanoogan.com/articles/article_65999.asp; and January 19, 2000 – Seton Hall University – Boland Hall. Three fatalities; 54 student, 2 firefighters, and 2 police officers sustained injuries. Essex County Prosecutor, Don Campolo said the fire was contained to the common area and was quickly extinguished, but that smoke and heat traveled through the dorm, which houses more than 600 students. "The couches were the primary combustible materials," said Campolo, http://archives.cnn.com/2000/US/01/19/seton.hall.fire.05/#1.

Often upholstered furniture is in common areas and where its burning can affect egress. Any fire involving upholstered furniture has the potential for injuries and deaths (see: February 2, 2000 Chapel Hill Fire Department crews were dispatched to Morrison Dorm on an automatic fire alarm. Upon arrival, fire crews discovered heavy smoke conditions in the lobby area on the ninth floor. Further investigation revealed a couch on fire in a student study lounge. Damage was estimated at $5000 and no injuries were reported. The fire was contained to the room of origin.http://www.sfpe-newengland.org/Firebrand%2009-00/article-collfiresafety.html.

Concern for the size of fire that can be developed by upholstered furniture led the New York State Governor's Task Force on Campus Fire Safety to recommend an upholstered furniture flammability standard for colleges and universities.

Regulation of upholstered furniture flammability is presently addressed by the Fire Code for certain occupancies in Section 805. This proposal would add similar requirements for upholstered furniture used in college and university dormitories.

The inclusion of college and university dormitories with the occupancy groups addressed by Section 805 is similar to the grouping of dormitories with Group I in Section 807.1. As there is equal concern for flame propagation of curtains, drapes, hangings and other decorative materials used in both Group I occupancies and dormitories evidenced by the same requirements prescribed in Section 807.1, there should be equal concern (and requirements) for upholstered furniture flammability in both these occupancy groups.

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

Analysis: The action on this proposal should be consistent with the action on code changes F74- and F75-06/07.

Committee Action: **Approved as Submitted**

Committee Reason: Based on the proponent's reason statement. This proposal would be limited in applicability only to the higher-risk occupancy types within Group R-2 where the fire record has been poor. It will provide an important enforcement tool for both the fire code official as well as college and university campus housing authorities in limiting the combustibility of student -owned furnishings that they bring to school with them.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Paul Hayward, Farmington City, Utah, representing Bonneville Chapter ICC requests Approval as Modified by this public comment.

Modify proposal as follows:

805.4.1 Upholstered furniture. ~~Newly introduced~~ Upholstered furniture shall meet the requirements of Sections 805.4.1.1 and 805.4.1.2.

805.4.1.1 Ignition by cigarettes. ~~Newly introduced~~ Upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with NFPA 260 and shall meet the requirements for Class I.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

805.4.1.2 Heat release rate. ~~Newly introduced~~ Upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

   Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system Installed in accordance with Section 903.3.1.1.

Commenter's Reason: Newly introduced? Eliminate these words and the enforcement tool being sought is still obtained. The term "newly introduced" is vague (and it really ought to be removed for all of the code body) and could have different meanings. Does it apply for 5 minutes, the first hour, or for a month? After a week is it no longer "newly introduced" but "formerly introduced" and maybe now it's now "existingly introduced"? Then whenever it passes the time frame of being "newly introduced" does the code provision regulating the items listed in the proposal still apply? Nothing is lost be merely stating "Upholstered furniture", especially if the intent is to keep out non-complying furniture from college dorms. Either it complies or it doesn't. Why get into when exactly it was "introduced" or brought into the living quarters? On an inspection, it must meet the code's criteria.

Final Action: AS AM AMPC____ D

F79-06/07
807.4.3.2

Proposed Change as Submitted:

Proponent: Steve Cooke, Washington State Association of Fire Marshals

Revise as follows:

807.4.3.2 Artwork. Artwork and teaching materials shall be ~~limited on the walls of corridors to not more than 20 percent of the wall area.~~ allowed to be attached directly to walls according to the following criteria:

1. The artwork and teaching materials shall not exceed 20 percent of the wall area in a room or corridor that is not protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1.

2. The artwork and teaching materials shall not exceed 50 percent of the wall area in a room or corridor that is protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1.

Reason: The amount of combustible materials hung as decoration and display in school classrooms can be excessive. The excessive nature of these combustible materials significantly increases the danger to occupants in the event of a fire. These materials will contribute to the fuel loading without a method of controlling the quantity. This proposal will give the fire code official the means to limit artwork and similar materials hung on classroom walls that is absent from the current code language. It also recognizes the benefits of sprinkler protection by increasing the amount of materials allowed on corridor walls if sprinklers are provided. This proposal was passed by the ICC/IAFC Western/Canadian Code Action Committee, and narrowly defeated by the Joint Fire Service Review Committee.

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

Committee Action: **Disapproved**

Committee Reason: There was no technical justification of the increase to 50% coverage or for expanding the scope of the section by applying the provisions to rooms.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Steve Cooke, Woodinville Fire Marshal's Office, representing Washington State Association of Fire Marshals requests Approval as Modified by this public comment.

Replace proposal with the following modifications to current text:

807.4.3.2 ~~Artwork~~ Decoration and display material. ~~Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area.~~ Combustible material attached to walls as decoration or display shall meet the following criteria:

1. Combustible material shall not exceed 30 percent of the wall area in a room or 20 percent in a corridor that is not protected throughout by an approved automatic sprinkler system in accordance with Section 903.1.1.
2. Combustible material shall not exceed 50 percent of the wall area in a room or 20 percent in a corridor that is protected throughout by an approved automatic sprinkler system in accordance with Section 903.1.1.

Commenter's Reason: This proposal is modified to address concerns received from comments made from the floor and from the committee members at the code hearing. The amount of combustible materials attached to walls as decoration or display in school classrooms can be exorbitant. The excessive nature of these combustible materials significantly increases the danger to occupants in the event of a fire. These materials will contribute to the fuel loading without a method of controlling the quantity. This proposal will give the fire code official the means to limit the amount of combustible material hung on classroom walls that is absent from the current code language. It is not congruent to require E occupancy rooms to meet the interior wall finish requirements of 803.3, but then allow an unlimited amount of combustible material to be attached to the walls. This proposal is not excessively prohibitive and recognizes the benefits of sprinkler protection by increasing the amount of materials allowed on the walls if sprinklers are provided.

Final Action: AS AM AMPC____ D

F81-06/07

901.6.1.1 (New), 901.6.1.2 (New)

Proposed Change as Submitted:

Proponent: Wayne R. Jewell, CBO, Chairman, ICC Hazard Abatement in Existing Buildings Committee

Add new text as follows:

901.6.1.1 Unsafe conditions requiring component replacement. The following conditions shall be deemed unsafe and shall cause the related component(s) to be replaced to comply with the provisions of this code:

1. Sprinkler heads having any of the following conditions:
   1.1. Signs of leakage;
   1.2. Paint or other ornamentation that is not factory applied;

1.3. Evidence of corrosion including, but not limited to, discoloration or rust;
1.4. Deformation or damage of any part;
1.5. Improper orientation of sprinkler head;
1.6. Empty glass bulb;
1.7. Sprinkler heads manufactured prior to 1920;
1.8. Replacement sprinkler heads that do not match existing sprinkler heads in orifice size, K-factor temperature rating, coating or deflector type; or
1.9. Sprinkler heads for the protection of cooking equipment that have not been replaced within one year.

2. Water pressure and air pressure gauges that have been installed for more than five years and have not been tested to within 3 percent accuracy.

901.6.1.2 Unsafe conditions requiring component repair or replacement. The following conditions shall be deemed unsafe and shall cause the related component(s) to be repaired or replaced to comply with the provisions of this code:

1. Sprinkler and standpipe system piping and fittings having any of the following conditions:
   1.1. Signs of leakage;
   1.2. Evidence of corrosion;
   1.3. Misalignment; or
   1.4. Mechanical damage.

2. Sprinkler piping support having any of the following conditions:
   2.1. Materials resting on or hung from sprinkler piping;
   2.2. Damaged or loose hangers or braces;

3. Class II and Class III standpipe systems having any of the following conditions:
   3.1. No hose or nozzle, where required;
   3.2. Hose threads incompatible with fire department hose threads;
   3.3. Hose connection cap missing;
   3.4. Mildew, cuts, abrasions, and deterioration evident;
   3.5. Coupling damaged;
   3.6. Gaskets missing or deteriorated; or
   3.7. Nozzle missing or obstructed.

4. Hose racks and cabinets having any of the following conditions:
   4.1. Difficult to operate or damaged;
   4.2. Hose improperly racked or rolled;
   4.3. Inability of rack to swing 90 degrees out of the cabinet;
   4.4. Cabinet locked, except as permitted by this code;
   4.5. Cabinet door will not fully open; or
   4.6. Door glazing cracked or broken;

5. Portable fire extinguishers having any of the following conditions:
   5.1. Broken seal or tamper indicator;
   5.2. Expired maintenance tag;
   5.3. Pressure gauge indicator in “red”;
   5.4. Signs of leakage or corrosion;
   5.5. Mechanical damage, denting or abrasion of tank;
   5.6. Presence of repairs such as welding, soldering or brazing;
   5.7. Damaged threads; or
   5.8. Damaged hose assembly, couplings or swivel joints.

6. Fire alarm and detection control equipment, initiating devices and notification appliances having any of the following conditions:
   6.1. Corroded or leaking batteries or terminals;
   6.2. Smoke detectors having paint or other ornamentation that is not factory-applied;
   6.3. Mechanical damage to heat or smoke detectors; or
   6.4. Tripped fuses.

7. Fire department connections having any of the following conditions:
   7.1. Fire department connections are not visible or accessible from the fire apparatus access road;
   7.2. Couplings or swivels are damaged;
   7.3. Plugs and caps are missing or damaged;
   7.4. Gaskets are deteriorated;
   7.5. Check valve is leaking; or
   7.6. Identification signs are missing.

8. Fire pumps having any of the following conditions:
   8.1. Pump room temperature is less than 40 degrees F;

   Exception: Pump room housing a diesel pump equipped with an engine heater.

   8.2. Ventilating louvers are not freely operable;
   8.3. Corroded or leaking system piping;
   8.4. Diesel fuel tank is less than two-thirds full; or
   8.5. Battery readings, lubrication oil or cooling water levels are abnormal.

Reason: The ICC Board approved the development of a new code with the scope including a compilation of current provisions in the I-Codes which address hazards such as those from fire as well as the development of new requirements relative to issues such as hazardous conditions due to structural issues. This would provide a single source code book for all disciplines to be used by building owners to bring their existing building stock up to minimum standards and enforcing agencies when performing inspections of existing buildings. The Hazard Abatement of Existing Buildings Committee (HAEB) was formed to develop this code.

During this 06/07 cycle, the committee is proposing multiple unsafe conditions requirements for inclusion within the text of the existing International Codes, predominately the *International Property Maintenance Code* and the *International Fire Code*. These requirements will later be extracted from these International Codes and placed into a new International Code dealing primarily with unsafe conditions and the abatement thereof. It is intended that the maintenance of these provisions remain with the committee of origin. The draft of this new International Code is currently scheduled to be put through the 07/08 code change process for both public proposals and public comments. The first edition of this new code is currently scheduled for 2009.

The purpose of this proposal is to afford the code official a list of conditions that are readily identifiable by the fire code official during the course of an inspection utilizing the *International Fire Code*. The specific conditions identified in this proposal are primarily derived from applicable NFPA standards, and represent conditions that are readily identifiable by the fire code official during the course of an inspection. All of the identified conditions pose a hazard to the proper operation of the respective systems While these do not represent all of the conditions that pose a hazard or otherwise may impair the proper operation of fire protection systems and are currently enforceable by reference to the applicable standards, identification of conditions directly in the IFC will provide a more direct path for enforcement by the fire code official.

Conditions affecting sprinkler heads, and sprinkler and standpipe system piping and fittings are from Chapter 5 of NFPA 25. Conditions affecting Class II and Class III standpipe systems, hose racks and cabinets are from Chapter 6 of NFPA 25. Identified impairments of portable fire extinguishers are from Chapter 6 and 7 of NFPA 10. Conditions affecting fire alarm systems is primarily from Chapter 10 of NFPA 72. Impairments to fire department connections are from Chapter 12 of NFPA 25, and those related to fire pumps are from Chapter 8 of NFPA 25.

Section 901.6.1.1: This section describes the unsafe conditions that would require component replacement.

Section 901.6.1.2: This section describes the unsafe conditions that would require component repair or replacement.

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

Committee Action: **Disapproved**

Committee Reason: The proposal is formatted similar to a handbook or information manual and contains a number of “laundry lists” which can become problematic if brought into code text. While the subject matter is important, this amount of material might serve better in an appendix. Simple references to appropriate NFPA standards would also be more efficient.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Wayne R. Jewell, Chair, ICC Hazard Abatement in Existing Buildings Committee requests Approval as Modified by this public comment.

Modify proposal as follows:

APPENDIX H
FIRE PROTECTION SYSTEMS – UNSAFE CONDITIONS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

H101
GENERAL

H101.1 This appendix is intended to identify conditions that can occur when fire protection systems are not properly maintained or components have been damaged. This is not intended to provide comprehensive inspection, testing and maintenance requirements, which are found in NFPA 10, 25 and 72. Rather, its intent is to identify problems that are readily observable during fire inspections.

H102
UNSAFE CONDITIONS

~~**901.6.1.1**~~ **H102.1 Unsafe conditions requiring component replacement.** The following conditions shall be deemed unsafe and shall cause the related component(s) to be replaced to comply with the provisions of this code:

(Conditions 1 and 2 remain unchanged)

~~**901.6.1.2**~~ **H102.2 Unsafe conditions requiring component repair or replacement.** The following conditions shall be deemed unsafe and shall cause the related component(s) to be repaired or replaced to comply with the provisions of this code:

(Conditions 1. through 8. remain unchanged)

Commenter's Reason: In disapproving this proposal, the committee noted that the information resembles a handbook or manual more than code text. The committee further commented that the subject matter is important and may be better served in an appendix. In response, the HAEB committee is proposing to delete this proposal from code text and to insert it into a new appendix to the IFC.

While the lists are derived from the applicable NFPA standards, they were not intended to be comprehensive. The true purpose is to serve as a visual reference guide for fire inspectors during their routine visits to buildings. As a checklist, it will serve an important function in assuring that visible indications of system deficiencies are noted.

Final Action: AS AM AMPC____ D

F85-06/07

903.2.1, 903.2.2 (IBC [F] 903.2.1, [F] 903.2.2)

Proposed Change as Submitted:

Proponent: Maureen Traxler, City of Seattle, Washington, Department of Planning & Development

Revise as follows:

903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section. For Group A-1, A-2, A-3, and A-4 occupancies, the automatic sprinkler system shall be provided throughout the floor area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and in all floors between the Group A occupancy and the highest level of exit discharge. For Group A-5 occupancies, the automatic sprinkler system shall be provided in the spaces indicated in Section 903.2.1.5.

903.2.2 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m^2) in area.
2. Throughout every portion of educational buildings below the lowest level of exit discharge.

Exception: An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

Reason: "Level of exit discharge" is defined as "The horizontal plane located at the point at which an exit terminates and an exit discharge begins." Buildings on sloping sites often have more than one level of exit discharge. Unless a particular level of exit discharge is specified, these sections are ambiguous. This proposal specifies the highest level of exit discharge in Section 903.2.1, and the lowest level in Section 903.2.2 because those levels provide the occupants the earliest opportunity to leave the building.

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

Committee Action: **Disapproved**

Committee Reason: The committee agreed that the noted sections are in need of clarification for buildings built on hilly terrain but pointed to the inconsistencies brought out in floor testimony that need to be fixed as the reason for disapproval. In Section 903.2.1, using the term "highest" could be problematic if a Group A occupancy is located below grade in that it could require more sprinklered levels than

are actually necessary. The proponent's intent was to sprinkler levels to the first exit encountered, depending on whether the direction of travel is up or down and the proposal should clearly reflect that intent. It was also suggested that, since the intent is to identify exit discharge levels serving the occupancy, using the word "serving" might be useful. The proponent was encouraged to return with a public comment dealing with those issues.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Maureen Traxler, City of Seattle, Washington, Department of Planning and Development requests Approval as Modified by this public comment.

Modify proposal as follows:

903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section. For Group A-1, A-2, A-3 and A-4 occupancies, the automatic sprinkler system shall be provided throughout the floor area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and in all floors between the Group A occupancy and the ~~highest~~ nearest level of exit discharge serving the Group A occupancy. For Group A-5 occupancies, the automatic sprinkler system shall be provided in the spaces indicated in Section 903.2.1.5.

903.2.2 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m2) in area.
2. Throughout every portion of educational buildings below the lowest level of exit discharge that serves that portion of the building.

> **Exception:** An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

Commenter's Reason: Buildings on sloping sites often have more than one level of exit discharge. Unless a particular level of exit discharge is specified, sections 903.2.1 and 903.2.2 are ambiguous. This public comment specifies that sprinklers are required for all floors between Group A occupancies and the level of exit discharge closest to the assembly, that also serves the assembly. This provides protection for occupants of Group A until they reach a floor that provides them access to a public way.

Similarly, section 903.2.2 is modified to provide sprinkler protection for occupants of educational buildings until they reach the nearest level of exit discharge.

Final Action: AS AM AMPC____ D

F94-06/07
903.3.1.1.1 (IBC [F] 903.3.1.1.1)

Proposed Change as Submitted:

Proponent: Michael Perrino, Code Consultants, Inc.

Revise as follows:

903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.
5. In atriums and participant sports areas in accordance with the exceptions to Sections 914.4.1, 903.2.1.3 and 903.2.1.4.

[Note: For the coordinating change to the IBC, the atrium section is 404.3]

Reason: The purpose of the proposed change is to permit code allowances for fully sprinklered buildings when sprinkler systems are designed in accordance with the information in this change.

In atriums and participant sports areas, the installation of sprinklers provides little if any added benefit. The unique characteristics of these very high spaces create inherent conditions that improve life safety. Smoke and hot gases rise upward and away from the fire seat and where occupants would be on the floor. In very large spaces the volume of the space acts to dilute the products of combustion to less than hazardous levels. In effect, in every location where sprinklers can be effective, sprinklers would still be required. Thus, the building can still be considered as "equipped throughout" from a practical perspective, which should allow the other provisions in the code to be applied.

This proposal is no different than the omission of sprinklers as noted in exception 4 of this section. In both cases, the presence of sprinklers would be of no benefit.

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

Committee Action: **Disapproved**

Committee Reason: The proposal would allow a virtually nonsprinklered building to be allowed to take full code credits for being equipped throughout. If the intent of the proposal is to be considered, it should be on a case basis by the fire code official under IFC Section 104.9.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Gene Boecker, Code Consultants, Inc., requests Approval as Modified by this public comment.

Modify proposal as follows:

903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.
5. In ~~atriums and~~ participant sports areas in accordance with the exceptions to Sections ~~914.4.1,~~ 903.2.1.3 and 903.2.1.4.

Commenter's Reason: During public testimony there was no discussion regarding this being an issue for participant sports arenas. This public comment is submitted to address the item for which no objection was voiced.

To address the committee's comments: while it may be true that there would be fewer sprinklers in the building, the reason for not including those sprinklers is base don the fact that the sprinklers would not activate due to excessive building height. In the large indoor spaces with high ceilings, the temperature of the smoke plume begins to drop as cooler ambient air is entrained. The greater the height, the more cooling occurs. And, since the volume of these spaces is so great, the ambient air temperature does not rise significantly enough to allow temperature rise to fusible link temperatures within the time it takes for a potential fire to burn itself out. Because the fuel load on the floor of a sports facility is so low, the fire size is also low. Even in cases where the event floor may be used for exhibition, the height of the facility is significant enough that the cooling action noted above is still sufficient to preclude sprinkler activation.

Due to the heights involved, sprinkler activation is not likely. Consequently, the installation of sprinklers would be no appreciable additive value but would pose a maintenance liability. Imagine the need to install scaffolding or boom extensions to reach the high ceiling of many sports facilities. The installation of sprinklers in these location does not affect the benefit of having those sprinklers. The result is the same whether they are installed or not. Consequently, the code should recognize those conditions. It already recognizes those conditions in exception # 4 where the low fuel load would not result in sprinkler activation. The proposal is addressing the same condition but base don ceiling height rather than contents.

Final Action: AS AM AMPC____ D

F100-06/07
903.4.2 (IBC [F] 903.4.2)

Proposed Change as Submitted:

Proponent: Thomas P. Hammerberg, Automatic Fire Alarm Association, Inc.

Revise as follows:

903.4.2 Alarms. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

> **Exception:** Where a dedicated function fire alarm system is installed exclusively to transmit waterflow signals to a remote monitoring location, only one alarm notification appliance shall be installed in the vicinity of the required manual fire alarm box and will sound upon actuation of the waterflow alarm device or the manual fire alarm box.

Reason: There is a great deal of confusion about the requirements for occupant notification when a fire alarm system is only installed to provide supervising station monitoring for a sprinkler system. The last sentence in paragraph 903.4.2 states that when a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. NFPA 72 added a new definition for this type of fire alarm system and will be called a "dedicated function fire alarm system". The intent of that change was to avoid confusion with all the requirements of a "building fire alarm system." This exception is needed to clearly indicate that when a fire alarm system is only installed for monitoring the sprinkler system, full occupant notification is not required. Since the primary purpose of this fire alarm control unit is to provide a means for monitoring the sprinkler system and not provide occupant notification, adding a single audible alarm notification appliance in the vicinity of the required manual fire alarm box is necessary to provide feedback to the person who actuated this manual fire alarm box. I purposely did not include visible alarm notification to prevent any potential conflict with ADAAG requirements. I have submitted a separate proposal to add the requirement for this manual fire alarm box to the IFC. The Protected Premises Technical Committee of NFPA 72 feels it is better suited in the IBC and IFC than in NFPA 72 and intends to remove this requirement once it is included in the IBC and IFC.

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

Committee Action: **Disapproved**

Committee Reason: The proposed exception is confusing and would waive the current requirement for an outside waterflow alarm device. In all likelihood, if the sprinkler system is out of service, the fire alarm will also be out of service, The current text is preferred.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Gene Boecker, Code Consultants, Inc., requests Approval as Modified by this public comment.

Modify proposal as follows:

903.4.2 Alarms. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is ~~installed~~ required in accordance with Section 907, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

> ~~**Exception:** Where a dedicated function fire alarm system is installed exclusively to transmit waterflow signals to a remote monitoring location, only one alarm notification appliance shall be installed in the vicinity of the required manual fire alarm box and will sound upon actuation of the waterflow alarm device or the manual fire alarm box.~~

Commenter's Reason: The intent of the original proposal was to make it clear that the addition of the water flow notification device did not necessitate a fire alarm system with full occupant notification. If that were the case, the code would simply require a fire alarm in every situation where sprinklers are provided. That was never the intent under the legacy codes and is not the intent in the current I-codes.

This device is required so that someone knows that sprinkler water flow has occurred. It, being monitored, would relay that information to the monitoring service. However, it is not the intent to evacuate the building when a flow test is performed or an accidental water flow occurs.

The added text would indicate that the need to activate the fire alarm system is first and foremost, when such a system is already present as it would be if it is required by code. If a fire alarm system is installed, it is already required to activate the occupant notification system by [2006] Section 907.7. This is even better clarified in the approved/modified text of Section 907.6 in code change F122-06/07.

The proposed text would reduce the erroneous assumption by some that a fire alarm system with complete occupant notification is required throughout the building by this section.

Final Action: AS AM AMPC____ D

F102-06/07

904.11.6.3, 904.11.6.3.1 through 904.11.6.3.3 (New)

Proposed Change as Submitted:

Proponent: Daniel E. Nichols, New York State Department of State

1. Revise as follows:

904.11.6.3 Cleaning. Hoods, grease-removal devices, fans, ducts and other appurtenances shall be cleaned at intervals ~~necessary to prevent the accumulation of grease~~ as required by this section. ~~Cleanings shall be recorded, and records shall state the extent, time and date of cleaning. Such records shall be maintained on the premises.~~

2. Add new text as follows:

904.11.6.3.1 Inspection. Hoods, grease-removal devices, fans, ducts, and other appurtenances shall be inspected at intervals specified in Table 904.11.6.3.1. Inspections shall be by completed by qualified individuals or by the fire code official.

TABLE 904.11.6.3.1
COMMERCIAL COOKING SYSTEM INSPECTION FREQUENCY

TYPE OF COOKING OPERATIONS	FREQUENCY OF INSPECTION
High-volume cooking operations such as 24-hour cooking, charbroiling, or wok cooking	3 months
Low-volume cooking operations such as places of religious worship, seasonal businesses, and senior centers	12 months
Cooking operations utilizing solid-fuel burning cooking appliances	1 month
All other cooking operations	6 months

904.11.6.3.2 Cleaning. If during the inspection it is found that hoods, grease-removal devices, fans, ducts, or other appurtenances have an accumulation of grease, such components shall be cleaned.

904.11.6.3.3 Records. Each inspection or cleaning shall be recorded and a copy of such shall be maintained on premises. Records for inspections shall state the individual performing the inspection, a description of the inspection, and when the inspection took place. Records for cleanings shall state the individual performing the cleaning and when the cleaning took place. Such records shall be maintained on the premises for a minimum of three years and be copied to the fire code official upon request.

Reason: The purpose of this code change proposal is to assist the fire code official by placing specific requirements for hoods and duct inspections within the IFC.

The IFC currently does not provide specific information on when kitchen hood systems need to be inspected. The current language states that hoods need to be inspected when grease accumulates. How does the fire code official know when this happens? It is clear that the intent of the section is to require a periodic inspection of kitchen hood systems. This is further supported by NFPA data that shows one-half of fires in assembly occupancies are caused by cooking appliances and 7% of all injuries are caused from a fire that started in the hood and duct system.

In the previous cycle, a similar proposal submitted by the proponent was denied. The previous proposal was scoped to add a reference to NFPA 96 for the inspection and maintenance provisions. Fire code officials voiced their concern that the requirements that fire code officials will enforce in the field need to be in the IFC, not a reference standard. Taking an approach to meet the needs of fire code officials, this proposal places the specific requirements right into the IFC.

It is the intent of the new proposal to give guidance to fire code officials for requiring periodic inspections of kitchen hood systems (based on use), direct requirements on cleaning when found to be deficient, and definitive records development and retention.

Bibliography: NFPA-Fire Loss Data of Assembly Occupancies, NFPA 96

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

Committee Action: **Disapproved**

Committee Reason: The committee generally agreed with the concept of the proposal but felt that it contains vague and subjective language that could result in inconsistent enforcement. In Section 904.11.6.3.1, it is unclear who would be considered "qualified individuals" and whether that would include the fire code official. In Section 904.11.6.3.2, cleaning would be required if hoods, etc. "have an accumulation of grease" but it is unclear what that means since there will always be a certain amount of grease in the system. In Section 904.11.6.3.3, the name of the cleaning firm should also be included. A concern was also expressed that having a fixed cleaning schedule could be problematic since some cooking operations could seasonally vary in the amount of grease produced and thus the inspection frequency needed.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Daniel E. Nichols, PE, New York State Department of State, requests Approval as Modified by this public comment.

Modify proposal as follows:

904.11.6.3.1 Inspection. Hoods, grease-removal devices, fans, ducts, and other appurtenances shall be inspected at intervals specified in Table 904.11.6.3.1 or as approved by the fire code official. Inspections shall be by completed by qualified individuals ~~or by the fire code official~~.

904.11.6.3.3 Records. ~~Each inspection or cleaning shall be recorded and a copy of such shall be maintained on premises~~. Records for inspections shall state the individual and company performing the inspection, a description of the inspection, and when the inspection took place. Records for cleanings shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning, maintained on the premises for a minimum of three years, and be copied to the fire code official upon request.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: At the hearings in Orlando, the IFC code development committee generally agreed that a code section that gave further direction on hood cleaning was needed. This public comment addresses the concerns of the committee as well as the comments from the floor:

1. Section 904.11.6.3.1 was modified to include the phrase "or as approved by the fire code official" to allow AHJ's to alter the inspection schedule based on specific conditions. The specific conditions that were mentioned were mainly based on irregular cooking frequencies, such as seasonal uses and religious groups. However, the seasonal use frequency in the table was left as a guidance tool for code users that do not set a different frequency in their jurisdiction.
2. Section 904.11.6.3.1 was modified to remove 'fire code official' from the qualified individuals sentence; returning the qualification requirements back to those found within the current IFC.
3. One comment was stated regarding 'What does the accumulation of grease mean?" This language is currently in the IFC and the intention of the original code change proposal was not to change the conditions of when hood gets cleaned.
4. One comment regarded that the company, in addition to the individual, shall be added as part of the record requirement. Section 904.11.6.3.3 has been modified to address this concern.

I trust that the membership will consider this public comment and recognize the necessity for this code change proposal. This is supported by NFPA data that shows one-half of fires in assembly occupancies are caused by cooking appliances and 7% of all injuries are caused from a fire that started in the hood and duct system.

It is still the intent that the hood inspection and cleaning requirements, including any changes made here, be moved to Chapter 6. This move was already approved in F55-06/07.

Final Action: AS AM AMPC____ D

F113-06/07, Part I
907.2.12.1 (IBC [F] 907.2.12.1)

Proposed Change as Submitted:

Proponent: Dave Frable, U.S. General Services Administration

PART I – IFC

Revise as follows:

907.2.12.1 Automatic fire detection. Smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall operate the emergency voice/alarm communication system. Smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room which is not provided with sprinkler protection, elevator machine rooms and in elevator lobbies.
2. In the main supply air duct of each air-handling system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m^3/s), downstream of any filters.
2. 3. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than ~~2,000~~ 15,000 cubic feet per minute (cfm) (0.94 m^3/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
4. In the return air system where multiple air-handling systems share common or supply return air ducts or plenums with a combined design capacity greater than 15,000 cfm (7.1 m^3/s),
5. At each story in return air systems having a design capacity greater than 15,000 cfm (7.1 m^3/s), where return air risers serve two or more stories.
3. 6. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system with a design capacity of greater than 15,000 cfm (7.1 m^3/s). In Group R-1 and R-2 occupancies a listed smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m^3/s) and serving not more than 10 air inlet openings.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*.

Reason: (New) IFC 907.2.12.1, paragraph 2 and IMC 606.2.1: Over the past few years, the U.S. General Services Administration has had a number of fire incidences that did not activate the building fire alarm system because there were no smoke detectors installed in the main supply air duct of the air-handling system downstream of any filter. We believe the solution would be to require smoke detectors to be installed in supply air systems so that fires that occur in the supply air filters can be discovered before it spreads. Establishing a 2,000 cfm threshold for installing detectors in supply air fans appears to be an industry standard.

(Revision) 606.2.1 and 606.2.2 (changed to 606.2.2 and 606.2.3, respectively) and (new) 907.2.12.1, paragraphs 3 & 4 (Note: the intent is for 907.2.12.1 to be have similar language as 606.2.2 and 606.2.3 so the codes are coordinated):

We also believe that the current requirement for installing smoke detectors in return air systems exceeding 2,000 cfm is overly restrictive. Furthermore, it seems to be completely opposite of what had been required by all of the legacy codes prior to the development of the 2000 IBC (i.e., previously, all three model building codes didn't require smoke detectors in return air systems unless they exceeded 15,000 cfm, not 2,000 cfm as currently required; and previous model codes required smoke detectors in supply air systems exceeding 2,000 cfm.

(New) IFC 907.2.12.1, paragraph 5 is material extracted from IMC existing 606.2.3 (changed to 606.2.4).

This is an editorial change to coordinate the two codes.

(Revision) 907.2.12.1 Paragraph No. 6 (formally Paragraph No. 3) – The purpose of this code change is to correlate this paragraph with the changes above. The code language contained in the IBC does not have a capacity threshold for return air ducts/plenum with connections to more than two stories and, therefore, all return duct/plenum system that connects more than two floors would require duct mounted smoke detectors at the connection to the riser regardless of the size of the system. This would be onerous to smaller buildings that have multi-story returns. In addition, the previous editions of the model building codes (pre-IBC 2000) did not require smoke detectors in multi-story return air systems unless they exceeded 15,000 cfm. This change also would correlate the capacity requirements currently specified in NFPA 90A - 2002 edition (NFPA 90A – 6.4.2).

(New) Exception to IFC 907.2.12.1 is material extracted from the IMC existing exception to 606.2.1 (changed to 606.2.2). This is an editorial change to coordinate the two codes.

(Deletion) Exception to IMC 606.2.2 (changed to IMC 606.2.3):
Exception needs to be deleted given the proposed new return air threshold will be increased from 2,000 cfm to 15,000 cfm.

As far as the cost impact, although there will be a new requirement to install smoke detectors in the supply side of the air handling equipment, the number of additional detectors required to be installed on the supply side should be offset by the greater number of detectors that will no longer be required on the return side of the air handling equipment.

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

Committee Action: **Approved as Submitted**

Committee Reason: Based on the proponent's reason statement. The proposal will provide correlation with the IMC and improve the level of protection against filter fires in air-handling systems. The threshold values will better correlate with the IMC and NFPA 90A as well as return them to the level of the legacy codes.

Assembly Action: **None**

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Dave Frable, U.S. General Services Administration/Public Buildings Service, requests Approval as Submitted for Part I.

Commenter's Reason: As proponent of the original code change proposal, I submit this comment to support the successful action of the Fire Code Committee and the Mechanical Code Committee in Lake Buena Vista that recommended approval of this code change. Currently many jurisdictions reference both the IFC/IMC and NFPA 90A which results in the unnecessary installation of duct smoke detectors in both the return and supply ducts. This code change removes the requirement to install duct detectors in exhaust ducts and will help coordinate between the IFC/IMC with NFPA 90A. Fires on the supply air side of HVAC units due to fan belts, motors or combustible filters will be detected much quicker and fans shut off appropriately. Any smoke from a fire that travels in a return air duct will be detected by the supply side duct smoke detector. In addition, a supply duct smoke detector could also pick up an exterior fire that gets pulled into the air handling system. Last but not least, we also believe that the current requirement for installing smoke detectors in return air systems exceeding 2,000 cfm is overly restrictive and seems to be completely opposite of what had been required by two of the three legacy codes (i.e., UBC and BOCA) prior to the development of the 2000 IBC.

Public Comment 2:

Peter A. Larrimer, Department of Veterans Affairs, representing himself, requests Approval as Modified by this public comment for Part I.

Modify Part I of the proposal as follows:

907.2.12.1 Automatic fire detection. Smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall operate the emergency voice/alarm communication system. Smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room which is not provided with sprinkler protection, elevator machine rooms and in elevator lobbies.
2. In the main supply air duct of each air-handling system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m^3/s), downstream of any filters.
3. In the main return ~~air and exhaust air plenum~~ of each air~~-conditioning~~ handling system having a capacity greater than 15,000 cubic feet per minute (cfm) (0.94 m^3/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
4. In the return air system where multiple air-handling systems share common or supply return air ducts or plenums with a combined design capacity greater than 15,000 cfm (7.1 m^3/s),
5. At each story in return air systems having a design capacity greater than 15,000 cfm (7.1 m^3/s), where return air risers serve two or more stories.
6. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system with a design capacity of greater than 15,000 cfm (7.1 m^3/s). In Group R-1 and R-2 occupancies a listed smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m^3/s) and serving not more than 10 air inlet openings.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*.

Commenter's Reason: Accepting the proposals with the modification will help coordinate with NFPA 90A. Hospitals must comply with NFPA 90A for JCAHO accreditation as reference by NFPA 101. Presently, duct detection is often provided on both the supply and return to comply with the IFC/IMC and NFPA. The modification removes the requirement to install duct detectors in exhaust ducts. This will coordinate with both NFPA 90A and the IMC which do not require duct detection in exhaust systems. Fires on the supply air side of HVAC units due to fan belts, motors or combustible filters will be detected and fans shut off appropriately. Smoke from a fire that travels in a return air duct will be detected by the supply side duct smoke detector. Detection is improved by accepting the proposal.

Public Comment 3:

Cecil F. Hardee, Jr., County of Fairfax, Virginia, representing Virginia Plumbing and Mechanical Association (VPMIA) and the Virginia Building Code Officials Association (VBCOA), requests Disapproval of Part I.

Commenter's Reason: There was a successful Assembly Floor Action to disapprove Part II of this proposal. The published reason statement indicates this achieves consistency with the IMC. This is incorrect, the IMC requires detection in the returns. It further states that this achieves consistency with NFPA 90A. NFPA 90A is not a referenced Standard through the IMC or the IBC, so this is not relevant to there application. The current text does not prohibit the use of smoke detectors in the supply duct it only requires them in the returns. The proponent states that they have experienced a number of fire incidences but failed to provide complete information of these fires as to exactly how the relocation of detection would have lessened their effect. Is the intent of duct detectors to protect the filters or the spaces?

This supply vs return issue has been debated back and forth for years and it needs to stop. Industry is paying the price each time this requirement changes. One of the largest problems occurs when a retrofit happens. If the existing detection is provided one location or the other it seems that an additional unit is almost always required. Let's leave the requirement to install detection in the returns. If what the proponent is trying to achieve is consistency, then this may be an opportunity to submit a code change to that reference document and align it with the ICC requirements, not the other way around. Placing the detector in the supply would defeat the intent of having the air in the space be detected for smoke. Installation in the supply allows outside containments and dilution through the outside air flow which may lead to a reduced sensitivity or false detection of smoke. Through all the debate that has previously occurred it has been determined that detection of the return air stream produces the greater level of safety.

Public Comment 4:

Eirene Oliphant, MCP, City of Leawood, Kansas, representing Metropolitan Kansas City Chapter of the ICC, requests Disapproval of Part I.

Commenter's Reason: While both Parts I & II were approved by their respective committees, assembly action on Part II was for disapproval. Language between the I Codes needs to be consistent.

In addition, the proposed changes provide redundant redundancy. This is not necessary, nor is it cost effective to a building owner. The Fire Committee referred to this change as providing protection against filter fires in air handling systems. The proponent notes problems due to lack of smoke detectors in the supply side, perhaps the real source of those fire stems from lack of maintenance. The code is a minimum. If an agency or jurisdiction wants to provide an additional requirement of smoke detectors on the supply side, then do it in conjunction with the adoption of the code.

Final Action: AS AM AMPC____ D

F113-06/07, Part II
IMC 606.2 through 606.2.4

Proposed Change as Submitted:

Proponent: Dave Frable, U.S. General Services Administration

PART II – IMC

Revise as follows:

606.2 Where required. Smoke detectors shall be installed where indicated in Sections 606.2.1 through ~~606.2.3~~ 606.2.4.

Exception: Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated.

606.2.1 Supply air systems. Smoke detectors shall be installed in supply air systems with a design capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m^3/s), in the supply air duct or plenum downstream of any filters.

~~**606.2.1**~~ **606.2.2 Return air systems.** Smoke detectors shall be installed in return air systems with a design capacity greater than ~~2,000~~ 15,000 cfm (~~0.9~~ 7.1m^3/s), in the return air duct or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*. The area smoke detection system shall comply with Section 606.4.

~~**606.2.2**~~ **606.2.3 Common supply and return air systems.** Where multiple air-handling systems share common supply or return air ducts or plenums with a combined design capacity greater than ~~2,000~~ 15,000 cfm (~~0.9~~ 7.1 m^3/s), the return air system shall be provided with smoke detectors in accordance with Section 606.2.2~~1~~.

~~**Exception:** Individual smoke detectors shall not be required for each fan-powered terminal unit, provided that such units do not have an individual design capacity greater than 2,000 cfm (0.9 m^3/s) and will be shut down by activation of one of the following:~~

~~1. Smoke detectors required by Sections 606.2.1 and 606.2.3.~~
~~2. An approved area smoke detector system located in the return air plenum serving such units.~~
~~3. An area smoke detector system as prescribed in the exception to Section 606.2.1~~.

In all cases, the smoke detectors shall comply with Sections 606.4 and 606.4.1.

~~**606.2.3**~~ **606.2.4 Return air risers.** Where return air risers serve two or more stories and serve any portion of a return air system having a design capacity greater than 15,000 cfm (7.1m3/s), smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the return air riser and any air ducts or plenums.

Reason: (New) IFC 907.2.12.1, paragraph 2 and IMC 606.2.1: Over the past few years, the U.S. General Services Administration has had a number of fire incidences that did not activate the building fire alarm system because there were no smoke detectors installed in the main supply air duct of the air-handling system downstream of any filter. We believe the solution would be to require smoke detectors to be installed in supply air systems so that fires that occur in the supply air filters can be discovered before it spreads. Establishing a 2,000 cfm threshold for installing detectors in supply air fans appears to be an industry standard.

(Revision) 606.2.1 and 606.2.2 (changed to 606.2.2 and 606.2.3, respectively) and (new) 907.2.12.1, paragraphs 3 & 4 (Note: the intent is for 907.2.12.1 to be have similar language as 606.2.2 and 606.2.3 so the codes are coordinated):

We also believe that the current requirement for installing smoke detectors in return air systems exceeding 2,000 cfm is overly restrictive. Furthermore, it seems to be completely opposite of what had been required by all of the legacy codes prior to the development of the 2000 IBC (i.e., previously, all three model building codes didn't require smoke detectors in return air systems unless they exceeded 15,000 cfm, not 2,000 cfm as currently required; and previous model codes required smoke detectors in supply air systems exceeding 2,000 cfm.

(New) IFC 907.2.12.1, paragraph 5 is material extracted from IMC existing 606.2.3 (changed to 606.2.4).

This is an editorial change to coordinate the two codes.

(Revision) 907.2.12.1 Paragraph No. 6 (formally Paragraph No. 3) – The purpose of this code change is to correlate this paragraph with the changes above. The code language contained in the IBC does not have a capacity threshold for return air ducts/plenum with connections to more than two stories and, therefore, all return duct/plenum system that connects more than two floors would require duct mounted smoke detectors at the connection to the riser regardless of the size of the system. This would be onerous to smaller buildings that have multi-story returns. In addition, the previous editions of the model building codes (pre-IBC 2000) did not require smoke detectors in multi-story return air systems unless they exceeded 15,000 cfm. This change also would correlate the capacity requirements currently specified in NFPA 90A - 2002 edition (NFPA 90A – 6.4.2).

(New) Exception to IFC 907.2.12.1 is material extracted from the IMC existing exception to 606.2.1 (changed to 606.2.2). This is an editorial change to coordinate the two codes.

(Deletion) Exception to IMC 606.2.2 (changed to IMC 606.2.3):
Exception needs to be deleted given the proposed new return air threshold will be increased from 2,000 cfm to 15,000 cfm.

As far as the cost impact, although there will be a new requirement to install smoke detectors in the supply side of the air handling equipment, the number of additional detectors required to be installed on the supply side should be offset by the greater number of detectors that will no longer be required on the return side of the air handling equipment.

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

Committee Action: **Approved as Submitted**

Committee Reason: This proposed change will correlate with the requirements found in NFPA 90A, resulting in only requiring a smoke detector in the supply duct. Many jurisdictions use both NFPA 90A and the I-codes which causes contractors to have to install detectors in both the return and supply ducts. This will alleviate that problem. The proponent cited many examples where the detector failed to shut down the fans because the fire was in the filter and the detector was in the return. The committee also wanted to be consistent with the action taken by the Fire Code committee.

Assembly Action: **Disapproved**

Individual Consideration Agenda

This item is on the agenda for individual consideration because an assembly action was successful and public comments were submitted.

Public Comment 1:

Dave Frable, U.S. General Services Administration/Public Buildings Service, requests Approval as Submitted for Part II.

Commenter's Reason: As proponent of the original code change proposal, I submit this comment to support the successful action of the Fire Code Committee and the Mechanical Code Committee in Lake Buena Vista that recommended approval of this code change.

Currently many jurisdictions reference both the IFC/IMC and NFPA 90A which results in the unnecessary installation of duct smoke detectors in both the return and supply ducts. This code change removes the requirement to install duct detectors in exhaust ducts and will help coordinate between the IFC/IMC with NFPA 90A. Fires on the supply air side of HVAC units due to fan belts, motors or combustible filters will be detected much quicker and fans shut off appropriately. Any smoke from a fire that travels in a return air duct will be detected by the supply side duct smoke detector. In addition, a supply duct smoke detector could also pick up an exterior fire that gets pulled into the air handling system. Last but not least, we also believe that the current requirement for installing smoke detectors in return air systems exceeding 2,000 cfm is overly restrictive and seems to be completely opposite of what had been required by two of the three legacy codes (i.e., UBC and BOCA) prior to the development of the 2000 IBC.

Public Comment 2:

Peter A. Larrimer, Department of Veterans Affairs, representing himself, requests Approval as Submitted for Part II.

Commenter's Reason: Accepting the proposals with the modification will help coordinate with NFPA 90A. Hospitals must comply with NFPA 90A for JCAHO accreditation as reference by NFPA 101. Presently, duct detection is often provided on both the supply and return to comply with the IFC/IMC and NFPA. The modification removes the requirement to install duct detectors in exhaust ducts. Fires on the supply air side of HVAC units due to fan belts, motors or combustible filters will be detected and fans shut off appropriately. Smoke from a fire that travels in a return air duct will be detected by the supply side duct smoke detector. Detection is improved by accepting the proposal.

Public Comment 3:

Cecil F. Hardee, Jr., County of Fairfax, Virginia, representing Virginia Plumbing and Mechanical Association (VPMIA) and the Virginia Building Code Officials Association (VBCOA), requests Disapproval of Part II.

Commenter's Reason: There was a successful Assembly Floor Action to disapprove Part II of this proposal. The published reason statement indicates this achieves consistency with the IMC. This is incorrect, the IMC requires detection in the returns. It further states that this achieves consistency with NFPA 90A. NFPA 90A is not a referenced Standard through the IMC or the IBC, so this is not relevant to there application. The current text does not prohibit the use of smoke detectors in the supply duct it only requires them in the returns. The proponent states that they have experienced a number of fire incidences but failed to provide complete information of these fires as to exactly how the relocation of detection would have lessened their effect. Is the intent of duct detectors to protect the filters or the spaces?

This supply vs return issue has been debated back and forth for years and it needs to stop. Industry is paying the price each time this requirement changes. One of the largest problems occurs when a retrofit happens. If the existing detection is provided one location or the other it seems that an additional unit is almost always required. Let's leave the requirement to install detection in the returns. If what the proponent is trying to achieve is consistency, then this may be an opportunity to submit a code change to that reference document and align it with the ICC requirements, not the other way around. Placing the detector in the supply would defeat the intent of having the air in the space be detected for smoke. Installation in the supply allows outside containments and dilution through the outside air flow which may lead to a reduced sensitivity or false detection of smoke. Through all the debate that has previously occurred it has been determined that detection of the return air stream produces the greater level of safety.

Public Comment 4:

Eirene Oliphant, MCP, City of Leawood, Kansas, representing Metropolitan Kansas City Chapter of the ICC, requests Disapproval of Part II.

Commenter's Reason: While both Parts I & II were approved by their respective committees, assembly action on Part II was for disapproval. Language between the I Codes needs to be consistent.

In addition, the proposed changes provide redundant redundancy. This is not necessary, nor is it cost effective to a building owner. The Fire Committee referred to this change as providing protection against filter fires in air handling systems. The proponent notes problems due to lack of smoke detectors in the supply side, perhaps the real source of those fire stems from lack of maintenance. The code is a minimum. If an agency or jurisdiction wants to provide an additional requirement of smoke detectors on the supply side, then do it in conjunction with the adoption of the code.

Final Action: AS AM AMPC____ D

F122-06/07, Part I
907

Proposed Change as Submitted:

Proponent: Gene Boecker, Code Consultants, Inc.

PART I – IFC

Revise and reorganize section as follows:

SECTION 907
FIRE ALARM AND DETECTION SYSTEMS

907.1 General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures. The requirements of Section 907.3 are applicable to existing buildings and structures as follows:

1. The requirements of Section 907.2 are applicable to new buildings and structures.
2. The requirements of Section 907.3 are applicable to existing buildings and structures.

907.1.1 ~~Construction documents~~ Shop drawings. ~~Construction documents~~ Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation. ~~Construction documents~~ shop drawings shall include, but not be limited to, all of the following:

1. A floor plan which indicates the use of all rooms.
2. Locations of alarm-initiating and notification appliances.
3. ~~Alarm control and trouble signaling equipment.~~ Location of fire alarm control unit, transponders, and notification power supplies.
4. ~~Annunciation.~~ Annunciators.
5. Power connection.
6. Battery calculations.
7. Conductor type and sizes.
8. Voltage drop calculations.
9. Manufacturer~~s,~~ data sheets indicating model numbers and listing information for equipment, devices and materials.
10. Details of ceiling height and construction.
11. The interface of fire safety control functions.
12. Classification of the supervising station.

907.1.2 Equipment. Systems and ~~their~~ components shall be listed and approved for the purpose for which they are installed.

907.2 Where required—new buildings and structures. An approved manual, automatic or manual and automatic fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through ~~907.2.23~~ 907.2.21 and provide occupant notification in accordance with Section ~~907.10~~ 907.6, unless other requirements are provided by another section of this code. ~~Where automatic sprinkler protection installed in accordance with Section 903.3.1.1 or 903.3.1.2 is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required.~~

~~The automatic fire detectors shall be smoke detectors. Where ambient conditions prohibit installation of automatic smoke detection, other automatic fire detection shall be allowed.~~ A minimum of one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or waterflow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exception: The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group A occupancies having an occupant load of 300 or more. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system and the ~~alarm~~ occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.