AHC Meeting #9
March 21-22, 2013
Fire Safety Work Group Report

The following 2013 Group B changes have been compiled for the above noted AHC Work Group. Code changes with an (*) indicate AHC sponsored Code changes. These changes are intended to serve as the agenda for the AHC in order to establish AHC positions, if any, for the upcoming 2013 Group B Committee Action Hearings.

EB16-13
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F225-13*
F236-13*
F257-13
F291-13*
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F308-13*
F320-13*
F348-13*
P1-13

EB16–13
705 (NEW)

Proponent: Rebecca Morley, National Center for Healthy Housing

Add new text as follows:

SECTION 705
CARBON MONOXIDE ALARMS

705.1 General. Carbon monoxide alarms shall be installed in existing Group I or R occupancies in accordance with Section 1103.9 of the *International Fire Code*.

Reason: Carbon monoxide (CO) is an odorless, tasteless, invisible gas that kills more than 300 people in homes each year. Thousands more are admitted to the hospital with carbon monoxide poisoning. This is a serious issue that affects people nationwide is all regions of the country. The International Residential Code requires CO alarms for residences with fuel-fired appliances or attached garages. This change would make the IEBC consistent with the IRC.

The following states have required CO alarms in existing residences: Alaska, California, Colorado, Illinois, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, North Carolina, Oklahoma, Oregon, Rhode Island, Vermont and Wisconsin. Deaths from CO are spread throughout the country as residents unwittingly use dangerous methods to stay warm in unusually cold weather.

Cost Impact: Yes, this code change proposal will increase the cost of property maintenance. A carbon monoxide alarm typically costs approximately $25.

F3–13
202 (IBC [F] 202)

Proponent: Marcelo M Hirschler, GBH International (gbhint@aol.com)

Revise as follows:

SECTION 202 (IBC [F] 202)
GENERAL DEFINITIONS

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

Reason: This is just a small cleanup in the definition of decorative materials to be consistent with section 807 of the code.

Cost Impact: Minimal

F4–13
202 (IBC [F] 202)

Proponent: Amy Carpenter, AIA, Pioneer Network Long Term Care Code Task Force

Revise as follows:

SECTION 202 (IBC [F] 202)
GENERAL DEFINITI0NS

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

Reason: Companion proposal to IFC Section 807. Clarifying and expanding definition of decorative materials, to include paper-based products and for correlation.

Cost Impact: None

F14–13*
310.3.1 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

310.3.1 Group I-2. In Group I-2 occupancies where smoking is prohibited, "No Smoking " signs are not required in interior locations of the facility where signs are displayed at all major entrances into the facility.

Reason: This proposal will provide correlation with NFPA 101 Section 19.7.4.2 which contains an exception for healthcare occupancies that allows for a facility to not install secondary "No Smoking Signs" throughout a facility if primary signs are prominently displayed at all major entrances. This exception is not currently included in the IFC. Since healthcare facilities already prohibit smoking, where signs are posted at the entrances it is redundant and unnecessary to also require the signs to be posted throughout a facility that does not permit smoking, has a staff trained to monitor and policies in place to quickly stop or prevent the action.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/default.aspx. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public. In 2012, three of the 25 face-to face meetings were held. In addition to the CTC meetings, the CTC established Study Groups (SG) of interested parties for each of the areas of study. These SG's are responsible for reviewing the available information and making recommendations to the CTC. All totaled, the SG's held over 70 conference calls in 2012.

Cost impact: This proposal will not increase the cost of construction.

F18–13
315.6 (New), 202 (New)

Proponent: Marcelo M Hirschler, GBH International (gbhint@aol.com)

Add new text as follows:

315.6 Storage in Plenums in Group I Occupancies. Storage shall not be permitted in plenums in Group I occupancies. Abandoned material in plenums in Group I occupancies shall be deemed to be storage and shall be removed. The accessible portion of abandoned cables in plenums in Group I occupancies that are not identified for future use with a tag shall be deemed storage and shall be removed.

SECTION 202
GENERAL DEFINITIONS

[M] PLENUM. An enclosed portion of the building structure, other than an occupiable space being conditioned, that is designed to allow air movement, and thereby serve as part of an air distribution system.

Reason: This new section is intended to introduce a concept that has been in the National Electrical Code (as well as in NFPA 90A) for a long time: plenums are intended for a specific use (see definition below), namely to be a part of the air distribution system so as to allow air movement. Plenums are also used (legitimately) for stringing communications and data cables as well as pipes and sprinkler pipes and other similar products. However, in actual fact, it is a common practice not to make the effort to remove products when they become obsolete. Examples include when an updated data system is being installed in the facility (and that typically occurs every 18-24 months). Normally, as the building is being rewired the old wires are cut off the grid but they are left in place and a new wiring system is added on top of them.

The tiles that often support plenums are not intended to support any significant weight and they can, therefore easily be overwhelmed by the added weight of storage or abandoned materials (such as abandoned cables). Recently, Bob Davidson and Sean DeCrane (Plenum Space Fuel Load, NFPA Annual Meeting 2009, M33) did an analysis that showed how the safety of firefighters is compromised by the weight of these abandoned cables. They point out that: "Plenum space fuel loads and wiring issues are a serious concern for fire fighters during interior firefighting operations." Their key recommendation was: "Take out the abandoned wiring!!"

Although the primary reason to recommend the removal of abandoned materials in plenums is weight, fire safety should also be taken into account.

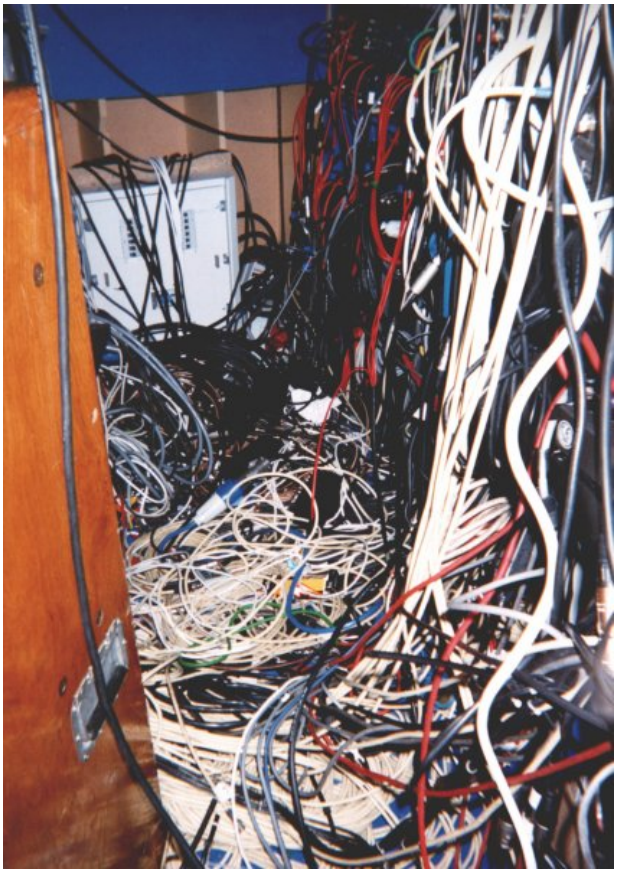
The introduction of a requirement such as the one being proposed here has long been believed not to be enforceable. This is probably true if it were to apply to all occupancies, primarily because fire code inspectors would rarely spend their time looking into plenums in existing buildings. However, the inspection of I occupancies occurs with enough regularity that there should be no significant difficulty in having inspectors identify the existence of abandoned products, especially abandoned cables, classify them as storage and demand their removal.

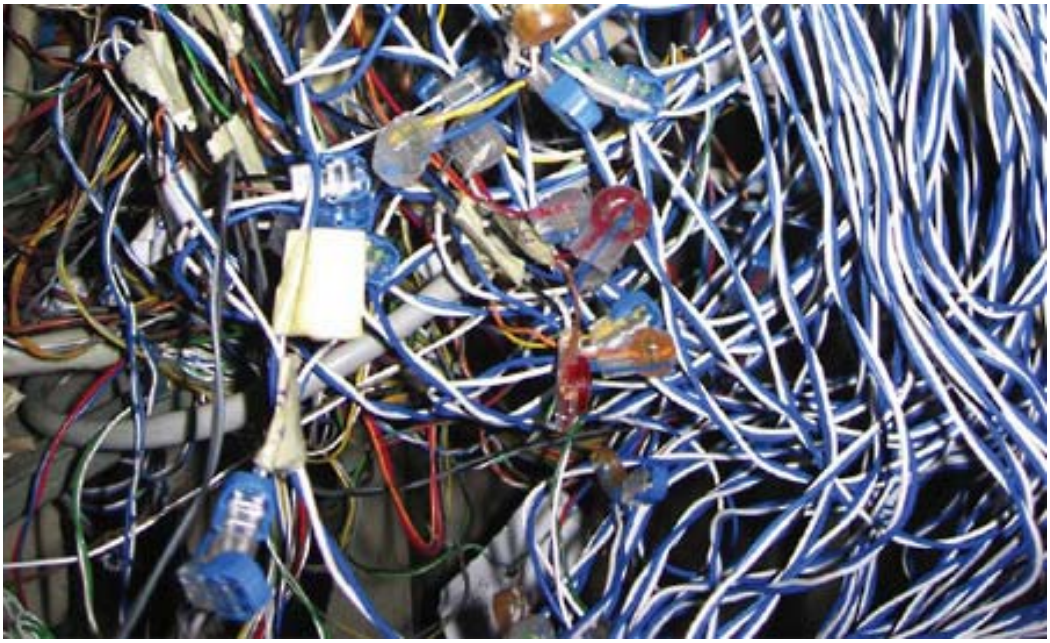
The proposal recommends that only the “accessible portions” of abandoned cables be removed, because there is no intent to cause potential damage to the building or facility by attempting to remove cables or circuits that are strung through walls, floors or other building elements.

This is a safety issue associated with the safety of firefighters and not an issue of the construction of the plenums (or of the use of materials installed in plenums) and is, therefore, suitable for the IFC and not the IMC. Note that the IMC does not specifically prohibit the use of plenums for storage, presumably because such a requirement would not be associated with the construction of the plenums. This issue is associated with General Safety Provisions and is, therefore, primarily suitable for the IFC.

Duplicating the IMC definition of PLENUM in the IFC will assist the fire code official in enforcement of this section.

Photographs of typical wiring in plenums, as found by Davidson and DeCrane, follow:





Cost Impact: Minimal

F25–13

403, 404, 405, 406.1.1, 406.3.3, 408, 311.6

Proponent: Adolf Zubia, Chairman IAFC Fire and Life Safety Section, representing ICC Fire Code Action Committee (azubiamia@yahoo.com)

Revise as follows:

SECTION 403 ~~408~~
~~USE AND OCCUPANCY-RELATED~~EMERGENCY PREPAREDNESS REQUIREMENTS

403.1 ~~408.1~~ General. In addition to the requirements of Section 401, occupancies, uses and outdoor locations shall comply with the emergency preparedness requirements set forth in Sections 403.2 through 403.11. Where a firesafety and evacuation plan is required by Sections 403.2 through 403.11, evacuation drills shall be in accordance with Section 405 and employee training shall be in accordance with Section 406. ~~In addition to the other requirements of this chapter, the provisions of this section are applicable to specific occupancies listed herein.~~

403.2 ~~408.2~~ Group A occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group A occupancies, other than those occupancies used exclusively for purposes of religious worship with an *occupant load* less than 2,000, and for buildings containing both a Group A occupancy and an atrium. Group A occupancies shall also comply with ~~the requirements of~~ Sections 403.2.1 through 403.2.4~~408.2.1 and 408.2.2 and Sections 401 through 406~~.

403.2.1 ~~408.2.1~~ Seating plan. In addition to the requirements of Section 404.2, t~~T~~he fire safety and evacuation plans for assembly occupancies shall include ~~the information required by Section 404.3 and~~ a detailed seating plan, *occupant load* and *occupant load* limit. Deviations from the *approved* plans shall be allowed provided the *occupant load* limit for the occupancy is not exceeded and the *aisles* and exit accessways remain unobstructed.

403.2.2 ~~408.2.2~~ Announcements. *(No change to current text)*

403.2.3 Fire watch personnel. Fire watch personnel shall be provided where required by Section 403.11.1.

403.2.4 Crowd managers. Crowd managers shall be provided where required by Section 403.11.3.

403.3 Group B occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group B occupancy where the Group B occupancy has an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge* .

403.4 Group E occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. Group E occupancies shall also comply with Section 403.4.1

403.4.1 ~~408.3~~ Group E occupancies ~~and Group R-2 college and university buildings~~. Group E occupancies shall comply with ~~the requirements of~~ Sections 403.4.1.1 through 403.4.1.3~~408.3.1 through 408.3.4 and Sections 401 through 406. Group R-2 college and university buildings shall comply with the requirements of Sections 408.3.1 and 408.3.3 and Sections 401 through 406.~~

403.4.1.1 ~~408.3.1~~ First emergency evacuation drill. *(No change to current text)*

~~**408.3.2 Emergency evacuation drill deferral.** In severe climates, the *fire code official* shall have the authority to modify the emergency evacuation drill frequency specified in Section 405.2.~~

403.4.1.2 ~~408.3.3~~ Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires. ~~In Group R-2 college and university buildings, one required drill shall be held during hours after sunset or before sunrise.~~

403.4.1.3 ~~408.3.4~~ Assembly points. *(No change to current text)*

403.5 Group F occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group F occupancy where the Group F occupancy has an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge* .

403.6 Group H Occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group H occupancies. Group H-5 occupancies shall also comply with Section 403.6.1.

403.6.1 ~~408.4~~ Group H-5 occupancies. Group H-5 occupancies shall comply with ~~the requirements of~~ Sections 403.6.1.1 through 403.6.1.4~~408.4.1 through 408.4.4 and Sections 401 through 407.~~

403.6.1.1 ~~408.4.1~~ Plans and diagrams. *(No change to current text)*

403.6.1.2 ~~408.4.2~~ Plan updating. The plans and diagrams required by Section 404, 403.6.1.1 and 407.6~~408.4.1~~ shall be maintained up to date and the *fire code official* and fire department shall be informed of ~~all~~ major changes.

403.6.1.3 ~~408.4.3~~ Emergency response team. Responsible persons shall be designated ~~the~~ as an on-site emergency response team and trained to be liaison personnel for the fire department. These persons shall aid the fire department in preplanning emergency responses, identifying locations where HPM is

stored, handled and used, and be familiar with the chemical nature of such material. An adequate number of personnel for each work shift shall be designated.

403.6.1.4 ~~408.4.4~~ Emergency drills. *(No change to current text)*

403.7 Group I occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group I occupancies. Group I occupancies shall also comply with Sections 403.7.1 through 403.7.3

403.7.1 ~~408.5~~ Group I-1 occupancies. Group I-1 occupancies shall comply with ~~the requirements of~~ Sections 403.7.1.1 through 403.7.1.6~~408.5.1 through 408.5.5 and Sections 401 through 406.~~

403.7.1.1 ~~408.5.1~~ Fire safety and evacuation plan. The fire safety and evacuation plan required by Section 404 shall include special ~~staff~~ employee actions, including fire protection procedures necessary for residents, and shall be amended or revised upon admission of any resident with unusual needs.

403.7.1.2 ~~408.5.2~~ ~~Staff~~ Employee training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by ~~the staff~~ employees at intervals not exceeding ~~least every~~ two months. A copy of the plan shall be readily available at all times within the facility.

403.7.1.3 ~~408.5.3~~ Resident training. *(No change to current text)*

403.7.1.4 ~~408.5.4~~ Drill frequency. *(No change to current text)*

403.7.1.5 Drill times. Drill~~s~~ times are not required to comply with ~~the time requirements of~~ Section 405.4.

403.7.1.6 ~~408.5.5~~ Resident participation in drills. *(No change to current text)*

403.7.2 ~~408.6~~ Group I-2 occupancies. Group I-2 occupancies shall comply with ~~the requirements of~~ Sections 403.7.2.1 through 403.7.2.3~~408.6.1 and 408.6.2 and Sections 401 through 406~~.

403.7.2.1 Drill times. Drill~~s~~ times are not required to comply with ~~the time requirements of~~ Section 405.4.

4037.2.2 ~~408.6.1~~ Evacuation not required. *(No change to current text)*

403.7.2.3 ~~408.6.2~~ Coded alarm signal. *(No change to current text)*

403.7.3 ~~408.7~~ Group I-3 occupancies. Group I-3 occupancies shall comply with ~~the requirements of~~ Sections 403.7.3.1 through 403.7.3.4~~408.7.1 through 408.7.4 and Sections 401 through 406~~.

403.7.3.1 ~~408.7.1~~ Employee training. Employees shall be instructed in the proper use of portable fire extinguishers and other manual fire suppression equipment. Training of new ~~staff~~ employees shall be provided promptly upon entrance on duty. Refresher training shall be provided at least annually.

403.7.3.2 ~~408.7.2~~ Employee s~~S~~taffing. Group I-3 occupancies shall be provided with 24-hour staffing. ~~Staff~~ An employee shall be within three floors or 300 feet (91 440 mm) horizontal distance of the access door of each resident housing area. In ~~Use~~ Conditions 3, 4 and 5, as defined in "Occupancy Classification – Institutional Group I-3" in Chapter 2, the arrangement shall be such that the ~~staff~~ employee involved can start release of locks necessary for emergency evacuation or rescue and initiate other necessary emergency actions within 2 minutes of an alarm.

Exception: An employee~~Staff~~ shall not be required to be within three floors or 300 feet (9144 mm) in areas in which all locks are unlocked remotely and automatically in accordance with Section 408.4 of the *International Building Code*.

403.7.3.3 ~~408.7.3~~ Notification. Provisions shall be made for residents in ~~Use~~ Conditions 3, 4 and 5, as defined in "Occupancy Classification – Institutional Group I-3" in Chapter 2, to readily notify an employee~~staff~~ of an emergency.

403.7.3.4 ~~408.7.4~~ Keys. Keys necessary for unlocking doors installed in a *means of egress* shall be individually identifiable by both touch and sight.

403.8 Group M occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group M occupancy, where the Group M occupancy has an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge,* and for buildings containing both a Group M occupancy and an atrium.

403.9 Group R occupancies.

403.9.1 ~~408.8~~ Group R-1 occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-1 occupancies. Group R-1 occupancies shall also comply with ~~the requirements of~~ Sections 403.9.1.1 through 403.9.1.3.~~408.8.1 through 408.8.3 and Sections 401 through 406.~~

403.9.1.1 ~~408.8.1~~ Evacuation diagrams. *(No change to current text)*

403.9.1.2 ~~408.8.2~~ Emergency duties. *(No change to current text)*
403.9.1.3 ~~408.8.3~~ Fire safety and evacuation instructions. *(No change to current text)*
403.9.2 ~~408.9~~ Group R-2 occupancies. Group R-2 occupancies shall comply with ~~the requirements of~~ Sections 403.9.2.1 through 403.9.2.3~~408.9.1 through 408.9.4 and Sections 401 through 406~~.

403.9.2.1. College and University Buildings. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-2 college and university buildings. Group R-2 college and university buildings shall also comply with Sections 403.9.2.1 and 403.9.2.2.

403.9.2.1.1 First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

403.9.2.1.2 Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires. One required drill shall be held during hours after sunset or before sunrise.

403.9.2.2 ~~408.9.1~~ Emergency guide. Fire emergency guides shall be provided for Group R-2 occupancies. Guide contents, maintenance and distribution shall comply with Sections 403.9.2.2.1 through 403.9.2.2.3

403.9.2.2.1 Guide contents. ~~A f~~Fire emergency guides shall ~~be provided which~~ describe~~s~~ the location, function and use of fire protection equipment and appliances accessible to residents, including fire alarm systems, smoke alarms, and portable fire extinguishers. ~~The~~ G~~g~~uides shall also include an emergency evacuation plan for each *dwelling unit*.

403.9.2.2.2 ~~408.9.3~~ Emergency guide m~~M~~aintenance. Emergency guides shall be reviewed and *approved* by the *fire code official.*~~in accordance with Section 401.2. Evacuation diagrams shall be reviewed and updated in accordance with Section 404.4.~~

403.9.2.2.3 ~~408.9.4~~ Emergency guide d~~D~~istribution. *(No change to current text)*

403.9.2.3 Evacuation diagrams for dormitories. A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each dormitory sleeping unit. Evacuation diagrams shall be reviewed and updated as needed to maintain accuracy.

403.9.3 ~~408.10~~ Group R-4 occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-4 occupancies. Group R-4 occupancies shall also comply with ~~the requirements of~~ Sections 403.9.3.1 through 403.9.3.6 ~~408.10.1 through 408.10.5 and Sections 401 through 406~~.

403.9.3.1 ~~408.10.1~~ Fire safety and evacuation plan. The fire safety and evacuation plan required by Section 404 shall include special ~~staff~~ employee actions, including fire protection procedures necessary for residents, and shall be amended or revised upon admission of a resident with unusual needs.

403.9.3.2 ~~408.10.2~~ ~~Staff~~ Employee training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by employees at intervals not exceeding ~~the staff at least every~~ two months. A copy of the plan shall be readily available at all times within the facility.

403.9.3.3 ~~408.10.3~~ Resident training. *(No change to current text)*

403.9.3.4 ~~408.10.4~~ Drill frequency. *(No change to current text)*

403.9.3.5 Drill times. Drills times are not required to comply with ~~the time requirements of~~ Section 405.4.

403.9.3.6 ~~408.10.5~~ Resident participation in drills. Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point and shall provide residents with experience in exiting through all required exits. All required exits shall be used during emergency evacuation drills.

Exception: Actual exiting from windows shall not be required. Opening the window and signaling for help shall be an acceptable alternative.

403.10 Special uses. Special uses shall be in accordance with Sections 403.10.1 through 403.10.3.

403.10.1 ~~408.11~~ Covered and open mall buildings. Covered and open mall buildings shall comply with the ~~provisions~~ requirements of Sections 403.10.1.1 through 403.10.1.6~~408.11.1 through 408.11.3~~.

403.10.1.1 Malls and mall buildings exceeding 50,000 square feet. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for covered malls exceeding 50,000 square feet (4645 m_2) in aggregate floor area and for open mall buildings exceeding 50,000 square feet (4645 m_2) in aggregate area within the perimeter line.

403.10.1.2 ~~408.11.1~~ Lease plan. In addition to the requirements of Section 404.2.2, a~~A~~ lease plan that includes the following information shall be prepared for each covered and open mall building:~~. The plan shall include the following information in addition to that required by Section 404.3.2:~~

1. Each occupancy, including identification of tenant.
2. *Exits* from each tenant space.
3. Fire protection features, including the following:
   3.1. Fire department connections.
   3.2. *Fire command center*.
   3.3. Smoke management system controls.
   3.4. Elevators, elevator machine rooms and controls.
   3.5. Hose valve outlets.
   3.6. Sprinkler and standpipe control valves.
   3.7. Automatic fire-extinguishing system areas.

3.8. Automatic fire detector zones.
3.9. *Fire barriers*.

403.10.1.3 ~~408.11.1.1~~ Lease plan approval. *(No change to current text)*

403.10.1.4 ~~408.11.1.2~~ Lease plan revisions. *(No change to current text)*

403.10.1.5~~408.11.2~~ Tenant identification. Tenant identification shall be provided for secondary exits from occupied tenant spaces that lead to an *exit corridor* or directly to the exterior of the building. ~~Each occupied tenant space provided with a secondary exit to the exterior or exit *corridor* shall be provided with tenant identification by~~ Tenant identification shall be posted on the exterior side of the exit or exit access door and shall identify the business name and/or address~~. Letters and numbers shall be posted on the *corridor* side of the door, be~~ using plainly legible letters and numbers that~~ and shall~~ contrast with their background.

Exception: Tenant identification is not required for anchor stores.

(Section 408.11.3 Moved to new Section 311.6)

403.10.1.6 Unoccupied tenant spaces. The fire safety and evacuation plan shall provide for compliance with the requirements for unoccupied tenant spaces in Section 311.

403.10.2 High-rise buildings. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for high-rise buildings.

403.10.3 Underground buildings. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for underground buildings.

403.11 Special requirements for public safety. Special requirements for public safety shall be in accordance with Sections 403.11.1 through 403.11.3.1.

~~SECTION 403~~
~~PUBLIC ASSEMBLAGES AND EVENTS~~

403.11.1~~403.1~~ Fire watch personnel. When, in the opinion of the *fire code official*, it is essential for public safety in a place of assembly or any other place where people congregate, because of the number of persons~~,~~ or the nature of the performance, exhibition, display, contest or activity, the *owner*, agent or lessee shall provide one or more fire watch personnel, as required and *approved*~~,~~. Fire watch personnel shall comply with Sections 403.11.1.1 and 403.11.1.2. ~~to remain on duty during the times such places are open to the public, or when such activity is being conducted.~~

~~**403.1.1 Duties.** Fire watch personnel shall keep diligent watch for fires, obstructions to *means of egress* and other hazards during the time such place is open to the public or such activity is being conducted and take prompt measures for remediation of hazards, extinguishment of fires that occur and assist in the evacuation of the public from the structures.~~

403.11.1.1 Duty Times. Fire watch personnel shall remain on duty during the times places requiring a fire watch are open to the public, or when an activity requiring a fire watch is being conducted.

403.11.1.2 Duties. On-duty fire watch personnel shall have the following duties:

1. Keep diligent watch for fires, obstructions to *means of egress* and other hazards
2. Take prompt measures for remediation of hazards and extinguishment of fires that occur
3. Take prompt measures to assist in the evacuation of the public from the structures.

403.11.2 ~~403.2~~ Public safety plan for gatherings. In other than Group A or E occupancies, where the *fire code official* determines that an indoor or outdoor gathering of persons has an adverse impact on public safety through diminished access to buildings, structures, fire hydrants and fire apparatus access roads or where such gatherings adversely affect public safety services of any kind, the *fire code official* shall have the authority to order the development of or prescribe a public safety plan that provides an approved level of public safety and addresses the following items:~~, or prescribe a plan for, the provision of an *approved* level of public safety.~~

~~**403.2.1 Contents.** The public safety plan, where required by Section 403.2, shall address such items~~

1. ~~as~~ Emergency vehicle ingress and egress
2. ~~—~~Fire protection
3. ~~—~~Emergency egress or escape routes
4. Emergency medical services
5. ~~—~~Public assembly areas
6. ~~and~~ The directing of both attendees and vehicles, ~~(~~including the parking of vehicles~~)~~
7. ~~,—~~Vendor and food concession distribution
8. ~~, and~~ The need for the presence of law enforcement
9. ~~, and~~ The need for fire and emergency medical services personnel ~~at the event~~.

403.11.3 ~~403.3~~ Crowd managers for gatherings exceeding 1,000 people. ~~Trained crowd managers shall be provided for~~ Where facilities or events involve a gathering of ~~where~~ more than 1,000 people, crowd managers shall be provided in accordance with Section 403.11.3.1.~~persons congregate. The minimum number of crowd managers shall be established at a ratio of one crowd manager to every 250 persons. Where *approved* by the *fire code official*, the ratio of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an *approved automatic sprinkler system* or based upon the nature of the event.~~

403.11.3.1 Number of crowd managers. The minimum number of crowd managers shall be established at a ratio of one crowd manager for ~~to~~ every 250 persons.

> **Exception:** Where *approved* by the *fire code official*, the ~~ratio~~ number of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an *approved automatic sprinkler system* or based upon the nature of the event.

SECTION 404
FIRE SAFETY, ~~AND~~ EVACUATION AND LOCKDOWN PLANS

404.1 General. Where required by Section 403, f~~F~~ire safety, evacuation and lockdown plans ~~and associated drills~~ shall comply with ~~the requirements of~~ Sections 404.2 through 404.4.1~~404.5.1~~.

~~**404.2 Where required.** An *approved* fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings.~~

1. ~~Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an *occupant load* less than 2,000.~~
2. ~~Group B buildings having an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge*.~~
3. ~~Group E.~~
4. ~~Group F buildings having an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge*.~~
5. ~~Group H.~~
6. ~~Group I.~~

~~7. Group R-1.~~
~~8. Group R-2 college and university buildings.~~
~~9. Group R-4.~~
~~10. High-rise buildings.~~
~~11. Group M buildings having an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge*.~~
~~12. Covered malls exceeding 50,000 square feet (4645 m_2) in aggregate floor area.~~
~~13. Open mall buildings exceeding 50,000 square feet (4645 m_2) in aggregate area within perimeter line.~~
~~14. Underground buildings.~~
~~15. Buildings with an atrium and having an occupancy in Group A, E or M.~~

SECTION 405
EMERGENCY EVACUATION DRILLS

405.1 General. Emergency evacuation drills complying with ~~the provisions of this section.~~ Sections 405.2 through 405.9 shall be conducted at least annually ~~in the occupancies listed in Section 404.2~~where firesafety and evacuation plans are required by Section 403 or when required by the *fire code official*. Drills shall be designed in cooperation with the local authorities.

405.2 Frequency. *(No change to current text)*

405.3 Leadership. *(No change to current text)*

405.4 Time. *(No change to current text)*

405.5 Record keeping. Records shall be maintained of required emergency evacuation drills and include the following information:

1. Identity of the person conducting the drill.
2. Date and time of the drill.
3. Notification method used.
4. ~~Staff members~~ Employees on duty and participating.
5. Number of occupants evacuated.
6. Special conditions simulated.
7. Problems encountered.
8. Weather conditions when occupants were evacuated.
9. Time required to accomplish complete evacuation.

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
Group B[c]	Annually	Employees
Group E	Monthly[a]	All occupants
Group F	Annually	Employees
Group I	Quarterly on each shift	Employees[b]
Group R-1	Quarterly on each shift	Employees

Group R-2[d]	Four annually	All occupants
Group R-4	Quarterly on each shift	Employees[b]
High-rise buildings	Annually	Employees

a. In severe climates, the *fire code official* shall have the authority to modify the emergency evacuation drill frequency~~*The* frequency shall be allowed to be modified in accordance with Section 408.3.2~~.
b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 403.9.3.6~~408.10.5~~. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
c. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
d. Applicable to Group R-2 college and university buildings in accordance with Section 403.9.2.1~~408.3~~.

406.1 General. Where fire safety and evacuation plans are required by Section 403, ~~E~~employees ~~in the occupancies listed in Section 404.2~~ shall be trained in ~~the~~ fire emergency procedures ~~described in their fire evacuation and fire safety plans~~. ~~Training shall be~~ based on plans prepared in accordance with Section 404.~~these plans and as described in Section 404.3.~~

~~**406.3.3 Emergency lockdown training.** Where a facility has a lockdown plan, employees shall be trained on their assigned duties and procedures in the event of an emergency lockdown.~~ *(moved to Section 406.4)*

~~**406.3.4**~~ **406.3.3 Fire safety training.** *(No change to current text)*

406.4 ~~**406.3.3**~~ **Emergency lockdown training.** *(No change to current text)*

Revise as follows:

311.1 General. Temporarily unoccupied buildings, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with Sections 311.1.1 through 311.5.6~~5~~.

311.6. ~~**408.11.3 Maintenance**~~**Unoccupied tenant spaces in mall buildings.** Unoccupied tenant spaces in covered and open mall buildings shall be:

1. Kept free from the storage of any materials.
2. Separated from the remainder of the building by partitions of at least 0.5-inch-thick (12.7 mm) gypsum board or an *approved* equivalent to the underside of the ceiling of the adjoining tenant spaces.
3. Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.
4. Kept free from combustible waste and be broomswept clean.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the Fire-CAC has held 6 open meetings and numerous Regional Work Group and Task Group meetings and conference calls which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx.

This proposal restructures Chapter 4 to place all of the core requirements in the front of the chapter in Section 403. The current code splits such requirements between Section 404.2 and Section 408, making the code difficult to follow and apply. Section 403 in this proposal includes the requirements previously included in Sections 404.2 and 408, which have been merged by occupancy classification or as otherwise appropriate.

The overall intent of this proposal is editorial revision. Provisions have been relocated and text has been edited in an effort to clarify what is believed to be the current intent without technical change and to improve readability. One section dealing with maintenance of unoccupied tenant spaces in malls was determined to be improperly located in Chapter 4 and was moved to Chapter 3 with other vacant use regulations.

In preparing this proposal, it was noted that the provisions for emergency evacuation drills for Group I-1 (403.7.1.6 of the rewrite) and Group R-4 (403.9.3.6 of the rewrite) are not consistent. This may have been deliberate when Chapter 4 was originally written, but it warrants a review to determine if the inconsistency is appropriate.

One change that was made corrects an error made by the Code Correlation Committee when they made what was believed to be an editorial addition to the code in Section 408.9.3 of the 2012 edition. That addition referenced Section 404.4 for review and updating of evacuation diagrams for any Group R-2 dormitory. The reference to Section 404.4 was incorrect because that section only relates to fire safety and evacuation plans, which are not required for Group R-2 except for college and university buildings. This error has been fixed in Section 403.9.2.3.

Because of the complexity of these revisions in legislative format, a clean copy of the final text is provided below to allow an easier review of the proposed text for the 2015 code:

SECTION 403
EMERGENCY PREPAREDNESS REQUIREMENTS

403.1 General. In addition to the requirements of Section 401, occupancies, uses and outdoor locations shall comply with the emergency preparedness requirements set forth in Sections 403.2 through 403.11. Where a firesafety and evacuation plan is required by Sections 403.2 through 403.11, evacuation drills shall be in accordance with Section 405 and employee training shall be in accordance with Section 406.

403.2 Group A occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group A occupancies, other than those occupancies used exclusively for purposes of religious worship with an *occupant load* less than 2,000, and for buildings containing both a Group A occupancy and an atrium. Group A occupancies shall also comply with Sections 403.2.1 through 403.2.4.

403.2.1 Seating plan. In addition to the requirements of Section 404.2, the fire safety and evacuation plans for assembly occupancies shall include a detailed seating plan, *occupant load* and *occupant load* limit. Deviations from the *approved* plans shall be allowed provided the *occupant load* limit for the occupancy is not exceeded and the *aisles* and exit accessways remain unobstructed.

403.2.2 Announcements. In theaters, motion picture theaters, auditoriums and similar assembly occupancies in Group A used for noncontinuous programs, an audible announcement shall be made not more than 10 minutes prior to the start of each program to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.

> **Exception:** In motion picture theaters, the announcement is allowed to be projected upon the screen in a manner *approved* by the *fire code official*.

403.2.3 Fire watch personnel. Fire watch personnel shall be provided where required by Section 403.11.1.

403.2.4 Crowd managers. Crowd managers shall be provided where required by Section 403.11.3.

403.3 Group B occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group B occupancy where the Group B occupancy has an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge* .

403.4 Group E occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. Group E occupancies shall also comply with Section 403.4.1

403.4.1 Group E occupancies . Group E occupancies shall comply with Sections 403.4.1.1 through 403.4.1.3

403.4.1.1First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

403.4.1.2 Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires.

403.4.1.3 Assembly points. Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated so as to avoid interference with fire department operations. The assembly areas shall be arranged to keep each class separate to provide accountability of all individuals.

403.5 Group F occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group F occupancy where the Group F occupancy has an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge* .

403.6 Group H Occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group H occupancies. Group H-5 occupancies shall also comply with Section 403.6.1.

403.6.1 Group H-5 occupancies. Group H-5 occupancies shall comply with Sections 403.6.1.1 through 403.6.1.4

403.6.1.1 Plans and diagrams. In addition to the requirements of Section 404 and Section 407.6, plans and diagrams shall be maintained in *approved* locations indicating the approximate plan for each area, the amount and type of HPM stored, handled and used, locations of shutoff valves for HPM supply piping, emergency telephone locations and locations of exits.

403.6.1.2 Plan updating. The plans and diagrams required by Section 404, 403.6.1.1 and 407.6 shall be maintained up to date and the *fire code official* and fire department shall be informed of major changes.

403.6.1.3 Emergency response team. Responsible persons shall be designated as an on-site emergency response team and trained to be liaison personnel for the fire department. These persons shall aid the fire department in preplanning emergency responses, identifying locations where HPM is stored, handled and used, and be familiar with the chemical nature of such material. An adequate number of personnel for each work shift shall be designated.

403.6.1.4 Emergency drills. Emergency drills of the on-site emergency response team shall be conducted on a regular basis but not less than once every three months. Records of drills conducted shall be maintained.

403.7 Group I occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group I occupancies. Group I occupancies shall also comply with Sections 403.7.1 through 403.7.3

403.7.1 Group I-1 occupancies. Group I-1 occupancies shall comply with Sections 403.7.1.1 through 403.7.1.6

403.7.1.1 Fire safety and evacuation plan. The fire safety and evacuation plan required by Section 404 shall include special employee actions, including fire protection procedures necessary for residents, and shall be amended or revised upon admission of any resident with unusual needs.

403.7.1.2 Employee training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by employees at intervals not exceeding two months. A copy of the plan shall be readily available at all times within the facility.

403.7.1.3 Resident training. Residents capable of assisting in their own evacuation shall be trained in the proper actions to take in the event of a fire. The training shall include actions to take if the primary escape route is blocked. Where the resident is given rehabilitation or habilitation training, training in fire prevention and actions to take in the event of a fire shall be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.

403.7.1.4 Drill frequency. Emergency evacuation drills shall be conducted at least six times per year, two times per year on each shift. Twelve drills shall be conducted in the first year of operation.

403.7.1.5 Drill times. Drill times are not required to comply with Section 405.4.

403.7.1.6 Resident participation in drills. Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point.

403.7.2 Group I-2 occupancies. Group I-2 occupancies shall comply with Sections 403.7.2.1 through 403.7.2.3.

403.7.2.1 Drill times. Drill times are not required to comply with Section 405.4.

4037.2.2 Evacuation not required. During emergency evacuation drills, the movement of patients to safe areas or to the exterior of the building is not required.

403.7.2.3 Coded alarm signal. When emergency evacuation drills are conducted after visiting hours or when patients or residents are expected to be asleep, a coded announcement is allowed instead of audible alarms.

403.7.3 Group I-3 occupancies. Group I-3 occupancies shall comply with Sections 403.7.3.1 through 403.7.3.4.

403.7.3.1 Employee training. Employees shall be instructed in the proper use of portable fire extinguishers and other manual fire suppression equipment. Training of new employees shall be provided promptly upon entrance on duty. Refresher training shall be provided at least annually.

403.7.3.2 Employee staffing. Group I-3 occupancies shall be provided with 24-hour staffing. An employee shall be within three floors or 300 feet (91 440 mm) horizontal distance of the access door of each resident housing area. In Conditions 3, 4 and 5, as defined in “Occupancy Classification – Institutional Group I-3” in Chapter 2, the arrangement shall be such that the employee involved can start release of locks necessary for emergency evacuation or rescue and initiate other necessary emergency actions within 2 minutes of an alarm.

> **Exception:** An employee shall not be required to be within three floors or 300 feet (9144 mm) in areas in which all locks are unlocked remotely and automatically in accordance with Section 408.4 of the *International Building Code*.

403.7.3.3 Notification. Provisions shall be made for residents in Conditions 3, 4 and 5, as defined in "Occupancy Classification – Institutional Group I-3" in Chapter 2, to readily notify an employee of an emergency.

403.7.3.4 Keys. Keys necessary for unlocking doors installed in a *means of egress* shall be individually identifiable by both touch and sight.

403.8 Group M occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group M occupancy, where the Group M occupancy has an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge,* and for buildings containing both a Group M occupancy and an atrium.

403.9 Group R occupancies.

403.9.1 Group R-1 occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-1 occupancies. Group R-1 occupancies shall also comply with Sections 403.9.1.1 through 403.9.1.3.

403.9.1.1 Evacuation diagrams. A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each hotel or motel sleeping unit.

403.9.1.2 Emergency duties. Upon discovery of a fire or suspected fire, hotel and motel employees shall perform the following duties:

1. Activate the fire alarm system, where provided.
2. Notify the public fire department.
3. Take other action as previously instructed.

403.9.1.3 Fire safety and evacuation instructions. Information shall be provided in the fire safety and evacuation plan required by Section 404 to allow guests to decide whether to evacuate to the outside, evacuate to an *area of refuge*, remain in place, or any combination of the three.

403.9.2 Group R-2 occupancies. Group R-2 occupancies shall comply with Sections 403.9.2.1 through 403.9.2.3.

403.9.2.1. College and University Buildings. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-2 college and university buildings. Group R-2 college and university buildings shall also comply with Sections 403.9.2.1 and 403.9.2.2.

403.9.2.1.1 First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

403.9.2.1.2 Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires. One required drill shall be held during hours after sunset or before sunrise.

403.9.2.2 Emergency guide. Fire emergency guides shall be provided for Group R-2 occupancies. Guide contents, maintenance and distribution shall comply with Sections 403.9.2.2.1 through 403.9.2.2.3

403.9.2.2.1 Guide contents. Fire emergency guides shall describe the location, function and use of fire protection equipment and appliances accessible to residents, including fire alarm systems, smoke alarms, and portable fire extinguishers. Guides shall also include an emergency evacuation plan for each *dwelling unit*.

403.9.2.2.2 Emergency guide maintenance. Emergency guides shall be reviewed and *approved* by the *fire code official.*

403.9.2.2.3 Emergency guide distribution. A copy of the emergency guide shall be given to each tenant prior to initial occupancy.

403.9.2.3 Evacuation diagrams for dormitories. A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each dormitory sleeping unit. Evacuation diagrams shall be reviewed and updated as needed to maintain accuracy.

403.9.3 Group R-4 occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-4 occupancies. Group R-4 occupancies shall also comply with Sections 403.9.3.1 through 403.9.3.6.

403.9.3.1 Fire safety and evacuation plan. The fire safety and evacuation plan required by Section 404 shall include special employee actions, including fire protection procedures necessary for residents, and shall be amended or revised upon admission of a resident with unusual needs.

403.9.3.2 Employee training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by employees at intervals not exceeding two months. A copy of the plan shall be readily available at all times within the facility.

403.9.3.3 Resident training. Residents capable of assisting in their own evacuation shall be trained in the proper actions to take in the event of a fire. The training shall include actions to take if the primary escape route is blocked. Where the resident is given rehabilitation or habilitation training, training in fire prevention and actions to take in the event of a fire shall be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.

403.9.3.4 Drill frequency. Emergency evacuation drills shall be conducted at least six times per year, two times per year on each shift. Twelve drills shall be conducted in the first year of operation.

403.9.3.5 Drill times. Drills times are not required to comply with Section 405.4.

403.9.3.6 Resident participation in drills. Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point and shall provide residents with experience in exiting through all required exits. All required exits shall be used during emergency evacuation drills.

> **Exception:** Actual exiting from windows shall not be required. Opening the window and signaling for help shall be an acceptable alternative.

403.10 Special uses.

403.10.1 Covered and open mall buildings. Covered and open mall buildings shall comply with the requirements of Sections 403.10.1.1 through 403.10.1.6.

403.10.1.1 Malls and mall buildings exceeding 50,000 square feet. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for covered malls exceeding 50,000 square feet (4645 m2) in aggregate floor area and for open mall buildings exceeding 50,000 square feet (4645 m2) in aggregate area within perimeter line.

403.10.1.2 Lease plan. In addition to the requirements of Section 404.2.2, a lease plan that includes the following information shall be prepared for each covered and open mall building:

1. Each occupancy, including identification of tenant.
2. *Exits* from each tenant space.
3. Fire protection features, including the following:
   3.1. Fire department connections.
   3.2. *Fire command center*.
   3.3. Smoke management system controls.
   3.4. Elevators, elevator machine rooms and controls.
   3.5. Hose valve outlets.
   3.6. Sprinkler and standpipe control valves.
   3.7. Automatic fire-extinguishing system areas.
   3.8. Automatic fire detector zones.
   3.9. *Fire barriers*.

403.10.1.3 Lease plan approval. The lease plan shall be submitted to the *fire code official* for approval, and shall be maintained on site for immediate reference by responding fire service personnel.

403.10.1.4 Lease plan revisions. The lease plans shall be revised annually or as often as necessary to keep them current. Modifications or changes in tenants or occupancies shall not be made without prior approval of the *fire code official* and building official.

403.10.1.5 Tenant identification. Tenant identification shall be provided for secondary exits from occupied tenant spaces that lead to an *exit corridor* or directly to the exterior of the building. Tenant identification shall be posted on the exterior side of the exit or exit access door and shall identify the business name and/or address using plainly legible letters and numbers that contrast with their background.

> **Exception:** Tenant identification is not required for anchor stores.

403.10.1.6 Unoccupied tenant spaces. The fire safety and evacuation plan shall provide for compliance with the requirements for unoccupied tenant spaces in Section 311.

403.10.2 High-rise buildings. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for high-rise buildings.

403.10.3 Underground buildings. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for underground buildings.

403.11 Special requirements for public safety.

403.11.1 Fire watch personnel. When, in the opinion of the *fire code official*, it is essential for public safety in a place of assembly or any other place where people congregate, because of the number of persons or the nature of the performance, exhibition, display, contest or activity, the *owner*, agent or lessee shall provide one or more fire watch personnel, as required and *approved*. Fire watch personnel shall comply with Sections 403.11.1.1 and 403.11.1.2.

403.11.1.1 Duty Times. Fire watch personnel shall remain on duty during the times places requiring a fire watch are open to the public, or when an activity requiring a fire watch is being conducted.

403.11.1.2 Duties. On-duty fire watch personnel shall have the following duties:

1. Keep diligent watch for fires, obstructions to *means of egress* and other hazards
2. Take prompt measures for remediation of hazards and extinguishment of fires that occur
3. Take prompt measures to assist in the evacuation of the public from the structures.

403.11.2 Public safety plan for gatherings. In other than Group A or E occupancies, where the *fire code official* determines that an indoor or outdoor gathering of persons has an adverse impact on public safety through diminished access to buildings, structures, fire hydrants and fire apparatus access roads or where such gatherings adversely affect public safety services of any kind, the *fire code official* shall have the authority to order the development of or prescribe a public safety plan that provides an approved level of public safety and addresses the following items:

1. Emergency vehicle ingress and egress
2. Fire protection
3. Emergency egress or escape routes
4. Emergency medical services
5. Public assembly areas
6. The directing of both attendees and vehicles, including the parking of vehicles
7. Vendor and food concession distribution
8. The need for the presence of law enforcement
9. The need for fire and emergency medical services personnel.

403.11.3 Crowd managers for gatherings exceeding 1,000 people. Where facilities or events involve a gathering of more than 1,000 people, crowd managers shall be provided in accordance with Section 403.11.3.1.

403.11.3.1 Number of crowd managers. The minimum number of crowd managers shall be established at a ratio of one crowd manager for every 250 persons.

> **Exception:** Where *approved* by the *fire code official*, the number of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an *approved automatic sprinkler system* or based upon the nature of the event.

Revise Section 404 as follows:

SECTION 404
FIRE SAFETY, EVACUATION AND LOCKDOWN PLANS

404.1 General. Where required by Section 403, fire safety, evacuation and lockdown plans shall comply with Sections 404.2 through 404.4.1.

(existing Section 404.2 is relocated and merged into Section 403 with the remaining sections renumbered)

Revise Section 405 as follows:

SECTION 405
EMERGENCY EVACUATION DRILLS

405.1 General. Emergency evacuation drills complying with Sections 405.2 through 405.9 shall be conducted at least annually where firesafety and evacuation plans are required by Section 403 or when required by the *fire code official*. Drills shall be designed in cooperation with the local authorities.

405.2 Frequency. Required emergency evacuation drills shall be held at the intervals specified in Table 405.2 or more frequently where necessary to familiarize all occupants with the drill procedure.

405.3 Leadership. Responsibility for the planning and conduct of drills shall be assigned to competent persons designated to exercise leadership.

405.4 Time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

405.5 Record keeping. Records shall be maintained of required emergency evacuation drills and include the following information:

1. Identity of the person conducting the drill.
2. Date and time of the drill.
3. Notification method used.
4. Employees on duty and participating.
5. Number of occupants evacuated.
6. Special conditions simulated.
7. Problems encountered.
8. Weather conditions when occupants were evacuated.
9. Time required to accomplish complete evacuation.

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
Group B[c]	Annually	Employees
Group E	Monthly[a]	All occupants
Group F	Annually	Employees
Group I	Quarterly on each shift	Employees[b]
Group R-1	Quarterly on each shift	Employees
Group R-2[d]	Four annually	All occupants
Group R-4	Quarterly on each shift	Employees[b]
High-rise buildings	Annually	Employees

a. In severe climates, the *fire code official* shall have the authority to modify the emergency evacuation drill frequency.
b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 403.9.3.6. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
c. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
d. Applicable to Group R-2 college and university buildings in accordance with Section 403.9.2.1.

405.6 Notification. Where required by the *fire code official*, prior notification of emergency evacuation drills shall be given to the *fire code official*.

405.7 Initiation. Where a fire alarm system is provided, emergency evacuation drills shall be initiated by activating the fire alarm system.

405.8 Accountability. As building occupants arrive at the assembly point, efforts shall be made to determine if all occupants have been successfully evacuated or have been accounted for.

405.9 Recall and reentry. An electrically or mechanically operated signal used to recall occupants after an evacuation shall be separate and distinct from the signal used to initiate the evacuation. The recall signal initiation means shall be manually operated and under the control of the person in charge of the premises or the official in charge of the incident. No one shall reenter the premises until authorized to do
so by the official in charge.

Revise Section 406 as follows

406.1 General. Where fire safety and evacuation plans are required by Section 403, employees shall be trained in fire emergency procedures . based on plans prepared in accordance with Section 404.

406.2 Frequency. Employees shall receive training in the contents of fire safety and evacuation plans and their duties as part of new employee orientation and at least annually thereafter. Records shall be kept and made available to the *fire code official* upon request.

406.3 Employee training program. Employees shall be trained in fire prevention, evacuation and fire safety in accordance with Sections 406.3.1 through 406.3.4.

406.3.1 Fire prevention training. Employees shall be apprised of the fire hazards of the materials and processes to which they are exposed. Each employee shall be instructed in the proper procedures for preventing fires in the conduct of their assigned duties.

406.3.2 Evacuation training. Employees shall be familiarized with the fire alarm and evacuation signals, their assigned duties in the event of an alarm or emergency, evacuation routes, areas of refuge, exterior assembly areas and procedures for evacuation.

(moved to Section 406.4)

406.3.3 Fire safety training. Employees assigned firefighting duties shall be trained to know the locations and proper use of portable fire extinguishers or other manual fire-fighting equipment and the protective clothing or equipment required for its safe and proper use.

406.4 Emergency lockdown training. Where a facility has a lockdown plan, employees shall be trained on their assigned duties and procedures in the event of an emergency lockdown.

Delete Section 408 (existing Section 408 has been relocated to Section 403):

Revise Section 311.1 as follows:

311.1 General. Temporarily unoccupied buildings, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with Sections 311.1.1 through 311.5.6.

Add a Section 311.6 as follows:

311.6. Unoccupied tenant spaces in mall buildings. Unoccupied tenant spaces in covered and open mall buildings shall be:

1. Kept free from the storage of any materials.
2. Separated from the remainder of the building by partitions of at least 0.5-inch-thick (12.7 mm) gypsum board or an *approved* equivalent to the underside of the ceiling of the adjoining tenant spaces.
3. Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.
4. Kept free from combustible waste and be broom swept clean.

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

F26–13*

404.2, 404.3.1, 404.3.2, Table 405.2, 408.3 (New), 408.3.1 (New), 408.3.2 (New), 408.3.3 (New), 408.3.4 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov)

Revise as follows:

404.2 Where required. An *approved* fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings:

1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an *occupant load* less than 2,000.
2. Group B.
   2.1. Buildings having an ambulatory care facility.
   2.2. Buildings having an *occupant load* of 500 or more *persons* or more than 100 *persons* above or below the lowest *level of exit discharge*.

3 through 15 *(No change to current text)*

404.3.1 Fire evacuation plans. Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete, ~~or,~~ ~~where *approved*~~, by selected floors or areas only, or with a defend-in-place response.

2 through 9 *(No change to current text)*

404.3.2 Fire safety plans. Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy including the following:
   2.1 ~~and p~~ Procedures for notifying occupants, including areas with a private mode alarm system.
   ~~i~~
   2.2 Procedures for ~~relocating~~ occupants under a defend-in-place response.
   2.3 Procedures ~~or~~ for evacuating occupants, including occupants who need assistance in evacuation.

3 through 7 *(No change to current text)*

405.2 Frequency. Required emergency evacuation drills shall be held at the intervals specified in Table 405.2 or more frequently where necessary to familiarize all occupants with the drill procedure.

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group B [c,d]	Annually	Employees
Group R-2 [~~d~~ e]	Four annually	All occupants

(Portions of table not shown remain unchanged)

a. The frequency shall be allowed to be modified in accordance with Section 408.3.2.
b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
c. Emergency evacuation drills are required in Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
d. Emergency evacuation drills are required in ambulatory care facilities in accordance with Section 408.3.
~~d~~e. Applicable to Group R-2 college and university buildings in accordance with Section 408.3.

Add new text as follows:

408.3 Ambulatory Care Facilities. Ambulatory care facilities shall comply with the requirements of Sections 408.3.1 through 408.3.3 and Section 401 through 406.

408.3.1 Fire evacuation plan. The fire safety and evacuation plan required by Section 404 shall include a description of special staff actions. This shall include procedures for stabilizing patients in a defend in place response, staged evacuation, or full evacuation in conjunction with the entire building if part of a multi-tenant facility.

408.3.2 Fire safety plan. A copy of the plan shall be maintained at the facility at all times. Plan shall include the all of following in addition to the requirements of Section 404:

1. Locations where patients are located who are rendered incapable of self preservation.
2. Maximum number of patients rendered incapable of self preservation.
3. Area and extent of each Ambulatory Care Facility.
4. Location of adjacent smoke compartments or refuge areas, where required.
5. Path of travel to adjacent smoke compartments.
6. Location of any special locking, delayed egress or access control arrangements.

408.3.3 Staff training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by the staff at least every two months. A copy of the plan shall be readily available at all times within the facility.

408.3.4 Emergency Evacuation Drills. Emergency evacuation drills shall comply with Section 405. Emergency evacuation drills shall be conducted at least four times per year.

Exceptions: The movement of patients to safe areas or to the exterior of the building is not required.

(Renumber subsequent sections)

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

This code change proposal clarifies the code by accurately describing the documentation needed to understand the typical "defend in place" method of occupant protection. Defend-in-place is a widely used approach to protecting occupants who are bedridden, unconscious or otherwise unable to self-preserve in a fire event. The method relies on both active and passive fire protection systems as well as the actions of trained staff and responders. The heavy emphasis on staff action requires a comprehensive fire safety and evacuation plan.

Any building containing an ambulatory healthcare occupancy will, by definition, contain occupants who may be incapable of self-preservation. The intent of the current IBC requirements for ambulatory care is to create a type of defend-in-place environment. Fire safety and evacuation plans must be developed, reviewed and approved to support this strategy.

The reference to "defend-in-place" is added in Section 404.3.1 to recognize the defend- in-place method. This is not a new concept. The IBC and legacy codes have been written to support this concept for years, yet the code did not name or describe the concept until this cycle. Group A code change G68-12 was approved in 2012 to define the concept, with the understanding that this change would follow.

Fire safety plans should describe in the life safety strategy the method of notifying occupants, including the use of a private mode alarm system as allowed by code. Procedures for dealing with occupants in a defend-in-place strategy should also be described so that it is clear what the staff will be trained on and what the first responders should expect to encounter.

The new Section 408.3 adds requirements for how to create fire safety and evacuation plans for Ambulatory Care Facilities. This section does not include great detail, as there are many successful ways to approach a defend in place response. Rather, this section describes the minimum amount of information necessary aid in the review of facility and the plan. Fire evacuations plan are required to describe the special actions of staff, especially staff that must stabilize a patient prior to moving. This will be the basis of the staff education and training. This will also help the code official understand the expected performance of the building.

It is imperative that the building and fire official know the size and location of the facility as well as the number of patients who are incapable of self-preservation. This information will help the building official determine the proper classification and mitigations required. It will also allow the fire official to preplan the response for a particular building. Any special characteristics of the means of egress, such as path to the adjacent smoke compartment and special locking arrangements should also be described to aid in verifying code compliance. Practically these documents will be the basis for staff training as well.

Fire safety plans are required to show the location of area where incapable patients are likely to be. They are required to show the location of smoke compartments, routes of travel, patient movement elevators and any locking constraints that might affect the horizontal evacuation of patients. All of these will be essential to robust staff training as well as operational planning for first responders.

Finally, the requirements for emergency evacuation drill have been merged into a single subsection for clarity. The only functional change is to delete the exception which would have allowed drills to not comply with the time requirements of Section 405.4. The committee felt that holding drill at unexpected time and varying conditions was a crucial component of staff training.

These requirements, while new to the fire code, have been a widely accepted practice in the facilities for years. This code change proposal has been reviewed by representatives from both the hospital and nursing home industry who have given their support to these changes.

Cost Impact: This proposal will not increase the cost of construction.

F27–13*

404.3.1, 404.3.2, 408.6, 408.6.1, 408.6.2, 408.6.3 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

404.3 Contents. Fire safety and evacuation plan contents shall be in accordance with Sections 404.3.1 and 404.3.2.

404.3.1 Fire evacuation plans. Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete, ~~or, where *approved*~~, by selected floors or areas only, or with a defend-in-place response.

2 through 9 *(No change to current text)*

404.3.2 Fire safety plans. Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy including the following:
   2.1. ~~and~~ Procedures for notifying occupants, including areas with a private mode alarm system. ~~,~~
   2.2 Procedures for ~~relocating~~ occupants under a defend-in-place response.
   2.3 Procedures ~~or~~ for evacuating occupants, including occupants who need assistance in evacuation.

3 through 7 *(No change to current text)*

408.6 Group I-2. Group I-2 occupancies shall comply with the requirements of Sections 408.6.1 through 408.6.3 and Section 401 through 406. ~~Drills are not required to comply with the time requirements of Section 405.4.~~

~~**408.6.1 Evacuation not required.** During emergency evacuation drills, the movement of patients to safe areas or to the exterior of the building is not required.~~

~~**408.6.2 Coded alarm signal.** When emergency evacuation drills are conducted after visiting hours or when patients or residents are expected to be asleep, a coded announcement is allowed instead of audible alarms.~~

Add new text as follows:

408.6.1 Fire evacuation plans. The fire safety and evacuation plans required by Section 404 shall include a description of special staff *actions*. Plan shall include all of the following in addition to the requirements of Section 404.

1. Procedures for evacuation for patients with needs for containment or restraint and post evacuation containment, where present.
2. A written plan for maintenance of the means of egress.
3. Procedure for a defend-in-place strategy.
4. Procedures for a full floor or building evacuation, where necessary.

408.6.2 Fire safety plans. A copy of the plan shall be maintained at the facility at all times. Plans shall include all of the following in addition to the requirements of Section 404:

1. Location and number of any patient sleeping rooms and operating rooms.
2. Location of adjacent smoke compartments or refuge areas.
3. Path of travel to adjacent smoke compartments.
4. Location of any special locking, delayed egress or access control arrangements.
5. Location of elevators utilized for patient movement in accordance with the fire safety plan, where provided.

408.6.3 Emergency Evacuation Drills. Emergency evacuation drills shall comply with Section 405.

Exceptions:

1. The movement of patients to safe areas or to the exterior of the building is not required.
2. Where emergency evacuation drills are conducted after visiting hours or where patients or residents are expected to be asleep, a coded announcement shall be an acceptable alternative to audible alarms.

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception in April, 2005, the CTC has held 25 meetings – all open to the public. In 2012, three of the 25 face-to face meetings were held. In addition to the CTC meetings, the CTC established Study Groups (SG) of interested parties for each of the areas of study. These SG's are responsible for reviewing the available information and making recommendations to the CTC. All totaled, the SG's held over 70 conference calls in 2012.

This code change proposal clarifies the code by accurately describing the documentation needed to understand the typical "defend in place" method of occupant protection. Defend-in-place is a widely used approach to protecting occupants who are bedridden, unconscious or otherwise unable to self-preserve in a fire event. The method relies on both active and passive fire protection systems as well as the actions of trained staff and responders. The heavy emphasis on staff action requires a comprehensive fire safety and evacuation plan.

The reference to "defend-in-place" is added in Section 404.3.1 to recognize the defend- in-place method. This is not a new concept. The IBC and legacy codes have been written to support this concept for years, yet the code did not name or describe the concept until this cycle. Group A code change G68-12 was approved in 2012 to define the concept, with the understanding that this change would follow.

Fire safety plans should describe in the life safety strategy the method of notifying occupants, including the use of a private mode alarm system as allowed by code. Procedures for dealing with occupants in a defend-in-place strategy should also be described so that it is clear what the staff will be trained on and what the first responders should expect to encounter.

It is imperative that the building and fire code officials know the size and location of the facility as well as the number of patients who are incapable of self-preservation. This information will help the building official determine the proper classification and mitigations required. It will also allow the fire official to preplan the response for a particular building. Any special characteristics of the means of egress, such as path to the adjacent smoke compartment and special locking arrangements should also be described to aid in verifying code compliance. Practically these documents will be the basis for staff training as well.

Section 408.6 has been rewritten to accurately reflect the needs and the current practice for Group I-2 occupancies. This section requires the facility to describe the special actions of staff. Due to the special nature of some facilities, specific requirements are made locations where patients are restrained. Since these facilities contain a large number of carts, beds, and other mobile equipment a written plan for maintenance of the means of egress is required. This would address the practical operational needs of the facility while ensuring that the means of egress can be maintained free of obstructions. While these facilities are defend in place, catastrophic failure may require full evacuation. Facilities are asked to describe this procedure so that the first responders can preplan.

Fire safety plans are required to show the location of area where incapable patients are likely to be. They are required to show the location of smoke compartments, routes of travel, patient movement elevators and any locking constraints that might affect the horizontal evacuation of patients. All of these will be essential to robust staff training as well as operational planning for first responders.

Finally, the requirements for emergency evacuation drill have been merged into a single subsection for clarity. The only functional change is to delete the exception which would have allowed drills to not comply with the time requirements of Section 405.4. The committee felt that holding drill at unexpected time and varying conditions was a crucial component of staff training.

These requirements, while new to the fire code, have been a widely accepted practice in the facilities for years. This code change proposal has been reviewed by representatives from both the hospital and nursing home industry who have given their support to these changes.

Cost Impact: This proposal will not increase the cost of construction.

F31–13
Table 405.2

Proponent: Dave Frable representing U.S. General Services Administration, Public Buildings Service

Revise as follows:

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
~~Group B[c]~~	~~Annually~~	~~Employees~~
Group B[c] (transient[e])	Annually	Employees
Group B[c] (nontransient[f])	Annually	All occupants
Group E	Monthly[a]	All occupants
Group F	Annually	Employees
Group I	Quarterly on each shift	Employees[b]
Group R-1	Quarterly on each shift	Employees
Group R-2[d]	Four annually	All occupants
Group R-4	Quarterly on each shift	Employees[b]
High-rise buildings	Annually	Employees

a. through d. *(No changes to current text)*
e. Applicable to Group B occupancies primarily used by occupants for short term use for less than 30 days.
f. Applicable to Group B occupancies primarily used by occupants for long term use for more than 30 days.

Reason: The intent of this code change is to provide occupants who are working in a Group B occupancy for more than 30 days to have an opportunity to participate in an annual fire and evacuation drill. Currently, only the employees (i.e., building staff) in a Group B occupancy have an opportunity to participate in an annual fire and evacuation drill. Having building occupants participate in an annual drill will provide educational instruction and practice for the building occupants evacuating/relocating as well as serve as a verification tool that the fire safety and evacuation plan, as developed, is functional. An additional benefit is that practice makes perfect when it comes to effective occupant egress during an evacuation and enables occupants to be familiar with egress routes and the fire safety and evacuation plan's details.

It should also be emphasized it is not the intent of this code change to require occupants in all Group B occupancies to participate in fire and evacuation drills. In certain Group B occupancies where occupants are staying or working for less than 30 days, occupants will not be required to participate in an emergency egress and relocation drill. For example, it would not be practical or reasonable for patients in an ambulatory health care facility (considered a Group B occupancy) to participate in a periodic evacuation drill. For these types of circumstances, building employees will still provide the necessary procedures in case of fire to occupants prior to an emergency and facilitate and direct occupants during the emergency regardless of whether the occupants participate in the annual fire and emergency drill.

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

F32–13
Table 405.2, 408.5.4, 408.10.4

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

SECTION 405
EMERGENCY EVACUATION DRILLS

405.2 Frequency. Required emergency evacuation drills shall be held at the intervals specified in Table 405.2 or more frequently where necessary to familiarize all occupants with the drill procedure.

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
Group B ~~c~~ b	Annually	Employees
Group E	Monthly[a]	All occupants
Group F	Annually	Employees
~~Group I~~	~~Quarterly on each shift~~	~~Employees~~ ~~b~~
Group I -1	Twice on each shift per year	All occupants
Group I -2	Quarterly on each shift	Employees
Group I -3	Quarterly on each shift	Employees
Group I -4	Monthly	All occupants
Group R-1	Quarterly on each shift	Employees
Group R-2 ~~d~~ c	Four annually	All occupants
Group R-4	~~Quarterly on each shift~~ Twice on each shift per year	~~Employees~~ ~~b~~ All occupants
High-rise buildings	Annually	Employees

a. The frequency shall be allowed to be modified in accordance with Section 408.3.2.

~~b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.~~

b.~~c~~ Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

c.~~d.~~ ~~Applicable to~~ Emergency evacuation drills in Group R-2 college and university buildings shall be in accordance with Section 408.3. Other Group R-2 occupancies shall be in accordance with Section 408.9.

408.5.4 Drill frequency. ~~Emergency evacuation drills shall be conducted at least six times per year, two times per year on each shift.~~ In addition to the evacuation drills in required in Section 405.2, employees shall participate in an additional two times a year on each shift. Twelve drills with all occupants shall be conducted in the first year of operation. Drills are not required to comply with the time requirements of Section 405.4.

408.10.4 Drill frequency. ~~Emergency evacuation drills shall be conducted at least six times per year, two times per year on each shift.~~ In addition to the evacuation drills in required in Section 405.2, employees shall participate in an additional two times a year on each shift. Twelve drills with all occupants shall be conducted in the first year of operation. Drills are not required to comply with the time requirements of Section 405.4.

Reason: The intent is to clarify the requirements for Group I-1, I-4 and R-4 fire and safety evacuation drill requirements. Table 405.2 is expanded to indicate clearly when employees and residents/children are required to participate in the drills. Group I-1 and R-4 require resident's participation for 6 drills a year (common practice). The Group I-4 should have drills consistent with Group E facilities.

Current footnote b does not make logical sense to reference Group R-4 drill participation for residents for Group I facilities. The requirement has been specifically addressed in the appropriate use group section.

Revisions to current footnote d is a clarification for dorms vs. apartments.

Group I-1, must use the provisions in Section 404 in addition to the concerns specific to Group I-1. In Section 408.5.4, staff is required to have additional practice drills. This will equal what was in the table for staff to do quarterly drills on each shift. Section 408.5.5 resident participation is coordinated with Group R-4 language in Section 408.10.5.

In Section 408.10.4, staff is required to have additional practice drills. This will equal what was in the table for staff to do quarterly drills on each shift.

The Adhoc Health Care committee has proposals to fire and safety evacuation plans and drills for Group I-2 and Ambulatory Care Facilities. This proposal can be accepted independently, but would also work in conjunctions with these proposals.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/default.aspx. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public.

Cost Impact: None

F33–13
Table 405.2

Proponent: Dave Frable representing U.S. General Services Administration, Public Buildings Service

Revise as follows:

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
Group B[c]	Annually	Employees
Group E	Monthly[a]	All occupants
Group F	Annually	Employees
Group I	Quarterly on each shift	Employees[b]
Group R-1	Quarterly on each shift	Employees
Group R-2[d]	Four annually	All occupants
Group R-4	Quarterly on each shift	Employees[b]
~~High-rise buildings~~	~~Annually~~	~~Employees~~
High-rise buildings (transient[e])	Annually	Employees
High-rise buildings (non transient[f])	Annually	All occupants

a. The frequency shall be allowed to be modified in accordance with Section 408.3.2.
b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
c. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
d. Applicable to Group R-2 college and university buildings in accordance with Section 408.3.
e. Applicable to high-rise buildings primarily used by occupants for short term use for less than 30 days.
f. Applicable to high-rise buildings primarily used by occupants for long term use for more than 30 days.

Reason: The intent of this code change is to provide occupants in high-rise buildings, for more than 30 days to have an opportunity to participate in an annual fire and evacuation drill. Currently, only the employees (i.e., building staff), have an opportunity to participate in an annual fire and evacuation drill. Having building occupants participate in an annual drill will provide educational instruction and practice for the building occupants evacuating/relocating as well as serve as a verification tool that the fire safety and evacuation plan, as developed, is functional. An additional benefit is that practice makes perfect when it comes to effective occupant egress during an evacuation and enables occupants to be familiar with egress routes and the fire safety and evacuation plan's details.

It should also be emphasized it is not the intent of this code change to require occupants in all high-rise buildings to participate in fire and evacuation drills, In certain high-rise buildings where occupants are staying or working les than 30 days, occupants will not be required to participate in an emergency egress and relocation drill. For example, it would not be practical or reasonable to require occupants in high-rise hospitals, hotels, or correctional facilities to participate in an evacuation drill. For these types of circumstances, building employees will still provide the necessary procedures in case of fire to occupants prior to an emergency and facilitate and direct occupants during the emergency regardless of whether the occupants participate in the annual fire and emergency drill.

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

F104–13*
806.1.1

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov)

Add new text as follows:

806.1.1 Restricted occupancies. Natural cut trees shall be prohibited within ambulatory care facilities and Group A, E, I-1, I-2, I-3, I-4, M, R-1, R-2 and R-4 occupancies.

Exceptions:

1. Trees located in areas protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2 shall not be prohibited in Groups A, E, M, R-1 and R-2.
2. Trees shall be allowed within *dwelling units* in Group R-2 occupancies.

Reason: Ambulatory Care Facilities are being added to the list of prohibited occupancies for natural cut trees at Section 806.1.1. Patients in these facilities are rendered incapable of self-preservation in this occupancy in activities that present the same evacuation challenges presented by Group I-2 occupancies which are already in the list. This section is recommended for modification because of the rapid manner in which a natural cut tree is consumed by fire with the associated release of heat and smoke would present a distinct hazard to occupants. A burning tree could not be approached or passed by thus effectively blocking that portion of an egress path while spreading heat and smoke to additional portions of the means of egress.

Ambulatory Care Facilities are located within Business (Group B) occupancies where natural cut trees are permitted. This added prohibition eliminates a hazard that otherwise would not occur for similar activities conducted in a Group I-2 occupancy and provides an improved level of protection for other occupancies in the mixed use situation.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Cost impact: This proposal will not increase the cost of construction.

F105–13
806.2

Proponent: Amy Carpenter, AIA, Pioneer Network Long Term Care Code Task Force

Revise as follows:

806.2 Artificial vegetation. Artificial decorative vegetation shall ~~meet the flame propagation performance criteria of NFPA 701. Meeting the flame propagation performance criteria of NFPA 701 shall be documented and certified by the manufacturer in an *approved* manner. Alternatively, the artificial decorative vegetation item shall~~ be tested in accordance ith NFPA 289, using the 20 kW ignition source, and shall have a maximum heat release rate of 100 kW.

Exception: In Groups R-2, I-1 and I-2, artificial vegetation shall be permitted in limited quantities such that a hazard of fire development or spread is not present.

Reason: The text stricken from section 806.2 is proposed because it is not a correct reference and should not be included. NFPA 701 is the standard for "flame propagation of Textiles and Films". The scope description, in the standard, is clear that it is for materials that will be used as curtains, drapes and window treatments, therefore it is not the correct reference standard, nor the correct test method, for artificial decorative vegetation that may be used in buildings.

In Groups R-2, I-1 and I-2 Condition 1, residents often seek to create a home-like environment and display decorative items, like a seasonal wreath at their unit entries. It is not always possible, or practical to determine compliance with NFPA 289, especially for items procured by individual residents. The language of this exception is similar to the permissions for decorative materials, in

these use groups, under Section 807. Further, as all of these Occupancies are required to have sprinkler coverage, there is a reduced risk for detrimental effects of limited quantities of artificial vegetation.

Cost Impact: No cost impact

F106–13

806.2, 807.1(IBC [F] 806.1), 807.1.2 (IBC [F] 806.1.2), 807.2 (IBC [F] 806.2), 807.4.2.2, 2603.5, 3104.2, 3105.4

Proponent: Timothy T. Earl, GBH International (tearl@gbhinternational.com)

Revise as follows:

806.2 Artificial vegetation. Artificial decorative vegetation shall meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701. Meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall be documented and certified by the manufacturer in an *approved* manner. Alternatively, the artificial decorative vegetation item shall be tested in accordance with NFPA 289, using the 20 kW ignition source, and shall have a maximum heat release rate of 100 kW.

807.1 (IBC [F] 806.1) General requirements. In occupancies in Groups A, E, I and R-1, and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 in accordance with Section 807.2 or be noncombustible.

Exceptions:

1. Curtains, draperies, hangings and other decorative materials suspended from walls of *sleeping units* and *dwelling units* in dormitories in Group R-2 protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1 and such materials are limited to not more than 50 percent of the aggregate area of walls.
2. Decorative materials, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are of limited quantities such that a hazard of fire development or spread is not present.

In Groups I-1 and I-2, combustible decorative materials shall meet the flame propagation criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.

Fixed or movable walls and partitions, paneling, wall pads and crash pads, applied structurally or for decoration, acoustical correction, surface insulation or other purposes, shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.

In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 807.2 and Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall be noncombustible.

807.1.2 (IBC [F] 806.1.2) Combustible decorative materials. The permissible amount of decorative materials meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall not exceed 10 percent of the specific wall or ceiling area to which it is attached.

Exceptions:

1. In auditoriums in Group A, the permissible amount of decorative material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.11 of the *International Building Code.*
2. The amount of fabric partitions suspended from the ceiling and not supported by the floor in Group B and M occupancies shall not be limited.

807.2 (IBC [F] 806.2) Acceptance criteria and reports. Where required to be flame resistant, decorative materials shall be tested by an *approved* agency and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701, or such materials shall be noncombustible.

Reports of test results shall be prepared in accordance with Test Method 1 or Test Method 2, as appropriate, of NFPA 701 and furnished to the *fire code official* upon request.

807.4.2.2 Motion picture screens. The screens upon which motion pictures are projected in new and existing buildings of Group A shall either meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall comply with the requirements for a Class B interior finish in accordance with Section 803 of the *International Building Code.*

Revise as follows:

2603.5 Sealing of buildings, structures and spaces. Paper and other similar materials that do not meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall not be used to wrap or cover a building, structure or space in excess of that required for the sealing of cracks, casements and similar openings.

Revise as follows:

3104.2 Flame propagation performance treatment. Before a permit is granted, the *owner* or agent shall file with the *fire code official* a certificate executed by an *approved* testing laboratory certifying that the tents and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects, including sawdust when used on floors or passageways, are composed of material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall be treated with a flame retardant in an *approved* manner and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.

IBC [F] 801.4 Decorative materials and trim. *Decorative materials* and *trim* shall be restricted by combustibility, fire performance, or ~~and the~~ flame propagation performance ~~criteria of NFPA 701,~~ in accordance with Section 806.

Reason: In 1989 the NFPA Technical Committee on Fire Tests eliminated the so-called “small-scale test” from NFPA 701 because the results had been shown not to represent a fire performance that corresponded to what happened in real scale. Instead of the “small-scale test” NFPA 701 now (and for over 20 years) contains two tests (Test 1 and Test 2), which apply to materials as indicated by the text of NFPA 701 (2010) that is shown at the bottom of this proposal.

However, a large number of manufacturers continue stating that the materials or products that they sell have been tested to NFPA 701, when they really mean the pre-1989 small-scale test in NFPA 701. That test no longer exists and materials or products meeting that test do not exhibit acceptable fire performance.

The change above was already done in the IBC.

Text of NFPA 701 (2010):

1.1.1.1 Test Method 1 shall apply to fabrics or other materials used in curtains, draperies, or other window treatments. Vinyl-coated fabric blackout linings shall be tested according to Test Method 2.
1.1.1.2 Test Method 1 shall apply to single-layer fabrics and to multilayer curtain and drapery assemblies in which the layers are fastened together by sewing or other means. Vinyl-coated fabric blackout linings shall be tested according to Test Method 2.
1.1.1.3 Test Method 1 shall apply to specimens having an areal density less than or equal to 700 g/m^2 (21 oz/yd^2), except where Test Method 2 is required to be used by 1.1.2.
1.1.2.1 Test Method 2 (flat specimen configuration) shall be used for fabrics, including multilayered fabrics, films, and plastic blinds, with or without reinforcement or backing, with areal densities greater than 700 g/m^2 (21 oz/yd^2).
1.1.2.2 Test Method 2 shall be used for testing vinyl-coated fabric blackout linings and lined draperies using a vinyl-coated fabric blackout lining.
1.1.2.3 Test Method 2 shall be used for testing plastic films, with or without reinforcement or backing, when used for decorative or other purposes inside a building or as temporary or permanent enclosures for buildings under construction.
1.1.2.4 Test Method 2 shall apply to fabrics used in the assembly of awnings, tents, tarps, and similar architectural fabric structures and banners.

Note also the following from the text of NFPA 701 (2010):

1.2* Purpose.
1.2.1 The purpose of Test Methods 1 and 2 shall be to assess the propagation of flame beyond the area exposed to the ignition source.

A.1.1 A small-scale test method appeared in NFPA 701 until the 1989 edition. It was eliminated from the test method because it has been shown that materials that "pass" the test do not necessarily exhibit a fire performance that is acceptable. The test was not reproducible for many types of fabrics and could not predict actual full-scale performance. It should not, therefore, be used.
A.1.1.1 For the purposes of Test Method 1, the terms curtains, draperies, or other types of window treatments, where used, should include, but not be limited to, the following items:

(1) Window curtains
(2) Stage or theater curtains
(3) Vertical folding shades
(4) Roll-type window shades
(5) Hospital privacy curtains
(6) Window draperies
(7) Fabric shades or blinds
(8) Polyvinyl chloride blinds
(9) Horizontal folding shades
(10) Swags

Examples of textile items other than window treatments to which Test Method 1 applies include:

(1) Table skirts
(2) Table linens
(3) Display booth separators
(4) Textile wall hangings
(5) Decorative event tent linings not used in the assembly of a tent

Cost Impact: Minimal

F107–13
806.3

Proponent: Amy Carpenter, AIA, Pioneer Network Long Term Care Code Task Force

Revise as follows:

806.3 Obstruction of means of egress. ~~The required width of any portion of a *means of egress* shall not be obstructed by decorative vegetation~~. Decorative vegetation shall not protrude more than 6 inches into the means of egress pathway and shall not obstruct any life safety equipment or controls.

Reason: Section 806.3 seeks to clarify a common enforcement mis-conception that decorative vegetation cannot protrude at all into the corridor. Often, calculated egress loads will set a required width of a corridor much lower than the actual provided corridor width. The current language would actually allow items to protrude into the corridor to any distance, as long as the vegetation doesn't encroach more than the required calculated width. This new language restricts the total projection to 6 inches, which is consistent with items such as hand sanitizers.

Cost Impact: No cost impact

F108–13
806.3

Proponent: Robert J Davidson, Davidson Code Concepts, LLC, representing self (rjd@davidsoncodeconcepts.com)

Revise as follows:

806.3 Obstruction of means of egress. The required width of any portion of a *means of egress* shall not be obstructed by decorative vegetation. Natural cut trees shall not be located within an exit, corridor, or a lobby or vestibule.

Reason: Section 806.3 "Obstruction of the means of egress" is recommended for modification because the rapid manner in which a natural cut tree is consumed by fire with the associated release of heat and smoke would present a distinct hazard to egress regardless of whether it impinged on the required width of the means of egress. A burning tree could not be approached or passed by thus effectively blocking that portion of an egress path while spreading heat and smoke to additional portions of the means of egress. A significant impact would be a natural cut tree located within a lobby that has the allowed 50% of all egress capacity passing through the same lobby.

Cost impact: This proposal will not increase the cost of construction.

F109–13
807 (IBC [F] 806)

Proponent: Amy Carpenter, representing Pioneer Network Long Term Care Code Task Force (acarpenter@lenhardtrodgers.net) and Wayne Jewell Township of Green Oak, MI representing self

Revise as follows:

SECTION 807
DECORATIVE MATERIALS OTHER THAN DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS

807.1 (IBC [F]806.1) General. Combustible decorative materials, other than decorative vegetation, shall comply with Section 807.2 through 807.5.

~~**807.1 (IBC [F]806.1) General requirements**. In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains draperies, hangings and other *decorative materials* suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with section 807.2 or be noncombustible.~~

~~**Exceptions:**~~

1. ~~Curtains, draperies, hangings and other decorative materials suspended from walls of *sleeping units* and *dwelling units* in dormitories in Group R-2 protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1 and such materials are limited to not more than 50 percent of the aggregate area of walls.~~ *(relocated to Section 807.3 exception 2)*
2. ~~Decorative materials, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are of limited quantities such that a hazard of fire development or spread is not present.~~ *(relocated to Section 807.5.5)*

~~In Groups I-1 and I-2, combustible decorative materials shall meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such~~

~~limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.~~ *(relocated to Section 807.5.6 and 807.5.7)*

~~Fixed or movable walls and partitions, paneling, wall pads and crash pads, applied structurally or for decoration, acoustical correction, surface insulation or other purposes, shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.~~ *(relocated to Section 807.3)*

~~In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet Sections 807.2 and 807.3 the flame propagation performance criteria in accordance with Section 807.2 and NFPA 701 or shall be noncombustible.~~

~~**807.1.1(IBC [F]806.1.1)**~~ **807.2 (IBC [F] 806.2) Noncombustible materials.** The permissible amount of noncombustible decorative material shall not be limited.

~~**807.1.2 (IBC [F]806.1.1)**~~ **807.3 (IBC [F] 806.3) Combustible decorative materials.** In other than Group I-3, ~~The permissible amount of~~ curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall be flame resistant ~~meeting the flame propagation performance criteria of NFPA 701~~ in accordance with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which it is attached.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered *interior finish* if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered *decorative materials* or furnishings. *(relocated from Section 807.1)*

Exceptions:

1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings ~~meeting the flame propagation performance criteria of NFPA 701~~ shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.11 of the *International Building Code.*
2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and other similar decorative materials suspended from walls or ceiling shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1. *(relocated and revised from Section 807.1, exception 1)*

3. ~~2.~~ In Group B and M occupancies, the amount of fabric partitions suspended from the ceiling and not supported by the floor ~~in Group B and M occupancies~~ shall not be limited.

~~**807.2(IBC [F] 806.2)**~~ **807.4 (IBC [F] 806.4) Acceptance criteria and reports.** Where required to be flame resistant, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall be tested by an *approved* agency and meet the flame propagation performance criteria of NFPA 701~~, or such materials shall be noncombustible~~. Reports of test results shall be prepared in accordance with NFPA 701 and furnished to the *fire code official* upon request.

~~**807.4**~~ **807.5 Occupancy-based requirements.** In occupancies specified ~~in Group A, E and I-4 day care facilities~~, combustible decorative materials not complying with Section 807.3 ~~other than decorative vegetation~~ shall comply with Sections 807.5.1 ~~807.4.1~~ through ~~807.4.4.2~~ 807.5.7.

IFC 807.5.1 ~~**807.4.1**~~ **General.** ~~All of~~ The following requirements shall apply to all occupancies: ~~to all Group A and E occupancies and Group I-4 day care facilities regulated by Sections 807.4.2 through 807.4.4~~:

1. ~~Explosive or highly flammable materials:~~ Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
2. ~~Fire-retardant coatings:~~ Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.
3. ~~Obstructions:~~ Furnishings or other objects shall not be placed to obstruct *exits,* access thereto, egress there from or visibility thereof.

807.5.2 ~~807.4.2~~ Group A. In Group A occupancies, the requirements in Sections ~~807.4.2.1~~ 807.5.2.1 through ~~807.4.2.3~~ 807.5.2.4 shall apply ~~to occupancies in Group A~~.

807.5.2.1 ~~807.4.2.1~~ Foam plastics. Exposed foam plastic materials and unprotected materials containing foam plastic used for decorative purposes or stage scenery or exhibit booths shall have a maximum heat release rate of 100 kW when tested in accordance with UL 1975, or when tested in accordance with NFPA 289 using the 20 kW ignition source.

Exceptions:

1. Individual foam plastic items or items containing foam plastic where the foam plastic does not exceed 1 pound (0.45 kg) in weight.
2. Cellular or foam plastic shall be allowed for trim in accordance with Section 804.2.

807.5.2.2 ~~807.4.2.2~~ Motion Picture Screens. The screens upon which motion pictures are projected in new and existing buildings shall either ~~meet the flame propagation performance criteria of NFPA 701~~ comply with Section 807.4 or shall comply with the requirements for a Class B interior finish in accordance with Section 803 of the *International Building Code*.

807.5.2.3 ~~807.4.2.3~~ Wood use in ~~Group A-3~~ places of religious worship. In places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall ~~be allowed~~ not be limited.

807.5.2.4 ~~807.3 (IBC [F] 806.4)~~ Pyroxylin plastic. Imitation leather or other material consisting of or coated with a pyroxylin or similarly hazardous base shall not be used ~~in Group A occupancies~~.

807.5.3 ~~807.4.3~~ Group E. Group E occupancies, shall comply with Sections ~~the requirements in Sections 807.4.3.1~~ 807.5.3.1 through ~~and 807.4.3.2~~ 807.5.3.3 ~~shall apply to occupancies in Group E~~.

807.5.3.1 ~~807.4.3.1~~ Storage in corridors and lobbies. Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved* ~~smoke detection~~ fire alarm system installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.5.3.2 ~~807.4.3.2~~ Artwork in corridors. Artwork and teaching materials shall be limited on the walls of *corridors* to not more than 20 percent of the wall area.

807.5.3.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

807.5.4 ~~807.4.4~~ Group I-4~~, day care facilities~~. Group I-4 occupancies shall comply with, the requirements in Section~~s~~ ~~807.4.4.1~~ 807.5.4.1 through ~~and~~ ~~807.4.4.2~~ 807.5.4.2 ~~shall apply~~ ~~to day care facilities classified in~~ ~~Group I-4~~.

807.5.4.1 ~~807.4.4.1~~ Storage in corridors and lobbies. Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved* ~~smoke detection~~ fire alarm system installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.5.4.2 ~~807.4.4.2~~ Artwork in corridors. Artwork and teaching materials shall be limited on the walls of *corridors* to not more than 20 percent of the wall area.

807.5.4.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

807.5.5 Dormitories in Group R-2. In Group R-2 dormitories, within sleeping units and dwelling units, the combustible decorative materials, shall be of limited quantities such that a hazard of fire development or spread is not present. *(relocated and revised from Section 807.1, exception 2)*

807.5.6 Groups I-1 and I-2. In Groups I-1 and I-2 occupancies, combustible *decorative materials* shall be of such limited quantities that a hazard of fire development or spread is not present.*(relocated from Section 807.1)*

IFC 807.5.7 Group I-3. In Group I-3, combustible *decorative materials* are prohibited. *(relocated from Section 807.1)*

Reason: The proposed revision is intended to be a clarification of the combustible materials permitted within a space. Specifically, to understand the different requirements for fabric-type decorative materials and paper-type decorative materials and what quantities of each are permitted in various use groups.

Currently, photographs and paintings, in some use groups, are required to be tested and certified to NFPA 701. The scope of this standard does not address paper items such as artwork and photographs and therefore was impossible to comply with.

The scope of NFPA 701 is as follows:
"*1.1.1* Test Method 1*
1.1.1.1 Test Method 1 shall apply to fabrics or other materials used in curtains, draperies, or other window treatments. Vinyl-coated fabric blackout linings shall be tested according to Test Method 2.

1.1.1.2 Test Method 1 shall apply to single-layer fabrics and to multi-layer curtain drapery assemblies in which the layers are fastened together by sewing or other means. Vinyl-coated fabric blackout linings shall be tested according to Test Method 2.

1.1.1.3 Test Method 1 shall apply to specimens having an areal density less than or equal to 700 g/m2 (21 oz/yd2), except where Test Method 2 is required to be used by 1.1.2."

Most revisions are editorial and serve to provide better clarity and to group requirements by use group.

807.1 – A general statement was needed so that the requirements match the Section title
The former text in 807.1 was re-organized and is now in Section 807.3 and 807.5 for better clarity.

807.2 – re-number only

807.3 - Since Group I-3 are limited to only non-combustible, the limitation is added to the front of the combustible materials.

The remainder of the sentence is revised for coordination with the next section on acceptance criteria and eliminating redundant reference to NFPA 701. That section starts out with "where required to be flame resistant". The limitation to "curtains, draperies, hangings and other decorative materials suspended from walls or ceilings" is in the first paragraph in Section 807.1. The addition of the words "fabric" hangings and other "similar" combustible decorative materials is to differentiate between fabrics and films that are covered under NFPA Standard 701 and other materials used for decorative effect, that are discussed in 807.5 for each use group.

Exception 1 is specific to Group A for percentage of materials complying with 701.

Exception 2, curtains for dormitories is relocated from 807.1. It was reformatted to be consistent with the exception for auditoriums. Revised language shown below:

> 2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and other similar decorative materials suspended from walls or ceiling ~~of *sleeping units* and *dwelling units* in dormitories in Group R-2~~ shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with ~~protected by~~ an *approved automatic sprinkler system* installed in accordance with Section 903.3.1 ~~and such materials are limited to not more than 50 percent of the aggregate area of walls~~.

Exception 3, reformatted to put groups first.

807.4 – Deleted text is not needed as this is addressed in 807.2. Added text is intended to specifically reference decorative items that are covered under the NFPA Standard.

807.5 – This proposed revision places requirements for multiple use groups in this section so the listing of groups was deleted. In addition, new section 807.1 already states this section is not applicable to decorative vegetation, so this language was deleted.

807.5.1 – these requirements should apply to all occupancies in this section.
Titles at the beginning of each sentence were redundant and not proper code language.

807.5.2 – text re-organized for consistency. The intent is to clarify the following conditions are applicable to Group A

807.5.2.1 – Re-number only

807.5.2.2 - Re-number. This is a subsection of Group A criteria, so group not needed. Consistency between subsections.

807.5.2.3 – Re-number. This is a subsection of Group A criteria, so group not needed. Plus, only in the title, not the text. Consistency between subsections.

807.5.2.4 - Relocated to group with Group A requirements. This is a subsection of Group A criteria, so group not needed. Consistency between subsections.

807.5.3 - text re-organized for consistency. The intent is to clarify the following conditions are applicable to Group E

807.5.3.1 – Re-number. Change in Exception 2 is for consistency in language with Section 907.

807.5.3.2 – Re title and re-number only.

807.5.3.3 - This provide guidance within the classroom as to how much art work is permitted.

807.5.4 - The intent of the first sentence is to clarify that the general provisions are applicable for Group I-4. The phrase "day care facilities" is redundant.

807.5.4.1 – Re-number. Change in Exception 2 is for consistency in language with Section 907.

807.5.4.2 – Re-title and re-number only.

807.5.4.3 – This provide guidance within the classroom as to how much art work is permitted.

807.5.5 - Relocate existing exception 2 in 807.1 related to Group R-2 dormitories. Language is similar to paper in school corridors. NFPA 701 does not apply to Photos or paintings. All Group R are now required to be sprinklered, so the threat of flame spread is reduced. Revised language shown below:

> **807.5.5 (IBC [F] 806.5.5) Dormitories in Group R-2.** In Group R-2 dormitories, within sleeping units and dwelling units, the combustible decorative materials, ~~including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are~~ shall be of limited quantities such that a hazard of fire development or spread is not present.

807.5.6 - Relocate existing Group I-1 and I-2 from 2nd paragraph of 807.1. New 807.3 would apply to curtains in all occupancies, including Group I-1 and I-2. This allowance is just for the paper permitted in the facilities. Revised language shown below:

> **IFC 807.5.6 Groups I-1 and I-2.** In Groups I-1 and I-2, combustible *decorative materials* shall ~~meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are~~ be of such limited quantities that a hazard of fire development or spread is not present.

807.5.7 – Re-located from 2nd paragraph of 807.1. Also scoped in 807.3

Cost Impact: None

F109-13

F110–13

807.1 (IBC [F] 806.1), 807.2 (IBC [F] 806.2), 807.3 (IBC [F] 806.4), 807.4

Proponent: Marcelo M Hirschler, GBH International (gbhint@aol.com)

Revise as follows:

807.1 (IBC [F] 806.1) General requirements. In ~~occupancies in~~ Groups A, E, I-4 and R-1 occupancies, and dormitories in Group R-2, ~~curtains, draperies, hangings and other~~ decorative materials suspended from walls or ceilings shall comply with 807.1.1, 807.1.2 or 807.1.3 ~~meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807.2 or be noncombustible~~.

807.1.1 (IBC [F] 806.1.1) The decorative materials shall meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 in accordance with Section 807.2.

807.1.2 (IBC [F] 806.1.2) The decorative materials shall exhibit a maximum rate of heat release of 100 kW when tested in accordance with NFPA 289, using the 20 kW ignition source.

807.1.3 (IBC [F] 806.1.3) The decorative materials shall be noncombustible.

Exceptions:

1. ~~Curtains, draperies, hangings and other decorative~~ Decorative materials suspended from walls of *sleeping units* and *dwelling units* in dormitories in Group R-2 protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1 do not need to comply with the requirements of 807.1.1 through 807.1.3 provided ~~and~~ such materials are limited to not more than 50 percent of the area of the specific wall or ceiling to which they are attached ~~aggregate area of walls~~.
2. Decorative materials~~, including, but not limited to, photographs and paintings~~ in dormitories in Group R-2 do not need to comply with the requirements of 807.1.1 through 807.1.3 where such materials are of limited quantities such that a hazard of fire development or spread is not present.

~~In Groups I-1 and I-2, combustible decorative materials shall meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.~~

~~Fixed or movable walls and partitions, paneling, wall pads and crash pads, applied structurally or for decoration, acoustical correction, surface insulation or other purposes, shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.~~

~~In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall~~

~~meet the flame propagation performance criteria in accordance with Section 807.2 and NFPA 701 or shall be noncombustible.~~

807.1.4 (IBC 806.1.4) Wall and ceiling coverings. Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior wall or ceiling finish and shall comply with the requirements for interior finish in Section 803 or shall be noncombustible.

Exception: Existing fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes that cover less than 10 percent of the wall or ceiling area to which they are attached do not need to comply with the requirements of 807.1.4.

807.1.5 (IBC 806.1.5) Fabric partitions. Fabric partitions that are suspended from the ceiling in Group B and M occupancies and not supported by the floor shall comply with the requirements of 807.1.1, 807.1.2 or 807.1.3. The amount of such fabric partitions shall not be limited.

~~**807.1.1**~~ **807.1.6 (IBC 806.1.6) Noncombustible materials.** The permissible amount of noncombustible decorative material shall not be limited.

~~**807.1.2**~~ **807.1.7 (IBC 806.1.7) Combustible decorative materials.** The permissible amount of decorative materials meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall not exceed 10 percent of the specific wall or ceiling area to which they are ~~it is~~ attached.

Exception~~s~~:

1. ~~1.~~ In auditoriums in Group A, the permissible amount of decorative material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.11 of the *International Building Code.*
2. ~~The amount of fabric partitions suspended from the ceiling and not supported by the floor in roup B and M occupancies shall not be limited.~~

807.2 (IBC [F] 806.2) Acceptance criteria and reports. Where required to be flame resistant, decorative materials shall be tested by an *approved* agency and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701, or such materials shall be noncombustible. Reports of test results shall be prepared in accordance with NFPA 701 and furnished to the *fire code official* upon request.

807.3 (IBC [F] 806.4) Pyroxylin plastic. Imitation leather or other material consisting of or coated with a pyroxylin or similarly hazardous base shall not be used in Group A occupancies.

807.4 Occupancy-based requirements. In occupancies in Group A, E and I ~~I-4 day care~~ facilities, decorative materials other than decorative vegetation shall comply with Sections 807.4.1 through 807.4.6.2 ~~807.4.4.2~~.

807.4.1 General. All of the following requirements shall apply to all Groups A, ~~and~~ E and I occupancies ~~and Group I-4 day care facilities~~ regulated by Sections 807.4.2 through 807.4.4:

1. Explosive or highly flammable materials. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.

2. Fire-retardant coatings. Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.
3. Obstructions. Furnishings or other objects shall not be placed to obstruct *exits,* access thereto, egress therefrom or visibility thereof.

807.4.2 Group A. The requirements in Sections 807.4.2.1 through 807.4.2.3 shall apply to occupancies in Group A.

807.4.2.1 Foam plastics. Exposed foam plastic materials and unprotected materials containing foam plastic used for decorative purposes or stage scenery or exhibit booths shall have a maximum heat release rate of 100 kW when tested in accordance with UL 1975, or when tested in accordance with NFPA 289 using the 20 kW ignition source.

Exceptions:

1. Individual foam plastic items or items containing foam plastic where the foam plastic does not exceed 1 pound (0.45 kg) in weight do not need to comply with the requirements of 807.4.2.1.
2. Cellular or foam plastic shall be allowed for trim in accordance with Section 804.2.

807.4.2.2 Motion picture screens. The screens upon which motion pictures are projected in new and existing buildings of Group A shall either meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall comply with the requirements for a Class B interior finish in accordance with Section 803 of the *International Building Code.*

807.4.2.3 Wood use in Group A-3 places of religious worship. In places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be allowed.

807.4.3 Group E. The requirements in Sections 807.4.3.1 and 807.4.3.2 shall apply to occupancies in Group E.

807.4.3.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved* smoke detection system installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.4.3.2 Artwork in corridors. Artwork and teaching materials shall be limited on the walls of *corridors* to not more than 20 percent of the specific wall area to which they are attached.

807.4.3.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

807.4.4 Groups I-1 and I-2. In Groups I-1 and I-2 occupancies, combustible decorative materials shall comply with the requirements of 807.1.1, 807.1.2 or 807.1.3.

Exceptions:

1. Combustible decorative materials including bulletin boards, artwork, photographs, paintings and similar personal items do not need to comply with the requirements of 807.1.1 through 807.1.3 provided such materials do not exceed 20 percent of the specific wall area to which they are attached.

2. In Group I-2 Condition 1 occupancies and Group I-1 occupancies, combustible decorative materials, including bulletin boards, artwork, photographs, paintings and similar personal items do not need to comply with the requirements of 807.1.1 through 807.1.3 provided such materials do not exceed 50 percent of the specific wall area to which they are attached where located within sleeping units and dwelling units
3. .

807.4.5 Group I-3. Combustible decorative materials are prohibited in Group I-3 occupancies.

~~**807.4.4**~~ **807.4.6 Group I-4, day care facilities.** The requirements in Sections 807.4.6.1 and 807.4.6.2 ~~807.4.4.1 and 807.4.4.2~~ shall apply to day care facilities classified in Group I-4.

~~**807.4.4.1**~~ **807.4.6.1 Storage in corridors and lobbies.** Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved* smoke detection system installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

~~**807.4.4.2**~~ **807.4.6.2 Artwork in corridors.** Artwork and teaching materials shall be limited on walls of *corridors and classrooms* to not more than 20 percent of the ~~specific~~ wall area to which they are attached.

807.4.6.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

Reason: This is primarily a reorganization of section 807 without changes, done for clarification. However, some changes were made as shown below.

1. Areas in healthcare occupancies used for long term patients often exhibit patient-prepared art and seasonal decorations, which help to define a friendlier environment. The 2012 IFC limits the decorative materials present to those materials meeting NFPA 701. These requirements are included independently of automatic sprinkler protection but automatic sprinklers are required in Group I-1 & I-2 facilities. Automatic suppression will limit the fire propagation to the area of origin. Small amounts of decorative finishes will not adversely affect the automatic sprinkler performance for typical materials of paper, cloth, textiles, and plastic films in quantities limited to less than 20% of the wall area. Proposed Section 807.4.4, exception 1, will allow up to 20% of the wall area to be decorative material without NFPA 701 documentation. This allowable area is in response to the users' needs to display artwork for the comfort of the patient/client.
2. The original requirements for Group I-1 & I-2 occupancies allow photos and paintings but only in such limited quantities that a hazard of fire development or spread is not present. Materials meeting NFPA 701 flame propagation requirements are in the 2012 IFC for other decorative materials. Burning characteristics vary widely based on the material used. Quick response sprinklers are required by NFPA 13 for hospital room and sleeping room areas. Group I-1 & I-2 corridor and circulation spaces are considered light hazard area for automatic sprinkler protection. These quick response sprinklers will respond 3 to 5 times faster than standard response sprinklers. This faster response will start suppression when the fire is smaller with less heat and products of combustion generation. Proposed Section 807.4.4, exception 2, will allow in Group I-2 nursing homes and in Group I-1 up to 50% of the wall area of sleeping units or dwelling units to be decorative material without NFPA 701 documentation. Again, this allowable area is in response to the users' needs to display artwork for the comfort of the patient/client.
3. The 2012 IFC Section 807.4.3.2 and 807.4.4.2 for Group E and I-4 occupancies allows art work and teaching materials on the corridor walls not to exceed 20% of the wall area. There is trained staff in the facility at all times it is occupied by students, children or clients. Group I-1 and I-2 occupancies have trained staff present 24 hours a day. Similar safe guards are present in these 3 types of occupancies. I-1 and I-2 also have smoke zoning and special protection of hazard requirements to control exposure to the products of combustion.
4. Flame spread on the decorative wall covering will be primarily in the vertical direction. Horizontal propagation will occur at a considerably slower rate than the vertical in typical corridor configurations. This slower horizontal propagation can be retarded or controlled by the quick response sprinklers. 20% of the wall area was selected as a reasonable limit, allowing the facility flexibility in using decorative wall materials.
5. Other issues covered in the re-write follow.
6. Wall coverings and ceiling coverings cannot be tested to NFPA 701. Thus, surface coverings should be deleted from the definition of decorative materials and wall coverings and ceiling coverings added. This was done in a separate proposal, because it is not dependent on this change.

7. If a partition is attached to the wall it is a wall covering system. Such partitions usually are fabric covering foam plastic and they should not be exempt from testing because they can result in having very high heat release.
8. Chapter 8 of the IBC treats wall coverings and ceiling coverings differently because textile ceiling coverings and expanded ceiling coverings cannot be tested to NFPA 265 and therefore the section (now 807.1.4) should address wall and ceiling coverings.
9. If a "partition" is attached to a wall it is not a partition but either a wall covering or a curtain/drape and it is covered by the general requirements for wall coverings in 807.1.4.
10. Once a partition is supported from the floor it becomes more structural and it cannot be tested to NFPA 701.
11. Fabric partitions are covered by 807.1.5, which addresses how they should be tested and there is no need for an exception to 807.1.7.
12. The IFC now includes NFPA 289 as a test and it offers a better option for testing than NFPA 701 so it should be added as an option. It would be an intermediate option between NFPA 701 and noncombustible.
13. NFPA 701 has two tests: test 1 and test 2 (with the weight per unit area of the decoration being what determines which one is used). Many manufacturers advertise fabrics that "meet NFPA 701" and sometime they add that the fabric meets the "small scale test in NFPA 701". The problem is that the "small scale test" was eliminated from NFPA 701 in 1989 (because it does not provide adequate safety) and is now no longer an acceptable test anywhere. This is covered by a separate proposal submitted by Tim Earl, because it is independent of the action here. That has already been done in the IBC.
14. The IFC 2012 code is silent about fixed or movable walls, etc. that cover less than 10% of a wall or ceiling area. To avoid problems the proposal recommends that we grandfather in existing systems.

Cost Impact: Minimal

F111–13

(IBC [F] 202); 807.1 (IBC [F] 806.1), 807.4, 807.4.1, 807.4.3.1, 807.4.4, 807.4.4.1, 807.4.5(New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

SECTION 202 (IBC [F] 202)
GENERAL DEFINITIONS

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

SECTION 807
DECORATIVE MATERIALS OTHER THAN DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS

IFC 807.1 (IBC [F] 806.1) General requirements. In occupancies in Groups A, E, ~~I~~ I-4 and R-1 and dormitories in Group R-2, curtains draperies, hangings and other combustible *decorative materials* suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with section 807.2 or be noncombustible.

Exceptions:

1. Curtains, draperies, hangings and other combustible decorative materials suspended from walls of *sleeping units* and *dwelling units* in dormitories in Group R-2 ~~protected~~ equipped by

an *approved automatic sprinkler system* installed in accordance with Section 903.3.1 and such materials are limited to not more than 50 percent of the aggregate area of walls.

2. Decorative materials, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are of limited quantities such that a hazard of fire development or spread is not present.

In Groups I-1 and I-2, curtains, draperies, hangings and other combustible *decorative materials* suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 or be noncombustible ~~unless the *decorative materials*, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present~~.

In Group I-3, combustible decorative materials are prohibited.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered *interior finish* if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered *decorative materials* or furnishings.

In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 806.2 and NFPA 701 or shall be noncombustible.

IFC 807.4 Occupancy-based requirements. In occupancies specified ~~in Group A, E and I-4 day care facilities~~, combustible decorative materials ~~other than decorative vegetation~~ shall comply with Sections 807.4.1 through ~~807.4.4.2~~ 807.4.5.4.

IFC 807.4.1 General. All of the following requirements shall apply to all Group A, ~~and~~ E ~~occupancies~~ and Group I-4 ~~day care facilities~~ occupancies ~~regulated by Sections 807.4.2 through 807.4.4~~:

1. ~~Explosive or highly flammable materials:~~ Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
2. ~~Fire-retardant coatings:~~ Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.
3. ~~Obstructions:~~ Furnishings or other objects shall not be placed to obstruct *exits,* access thereto, egress there from or visibility thereof.

807.4.2 Group A. *(No change)*

807.4.2.1 Foam plastics. *(No change)*

807.4.2.2 Motion picture screens. *(No change)*

807.4.2.3 Wood use in Group A-3 places of religious worship. *(No change)*

807.4.3 Group E. *(No change)*

807.4.3.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved* smoke detection system installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.4.3.2 Artwork. *(No change to current text)*

807.4.4 Group I-4~~, day care facilities~~. Group I-4 occupancies shall comply with, the requirements in Section~~s~~ 807.4.4.1 and 807.4.4.2 ~~shall apply to day care facilities classified in Group I-4~~.

807.4.4.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in *corridors* and lobbies.

Exceptions:

1. *Corridors* protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. *Corridors* protected by an *approved* smoke detection system installed in accordance with Section 907.
3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.4.4.2 Artwork. Artwork and teaching materials shall be limited on the walls of *corridors* to not more than 20 percent of the wall area.

IFC 807.4.5 Groups I-1 and I-2. In Groups I-1 and I-2 occupancies, combustible *decorative materials* shall comply with Sections 807.4.5.1 through 807.4.5.4

IFC 807.4.5.1 Group I-1 and Group I-2 Condition 1 within units. In Group I-1 and Group I-2 Condition 1 occupancies, equipped throughout by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1, within sleeping units and dwelling units, combustible decorative materials are limited to not more than 50 percent of the aggregate wall area.

IFC 807.4.5.2 In Group I-1 and Group I-2 Condition 1 for areas other than within units. In Group I-1 and Group I-2 Condition 1 occupancies, equipped throughout by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1, combustible decorative materials in areas other than within dwelling and sleeping units are limited to not more than 30 percent of the aggregate wall area.

IFC 807.4.5.3 In Group I-2 Condition 2. In Group I-2 Condition 2 occupancies, equipped throughout by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1, the combustible decorative materials are limited to not more than 30 percent of the aggregate wall area.

IFC 807.4.5.4 Other areas in Groups I-1 and I-2. In Group I-1 and I-2 occupancies, in areas not equipped throughout by an *approved automatic sprinkler system*, the combustible decorative materials, shall be of such limited quantities that a hazard of fire development or spread is not present.

Reason: The intent of this proposal is to create consistent language for the Group I-1, I-2, and I-4 language for flame resistant curtains complying with NFPA 701 and the appropriate amount of paper permitted in these environments. The format for Group I-2 is consistent with how education and day care are currently addressed.
807.1 –The change from Group I-1 to I-4 in the first line is because I-1, I-2 and I-3 are addressed later in the section. For Group I-1 and I-2, the language is revised so it is clear what materials must comply with NFPA 701. Allowances for other decorative materials in Group I-1 and I-2 will be addressed in a new Section 807.4.5.
In the remainder of revised sections, the changes are editorial clean ups for consistent use of language and current terminology.

- 807.4 is revised to include the provisions added for Group I-1 and I-2.
- 807.4.1 is revised to remove redundant language.
- 807.4.3.1 is revised for consistent language with the referenced Section 907
- 807.4.4 is revised to remove redundant language.
- 807.4.4.1 is revised for consistent language with the referenced Section 907

807.4.5 is new text to address Group I-1 and I-2 facilities.-
Residents/patients in health care facilities increasingly seek to make their stay be comfortable and maintain connections with family and community. Part of this process may include decorating their bedrooms with personal décor from their homes, pictures drawn by their grandchildren, get well cards and other such items. The code currently calls for any combustible decorations to meet the flame spread requirements of NFPA 701, and a report must be provided to the code official. However, it is not practical

nor routinely possible for every construction paper drawing or greeting card to be tested to NFPA 701 or to be treated with a flame retardant coating.

However, Section 407.2.1 of the code allows waiting or similar areas to be open to corridors. These types of spaces typically have magazines, bulletin boards with paper notices tacked to them, and other combustible items, not treated with flame retardants nor tested to NFPA 701. We submit that by allowing a specified percentage of un-treated, combustible decorative materials, in fully sprinkled Group I-1 and I-2 buildings, we do not exceed the "ordinary occupancy" classification outlined in NFPA 13, nor to do we increase the fire loading above what is currently permitted. What this proposal does do, though, is provide consistent language to aid enforcement, and provides a guide to providers to determine compliance within their facilities. This should eliminate the haphazard and inconsistent application of these provisions in facilities nationwide. A brief outline of the new provisions are as follows:

Section 807.4.5.1 - Group I-1 and I-2 Condition 1 buildings, that are protected throughout with an automatic sprinkler system, would be allowed to have combustible decorative materials that cover up to 50% of the aggregate area of walls inside of resident rooms. This is consistent with the requirements within sprinklered dwelling units in Group R-2 dormitories.

Section 807.4.5.2 - In I-1 and I-2 Condition 1 buildings, that are protected throughout with an automatic sprinkler system, spaces other than resident rooms would be limited to 30% coverage of walls by combustible decorative materials. This would include common spaces and corridors.

Section 807.4.5.3 - For Group I-2 Condition 2 buildings, protected throughout with an automatic sprinkler system, all spaces would be limited to 30% coverage of walls. The need for this allowance is for such items as pictures, bulletin boards, safety bulletins, educational materials, patient bills or rights, allowing longer term patients to put up cards, and limited holiday decorations.

Section 807.4.5.4 - For existing Group I-1 and I-2 non-sprinkled buildings, and for Group I-2 buildings that have not yet retroactively provide complete automatic sprinkler protection, Section 807.4.5.4 shall apply. This text is current language relocated from Section 807.1.

Please note, that this proposed language change would also include combustible decorations that are tested to NFPA 701 or have been treated with an approved fire retardant coating within these limits. This change would also allow decorations to be placed on doorways, as long as they are either less than 50% coverage inside a Group I-1 or I-2 Condition 1 resident or 30% in other areas, and do not obstruct the use of the door, nor block vision panels.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering, a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/default.aspx. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public.

Cost Impact: None

F112–13

808.1, 808.2, 5003.8.7.1, 5003.9.10, 5005.1.10, 5704.3.2.1.1, 5705.2.4, Chapter 80

Proponent: Glen Carter, Justrite Manufacturing Company LLC

Revise as follows:

808.1 Wastebaskets and linen containers in Group I-1, I-2 and I-3 occupancies. Wastebaskets, linen containers and other waste containers, including their lids, located in Group I-1, I-2 and I-3 occupancies shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be listed in accordance with UL 1315 or approved in accordance with FM 6921 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room and constructed in accordance with Table 509 of the International Building Code.

808.2 Waste containers with a capacity of 20 gallons or more in Group R-2 college and university dormitories. Waste containers, including their lids, located in Group R-2 college and university dormitories, and with a capacity of 20 gallons (75.7 L) or more, shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be listed in accordance with UL 1315 or approved in accordance with FM 6921 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room constructed in accordance

5003.8.7.1 Construction. The interior of cabinets shall be treated, coated or constructed of materials that are nonreactive with the hazardous material stored. Such treatment, coating or construction shall include the entire interior of the cabinet. Cabinets shall either be listed in accordance with UL 1275 or approved in accordance to FM 6050 as suitable for the intended storage or constructed in accordance with the following: with Table 509 of the International Building Code.

5003.9.10 Safety cans. Safety cans shall be listed in accordance with UL 30, UL 1313, or approved in accordance with FM 6051 and FM 6052 when used to increase the maximum allowable quantities per control area of flammable or combustible liquids in accordance with Table 5003.1.1(1). ~~Safety cans listed in accordance with UL 1313 are allowed for flammable and combustible liquids when not used to increase the maximum allowable quantities per control area and for other hazardous material liquids in accordance with the listing.~~

5005.1.10 Liquid transfer. Liquids having a hazard ranking of 3 or 4 in accordance with NFPA 704 shall be transferred by one of the following methods:

1. From safety cans complying with UL 30, UL 1313 or with FM 6051 and FM 6052.

2 through 5 *(No change to current text)*

5704.3.2.1.1 Materials. Cabinets shall be listed in accordance with UL 1275, or approved in accordance to FM 6050, or constructed of approved wood or metal in accordance with the following:

5705.2.4 Class I, II and III liquids. Class I liquids or when heated to or above their flash points, Class II and Class III liquids shall be transferred by one of the following methods:

1. From safety cans complying with UL 30, UL 1313 or with FM 6051 and FM 6052

2 through 5 *(No change to current text)*

Add standards to Chapter 80 as follows:

FM

6050-96 Approval Standard for Storage Cabinets (Flammable and Combustible Liquids
6051 and 6052-76 Approval Standard for Safety Containers and Filling, Supply and Disposal Containers
6921-04 Approval Standard for Cabinets for Combustible Waste

Reason:

1) For those proposals adding the appropriate FM Approval standard: FM Approvals is a nationally and globally recognized laboratory who just like UL has construction specifications these safety products have to be built to, performance specification these safety products are tested to before an approval is issued.

FM Approvals publish an approval guide that lists all the products they have approved. And FM Approvals conducts periodic quality assurance audits to assure the approved products are manufactured to the same standards as those products and designs that were submitted for evaluation. All design changes are submitted to FM Approvals for their approval prior to those changes being allowed. The fire tests conducted by both organizations (UL & FM) on these products are to the same time temperature curve.

It is in this spirit that FM Approvals should be included in the IFC as a nationally & globally recognized approval laboratory.

2) For those proposals 5003.9.10, 5005.1.10, and 5705.2.4 I am proposing adding UL 1313 for Non-metallic Safety Cans. Non-metallic safety cans are tested the same way as metallic safety cans and are as safe or safer than the metallic safety cans. If you had ever seen a non-metallic safety can in a fire test you would no longer be a skeptical.

   a) Intuitively, it is hard to imagine a safety san made of polyethylene surviving a fire test. I was curious about this concept until I witnessed our non-metallic safety can in a fire test conducted at UL. In the fire test, the safety can performed very admirably in the way the design met its goals, in not contributing to the spread of fire. Our non-metallic safety can vented on cue. As the vented vapors were being consumed by fire, the level of the liquid fuel lowered in the can. In turn the polyethylene started to melt but, only in the void above the fluid level. The liquid fuel level was protecting the can from melting further by absorbing the heat. As the fluid level went down the safety can's walls melted inward and further down the height of the can above the fuel level. This continued until all the fuel inside the safety can had been consumed while contained within the safety can's walls. There was no spew of fuel; no rupture of the safety can spreading fuel all over the area. That is exactly the intended result of a well-designed safety can. I believe once anyone has witnessed this test and understood the consequences they would be compelled to agree too.
   b) There are numerous flammable and combustible liquids that are incompatible with metallic safety cans. As an example, isopropyl alcohol will begin to pit a metallic safety can until micro leaks begin to occur. The only safe and compatible solution for storage of this liquid and others is a non-metallic safety can.
   c) A non-metallic safety can is definitely more robust during a drop test; our non-metallic safety can designs will rebound undamaged because of its superior thick wall strength. The metallic safety can in a drop test will result in a dented and crumpled shell. Both meet the criteria of a safety can but you cannot top the strength and resilience of the poly can.
   d) Metallic and non-metallic safety cans both benefit work place safety and each are recognized by many local, state, and federal laws. Non-metallic safety cans would be a loss to the safety community if it is not recognized. It is hard to picture what legal & safe alternative will be available to those whose processes that currently requiring non-metallic safety cans. Non-metallic safety cans have long provided a safe solution over makeshift consumer gasoline cans or glass/plastic carboys etc...

Note: The FM 6051 and 6052 are a combined specification covering metallic and non-metallic safety cans.

3) I am proposing the deletion illustrated in section 5003.9.10 to allow non-metallic safety cans to be used to allow the increase of MAQs in a control area for those reasons described in 2 a), b), c), & d) above.

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

Analysis: A review of the standards proposed for inclusion in the code, FM 6050-96, FM 6051 and 6052-76 and FM 6921-04 , with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28), will be posted on the ICC website on or before April 1, 2013. The standard UL 1313 is currently referenced within the IFC.

F121–13
903.2, 102.3, 1106 (New)

Proponent: Al Godwin, CBO, CPM, Aon Fire Protection Engineering, representing Aon Fire Protection Engineering Corporation (al.godwin@aon.com)

Revise as follows:

903.2.1 Group A. An *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be provided throughout buildings and portions thereof used as Group A occupancies when any one of the following conditions exists ~~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 from the Group A occupancy to, and including, the 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.~~

903.2.1.6 Location. When required by Sections 903.2.1.1 through 903.2.1.5, sprinkler installation shall be as follows:

1. 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 from the Group A occupancy to, and including, the nearest *level of exit discharge* serving the Group A occupancy.
2. For Group A-5 occupancies, the *automatic sprinkler system* shall be provided in the spaces indicated in Section 903.2.1.5.

3. For a Change of Occupancy, Partial Change of Occupancy or Change of Character, compliance shall be as specified in Section 1106.

903.2.2 Ambulatory care facilities. An *automatic sprinkler system* shall be installed ~~throughout the entire floor containing~~ in an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

903.2.2.1 Location. Where required by Section 903.2.2, sprinkler installation shall be as follows:

1. Throughout the entire floor containing an ambulatory care facility.
2. In buildings where ambulatory care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* shall be installed throughout the entire floor where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest *level of exit discharge*, including the *level of exit discharge*.
3. For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in Section 1106.

903.2.3 Group E. An *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be provided for Group E occupancies where either of the following conditions exist ~~as follows~~:

~~1. Throughout all~~ The Group E *fire areas* exceeds ~~greater than~~ 12,000 square feet (1115 m^2) in area.
~~2. Throughout every~~ Where portions of educational buildings are below the *lowest level of exit discharge* serving that portion of the building.

903.2.3.1 Location. Where required by Section 903.2.3, sprinkler installation shall be as follows:

1. Throughout the applicable *fire areas* as specified above.
2. Throughout the portion of educational buildings that are below the *lowest level of exit discharge* serving that portion of the building.

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

3. For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in section 1106.

903.2.4 Group F-1. An *automatic sprinkler system* in accordance with Section 903.1.1 shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 *fire area* exceeds 12,000 square feet (1115 m^2).
2. A Group F-1 *fire area* is located more than three stories above grade plane.
3. The combined area of all Group F-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2).
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m^2).

903.2.4.1 Woodworking operations. An *automatic sprinkler system* in accordance with Section 903.1.1 shall be provided throughout all Group F-1 occupancy *fire areas* that contain woodworking operations in excess of 2,500 square feet in area (232 m^2) which generate finely divided combustible waste or which use finely divided combustible materials.

903.2.4.2 Location. Where required by Sections 903.2.4 or 903.2.4.1, sprinkler installation shall be as follows:

1. Throughout the applicable *fire areas* as specified above.
2. Throughout Group F-1 occupancies used for the manufacture of upholstered furniture or mattresses in excess of 2,500 square feet (232 m^2).
3. For a Change of Occupancy, Partial Change of Occupancy or Change of Character, compliance shall be as specified in Section 1106.

903.2.5 Group H. *Automatic sprinkler systems* in accordance with Section 903.3.1.1 shall be provided in high-hazard occupancies as required in Sections 903.2.5.1 through 903.2.5.~~3~~ 4.

903.2.5.1 General. An *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed in Group H occupancies.

903.2.5.2 Group H-5 occupancies. An *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed (*remainder unchanged*).

903.2.5.3 Pyroxylin plastics. An automatic sprinkler system in accordance with Section 903.3.1.1 shall be provided (*remainder unchanged*).

903.2.5.4 Location. Where required by Sections 903.2.5, 903.2.5.1, 903.2.5.2 or 903.2.5.3, sprinkler installation shall be as follows:

1. Throughout the area containing a Group H occupancy.
2. Throughout the floor area where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg).
3. For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in section 1106.

903.2.6 Group I. An *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be provided throughout all buildings with a Group I *fire area*.

Exceptions:

1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 facilities.
2. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be allowed in Group I-1 facilities when in compliance with all of the following:
   2.1 A hydraulic design information sign is located on the system riser;
   2.2 Exception 1 of Section 903.4 is not applied; and
   2.3 Systems shall be maintained in accordance with the requirements of Section 903.3.1.2.
3. ~~An *automatic sprinkler system* is not required where day care facilities are at the *level of exit discharge* and where every room where care is provided has at least one exterior *exit* door.~~
4. ~~In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided and all floors between the level of care and the *level of exit discharge*, all floors below the *level of exit discharge*, other than areas classified as an open parking garage.~~

903.2.6.1 Location. Where required by Section 903.2.6, sprinkler installation shall be throughout the entire building when containing a Group I occupancy.

Exceptions:

1. An *automatic sprinkler system* is not required where day care facilities are at the *level of exit discharge* and where every room where care is provided has at least one exterior *exit* door.
2. In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided and all floors between the level of care and the *level of exit discharge*, all floors below the *level of exit discharge*, other than areas classified as an open parking garage.
3. For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in section 1106.

903.2.7 Group M. An *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M *fire area* exceeds 12,000 square feet (1115 m^2).
2. A Group M *fire area* is located more than three stories above grade plane.
3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m^2).

903.2.7.1 High-piled storage. An *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be provided as required in Chapter 32 in all buildings of Group M where storage of merchandise is in high-piled or rack storage arrays.

903.2.7.2 Location. Where required by Sections 903.2.7 or 903.2.7.1, sprinkler installation shall be as follows:

1. Throughout the applicable *fire areas* as specified above.
2. Throughout Group M occupancies used for the display and sale of upholstered furniture or mattresses in excess of 5,000 square feet (464 m^2).
3. As applicable in Chapter 32 for high-piled storage.
4. For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in section 1106.

903.2.8 Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

903.2.8.1 Group R-3 or R-4 congregate residences. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 or R-4 congregate living facilities with 16 or fewer residents.

903.2.8.2 Care facilities. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with 5 or fewer individuals in a single-family dwelling.

903.2.8.3 Location. Where required by Section 903.2.8, sprinkler installation shall be throughout the entire building when containing a Group R occupancy.

Exception: For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in section 1106.

903.2.9 Group S-1. An *automatic sprinkler system* shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 *fire area* exceeds 12,000 square feet (1115 m^2).
2. A Group S-1 *fire area* is located more than three stories above grade plane.
3. The combined area of all Group S-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2).
4. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m^2).

903.2.9.1 Repair garages. An *automatic sprinkler system* shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the *International Building Code*, where one of the following conditions exists ~~as shown~~:

1. Buildings having two or more stories above grade plane, including *basements*, with a *fire area* containing a repair garage exceeding 10,000 square feet (929 m^2)
2. Buildings no more than one story above grade plane, with a *fire area* containing a repair garage exceeding 12,000 square feet (1115 m^2).
3. Buildings with repair garages servicing vehicles parked in *basements*.
4. A Group S-1 *fire area* used for the repair of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464 m^2).

903.2.9.2 Bulk storage of tires. Throughout all ~~B~~buildings and structures where the area for the storage of tires exceeds 20,000 cubic feet (566 m^3) shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

903.2.9.3 Location. Where required by Sections 903.2.9, 903.2.9.1 or 903.2.9.2, sprinkler installation shall be as follows:

1. Throughout the applicable *fire areas* as specified above.
2. Throughout Group S-1 occupancies used for the storage of upholstered furniture or mattresses in excess of 2,500 square feet (232 m^2).
3. Throughout the entire building when any of the conditions of Sections 903.2.9.1 and 903.2.9.2 exists.
4. For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in section 1106.

903.2.10 Group S-2 enclosed parking garages. An *automatic sprinkler system* shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the *International Building Code* where one of the following conditions exists ~~as follows~~:

1. Where the *fire area* of the enclosed parking garage exceeds 12,000 square feet (1115 m^2)~~; or,~~ .
2. Where the enclosed parking garage is located beneath other groups.

~~**Exception:** Enclosed parking garages located beneath Group R-3 occupancies.~~

903.2.10.1 Commercial parking garages. An *automatic sprinkler system* shall be provided throughout buildings used storage of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464 m 2).

903.2.10.2 Location. Where required by Sections 903.2.10 or 903.2.10.1, sprinkler installation shall be as follows:

1. Throughout the applicable *fire areas* as specified above.
2. Throughout the area of all floors below other groups used as an enclosed parking garage.

Exception: Enclosed parking garages located beneath Group R-3 occupancies.

3. For a change of occupancy, partial change of occupancy or change of character, compliance shall be as specified in section 1106.

Delete and substitute as follows:

~~**[A] 102.3 Change of use or occupancy.** No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this code and the *International Building Code*. Subject to the approval of the *fire code official*, the use or occupancy of an existing structure shall be allowed to be changed and the structure is allowed to be occupied for purposes in other groups without conforming to all of the requirements of this code and the *International Building Code* for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.~~

[A] 102.3 Change of use or occupancy, partial change of occupancy and change of character. No change in use or occupancy, partial change of occupancy or change of character shall be made to any structure without compliance with Section 1106.

Add new text as follows:

SECTION 1106
CHANGE OF OCCUPANCY, PARTIAL CHANGE OF OCCUPANCY, CHANGE OF CHARACTER

1106.1 General. Buildings or portions thereof undergoing a change of occupancy, partial change of occupancy or change of character, shall comply with the provisions of Sections 1106.1.1 through 1106.4

1106.1.1 Special use. Any change of Occupancy, Partial Change of Occupancy or Change of Character that results in the creation of one of the following special use or occupancy shall comply with all of the applicable requirements of this code and the *International Building Code*.

1. Covered and open mall buildings.
2. Atriums.
3. Motor vehicle-related occupancies.
4. Aircraft-related occupancies.
5. Motion picture projection rooms.
6. Stages and platforms.
7. Special amusement buildings.
8. Incidental use areas.
9. Hazardous materials.
10. Ambulatory care facilities.

1106.1.2. Underground buildings. An underground building in which there is a change of occupancy, partial change of occupancy or change of character shall comply with the requirements of this code and the *International Building Code* applicable to underground buildings.

1106.2 Change of use or occupancy. No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this code and the *International Building Code*. Subject to the approval of the *fire code official*, the use or occupancy of an existing structure shall be allowed to be changed and the structure is allowed to be changed and is allowed to be occupied for purposes in other groups without conforming to all of the

requirements of this code and the *International Building Code* for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

1106.3 Partial change of occupancy classification, In other than special uses as specified in Section 1106.1.1, where a portion of an existing building is changed to a new occupancy classification, Sections 1106.3.1 and 1106.3.2 shall apply.

1106.3.1 Fire sprinkler system. Automatic sprinkler system provisions of Section 903.2.1 through 903.2.10.1 shall only be applicable to the *fire area* of concern where separated from other *fire areas* as required by Section 707.3.10 of the *International Building Code* except as specifically required by Sections 1106.3.1.1 through 1106.1.8.

1106.3.1.1 Ambulatory care facilities. For ambulatory care facilities, the automatic sprinkler system provisions of Section 903.2.2 shall only be applicable to the floor where the ambulatory care facility is located where the *fire area* of the floor is separated from other floors in accordance with Section 707.3.10 of the *International Building Code*.

1106.3.1.2 Group E occupancies. Group E occupancies created over portions of educational buildings that are below the *lowest level of exit discharge*, an *automatic sprinkler system* is not required in any area below the *lowest level of exit discharge* serving that area where:

1 The new Group E *fire area* has at least one exterior *exit* door at ground level; or,

2 All existing and new Group E *fire area*s above are separated from the level below in accordance with Section 707.3.10 of the *International Building Code*.

1106.3.1.3 Group F-1 occupancies. For Group F-1occupancies as provided for in Sections 903.2.4 and 902.4.1, automatic sprinkler system installation shall be as required ~~specified~~ in Section 903.2.4.2.

1106.3.1.4 Group H occupancies. For Group H occupancies as provided for in Sections 903.2.5, 903.2.5.1, 903.2.5.2 and 903.2.5.3, automatic sprinkler system installation shall be as specified in Section 903.2.5.4.

1106.3.1.5 Group I occupancies. For Group I occupancies as provided for in Sections 903.2.6, automatic sprinkler system installation shall be in accordance with one of the following:

1 Throughout the building containing a Group I occupancy.

2 An *automatic sprinkler system* is not required where Group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has at least one exterior *exit* door; or,

3 In buildings where a Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall only be required to be installed on the floor where the Group I-4 day care is located and where the floor is separated from other floors in accordance with Section 707.3.10 of the *International Building Code*.

1106.3.1.6 Group M occupancies. For Group M as provided for in Sections 903.2.7 and 903.2.7.1, automatic sprinkler system installation shall be as specified in Section 903.2.7.2.

1106.3.1.7 Group S-1 occupancies. For Group S-1 as provided for in Sections 903.2.9, 903.2.9.1 and 903.2.9.2, automatic sprinkler system installation shall be as specified in Section 903.2.9.3.

1106.3.1.8 Group S-2 occupancies. For Group S-2 enclosed parking garages as provided for in Sections 903.2.10 and 903.2.10.1, automatic sprinkler system installation shall be as specified in Section 903.2.10.2.

106.3.2 Fire alarm and detection system. Fire alarm and detection systems of Section 907.2 shall be provided throughout the area where the partial *change of occupancy* occurs. Existing alarm notification

appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm notification appliances shall be provided throughout the area where the partial *change of occupancy* occurs and shall be automatically activated.

1106.4 Change of character. A change in occupancy with no change of occupancy classification shall not be made to any structure that will subject the structure to any special provisions of the applicable *International Codes*, without approval of the *fire code official*. Compliance shall be only as necessary to meet the specified provisions and is not intended to require the entire building be brought into compliance.

Reason: This bold code change is an attempt to accomplish the following:

1. Attempt to explain what areas must be sprinklered under Section 903.2. Some provisions make reference to "throughout buildings", "throughout all buildings" or "in the occupancy." Group R occupancies, Repair garages and bulk storage of tires makes it clear that it is throughout all buildings. The Commentary implies that Group I is the entire building, but it is not clear about other occupancies. Is it the building or just the fire area.

   And, the provisions for upholstered furniture and Group H do not use the term fire area. Therefore, the changes to 903.2 is to start discussions about clarification.

   Code change E116-12, which was approved As Modified, identifies that Group H occupancies might be sprinklered but in a non-sprinklered building as follows:

E116– 12
Table 1016.2 (IFC [B] Table 1016.2)

Proponent: Patrick A. McLaughlin, McLaughlin & Associates, representing Compressed Gas Association (pmclaugma@aol.com)

Revise as follows:

TABLE 1016.2 (IFC [B] TABLE 1016.2)
EXIT ACCESS TRAVEL DISTANCE[a]

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
A, E, F-1, M, R, S-1	200	250[b]
I-1	Not Permitted	250[b]
B	200	300[c]
F-2, S-2, U	300	400[c]
H-1	Not Permitted	75[c]
H-2	Not Permitted	100[c,d]
H-3	Not Permitted	150[c,d]
H-4	Not Permitted	175[c,d]
H-5	Not Permitted	200[c,d]

For SI: 1 foot = 304.8 mm.
a. *(no change)*
b. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.2.
c. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
d. Occupancies equipped throughout with an *automatic sprinkler system* in accordance with Section 903.2.5.1.

Reason: H-1 thru H-4 occupancies are required to be sprinklered, however, if the H occupancy is located within another occupancy, that occupancy may or may not be sprinklered because the sprinkler system is not required throughout. As written, the travel distance allowance would not apply and there is no guidance on what the travel distance should be. Furthermore, the current footnote has led to erroneous interpretation of the code requiring the building to be spinklered throughout. In our opinion this was never the intent of this table. H occupancies cannot exit through a more hazardous occupancy, therefore the travel distances allowed within the H occupancy seem reasonable when exiting through another occupancy of lesser hazard.

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

E116-12

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

T1016.2-E-MCLAUGHLIN

2. Attempt to bring the IFC in line with IEBC Section 1012.2 Fire Protection systems. I don't agree with the blanket provisions provided there and believe that more detail info is needed. 2012 IEBC Section 1012.2 is as follows:

1012.2 Fire protection systems. Fire protection systems shall be provided in accordance with Sections 1012.2.1 and 1012.2.2.

1012.2.1 Fire sprinkler system. Where a change in occupancy classification occurs that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the International Building Code, such system shall be provided throughout the area where the change of occupancy occurs.

1012.2.2 Fire alarm and detection system. Where a change in occupancy classification occurs that requires a fire alarm and detection system to be provided based on the new occupancy in accordance with Chapter 9 of the *International Building Code*, such system shall be provided throughout the area where the partial *change of occupancy* occurs. Existing alarm notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm notification appliances shall be provided throughout the area where the partial *change of occupancy* occurs and shall be automatically activated.

3. Match the IFC with the IEBC Sections 1001, 1002 and 1012 provided below.

SECTION 1001
GENERAL

1001.1 Scope. The provisions of this chapter shall apply where a *change of occupancy* occurs, as defined in Section 202, including:

1. Where the occupancy classification is not changed; or
2. Where there is a change in occupancy classification or the occupancy group designation changes.

1001.2 Change in occupancy with no change of occupancy classification. A change in occupancy, as defined in Section 202, with no *change of occupancy* classification shall not be made to any structure that will subject the structure to any special provisions of the applicable *International Codes*, including the provisions of Sections 1002 through 1011, without the approval of the *code official*. A certificate of occupancy shall be issued where it has been determined that the requirements for the change in occupancy have been met.

1001.2.1 Repair and alteration with no change of occupancy classification. Any *repair* or *alteration* work undertaken in connection with a *change of occupancy* that does not involve a *change of occupancy* classification shall conform to the applicable requirements for the work as classified in Chapter 4 and to the requirements of Sections 1002 through 1011.

Exception: As modified in Section 1205 for *historic buildings*.

1001.3 Change of occupancy classification. Where the occupancy classification of a building changes, the provisions of Sections 1002 through 1012 shall apply. This includes a *change of occupancy* classification within a group as well as a *change of occupancy* classification from one group to a different group.

1001.3.1 Partial change of occupancy classification. Where a portion of an *existing building* is changed to a new occupancy classification, Section 1012 shall apply.

1001.4 Certificate of occupancy required. A certificate of occupancy shall be issued where a *change of occupancy* occurs that results in a different occupancy classification as determined by the *International Building Code*.

SECTION 1002
SPECIAL USE AND OCCUPANCY

1002.1 Compliance with the building code. Where the character or use of an *existing building* or part of an *existing building* is changed to one of the following special use or occupancy categories as defined in the *International Building Code*, the building shall comply with all of the applicable requirements of the *International Building Code*:

1. Covered and open mall buildings.
2. Atriums.
3. Motor vehicle-related occupancies.
4. Aircraft-related occupancies.
5. Motion picture projection rooms.
6. Stages and platforms.
7. Special amusement buildings.
8. Incidental use areas.
9. Hazardous materials.
10. Ambulatory care facilities.

1002.2 Underground buildings. An underground building in which there is a change of use shall comply with the requirements of the *International Building Code* applicable to underground structures.

SECTION 1012
CHANGE OF OCCUPANCY CLASSIFICATION

1012.1 General. The provisions of this section shall apply to buildings or portions thereof undergoing a change of occupancy classification. This includes a change of occupancy classification within a group as well as a change of occupancy classification from one group to a different group. Such buildings shall also comply with Sections 1002 through 1011. The application of requirements for the change of occupancy shall be as set forth in Sections 1012.1.1 through 1012.1.4. A *change of occupancy*, as defined in Section 202, without a corresponding change of occupancy classification shall comply with Section 1001.2.

1012.1.1 Compliance with Chapter 9. The requirements of Chapter 9 shall be applicable throughout the building for the new occupancy classification based on the separation conditions set forth in Sections 1012.1.1.1 and 1012.1.1.2.

1012.1.1.1 Change of occupancy classification without separation. Where a portion of an *existing building* is changed to a new occupancy classification and that portion is not separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the *International Building Code* for the separate occupancy, the entire building shall comply with all of the requirements of Chapter 9 applied throughout the building for the most restrictive occupancy classification in the building and with the requirements of this chapter.

1012.1.1.2 Change of occupancy classification with separation. Where a portion of an *existing building* that is changed to a new occupancy classification and that portion is separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the *International Building Code* for the separate occupancy, that portion shall comply with all of the requirements of Chapter 9 for the new occupancy classification and with the requirements of this chapter.

1012.1.2 Fire protection and interior finish. The provisions of Sections 1012.2 and 1012.3 for fire protection and interior finish, respectively, shall apply to all buildings undergoing a change of occupancy classification.

1012.1.3 Change of occupancy classification based on hazard category. The relative degree of hazard between different occupancy classifications shall be determined in accordance with the categories specified in Tables 1012.4, 1012.5 and 1012.6. Such a determination shall be the basis for the application of Sections 1012.4 through 1012.7.

1012.1.4 Accessibility. All buildings undergoing a change of occupancy classification shall comply with Section 1012.8.

1012.2 Fire protection systems. Fire protection systems shall be provided in accordance with Sections 1012.2.1 and 1012.2.2.

1012.2.1 Fire sprinkler system. Where a change in occupancy classification occurs that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the *International Building Code*, such system shall be provided throughout the area where the *change of occupancy* occurs.

1012.2.2 Fire alarm and detection system. Where a change in occupancy classification occurs that requires a fire alarm and detection system to be provided based on the new occupancy in accordance with Chapter 9 of the *International Building Code*, such system shall be provided throughout the area where the *change of occupancy* occurs. Existing alarm notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm notification appliances shall be provided throughout the area where the *change of occupancy* occurs and shall be automatically activated.

4. This is also intended to coordinate with code change G231-12 which was approved as Submitted at the Final Action hearing.

G231-12
202, 3408.1.1 (New) [IEBC [B] 202, 407.1.1 (New)]

Proposed Change as Submitted

Proponent: Al Godwin, CBO, CPM, Aon Fire Protection Engineering (al.godwin@aon.com)

Add new text as follow:

3408.1.1 (IEBC [B] 407.1.1) Change of Character. A change in occupancy with no change of occupancy classification shall not be made to any structure that will subject the structure to any special provisions of the applicable *International Codes*, without approval of the *building official*. Compliance shall be only as necessary to meet the specific provisions and is not intended to require the entire building be brought into compliance.

Add new definition as follows:

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

Reason: In the last code cycle, Code Change EB27-09/10 added "10. Ambulatory health care facilities" to IEBC Section 902.1 (now 1002.1) under the classification of "change of character. This section in the IEBC, along with The IEBC definition of Change of Use, in general verbiage, recognizes that there are changes of use that do not involve changing occupancy groups.

IEBC Section 1001.2 states:

> "**1001.2 Change in occupancy with no change in occupancy classification.** A change in occupancy, as defined in Section 202, with no *change of occupancy* classification shall not be made to any structure that will subject the structure to any special provisions of the applicable *International Codes*, including the provisions of Section 1002 through 1011, without the approval of the code official."

This proposal is to bring those provisions from IEBC Section 1001.2 over into Chapter 34 of the IBC.

As noted in the IEBC, it is possible to change a use without changing the occupancy classification. Some examples are as follows:

1. Group A-2 bar with an occupant load of 275 to a Group A-2 bar with an occupant load of 350. Increasing occupant loads is permitted under Section 1004.2.
2. Group B office to Group B Ambulatory Health Care
3. Group B office to Group B café
4. Group F-1 factory to a Group F-1 woodworking shop.
5. Group H-3 Oxidizing gases to Group H-3 Flammable solids
6. Group M retail to Group M retail of upholstered furniture
7. Group S-1 warehouse to Group S-1 tire warehouse over 20,000 cubic feet
8. Group S-1 warehouse to Group S-1 motor vehicle repair garage
9. Group R-2 apartment to Group R-2 Live/Work unit.

Each of these classifications has particular code provisions that would apply if the occupancy had been originally identified. Some items might be fire protection, alarms, fresh air, restroom facilities, accessibility, smoke barriers, etc. The IBC currently does not specifically address these changes since they do not change Groups or change Divisions within Groups.

When making a change of character, it is not necessary to totally re-evaluate the building. Only the new applicable provisions should be addressed.

For example:

Group A-2 bar with an occupant load of 275 to a Group A-2 bar with an occupant load of 350.

Items that might require review:

Means of egress – 1004.2, to the public way
Sprinklers – 903.2.1.2, only in this space
Alarms – 907.2.1, only in this space
Restrooms – Chapter 29
Fresh air – IMC

Accessibility – see Section 3411
If food – upgrade of interceptor provisions of the IPC

Items that might not require a new review:

Height and area
Exterior walls and openings

As this is a confusing issue, the code official will need to define what items of correction are appropriate. While the wording may be new, code officials have performed this service for years. This proposal just puts it in the code.

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

3408.1.1 (NEW)-G-GODWIN

Public Hearing Results

Committee Action: **Disapproved**

Committee Reason: The proposed language needs to be revised with terminology such as "change in the character of use." There was some discussion that the definition proposed could be beneficial in the IBC. Some committee members felt that this language was unnecessary.

Assembly Action: **None**

Individual Consideration Agenda

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

Public Comment:

Al Godwin, CBO, CPM, Aon Fire Protection Engineering Corporation, requests Approval as Submitted.

Commenter Reason: The Committee made the comment that the wording should be changed to "change in the character of use." Therefore the title of Section 3408.1.1 has been amended to reflect the new provision. This provision already exists in IEBC Section 1001.2. However, according to IEBC Section 301.1 compliance can be achieved by one of the three methods. The provision for Change of Character only exists in the Work Area Method of Section 301.1.2. Change of Character should also occur under the Prescriptive Compliance Method of Chapter 4 which is IBC Section 3408.1.1.

Therefore, this provision is a good change. It merely duplicates an existing IEBC provision and copies it in IEBC 407.1.1, which is also IBC 3408.1.1.

G231-12
Final Action: AS AM AMPC____ D

5. The design of this code change proposal would allow the adoption of Part I and disapproval of the remainder. As such, all references to "For a Change of Occupancy, Partial Change of Occupancy or Change of Character, compliance shall be as specified in Section 1106" would editorially drop out since that section would not exist.

Cost Impact: This should be considered as a clarification and coordination. While some provisions of Section 1106 are more intensive than currently written in the IEBC, they may be less intensive that what is currently enforced under the IFC. As such, it should be a merge of the potential costs under the IFC and the IEBC.

F125 – 13
903.2.2 (New)

Proponent: Daniel E. Nichols, P.E., New York State Department of State (dan.nichols@dos.ny.gov)

Add new text as follows:

903.2.2 Group B. An *automatic sprinkler system* shall be provided throughout all buildings containing a Group B occupancy where a Group B *fire area* is located more than three stories above grade plane.

~~903.2.2~~ 903.2.2.1 Ambulatory Care Facilities. (No Changes)

Reason: This proposal is to set a requirement for automatic sprinkler systems to be installed in mid-rise business occupancies. Currently, the only requirement for automatic sprinkler protection in Group B occupancies is when the building meets one of the specific hazard requirements in IFC 903.2.11, generally the occupied floor (30 people) over 55 feet in height requirement.

The State of New York has required the installation of automatic sprinkler systems in all buildings over 30 feet in height for the past 10 years. A majority of that reasoning is to require business and educational occupancies to have an automatic sprinkler system for buildings over 3 stories. The reasoning for this lower height for sprinkler protection is due to the following:

1. Firefighting operations on higher levels is increasing challenging. The IFC already implicitly recognizes the extra challenges by requiring standpipe systems at the 30 feet or more height measurement as well as aerial apparatus access roads (in Appendix D). With the excellent performance of automatic sprinkler systems, the hazards to firefighters is greatly reduced.
2. Group B occupancies create a fire control problem by a majority of floor spaces being open. With the change of the materials used to construct furnishings, smoke produces a greater obscuration of the environment and makes finding the source of the fire more difficult. Other open space floor plan occupancies, such as Group M and F-1 occupancies, already have sprinkler thresholds for buildings above three stories.
3. Group B occupancies are not required to have any automatic fire alarm or detection requirements. The requirement for automatic sprinkler systems to be monitored provides a system to give accelerated warning of a fire within the building , evacuates the area and starts first responders to the scene.
4. In 2011, a Fire Captain in Asheville, North Carolina died while operating on an upper floor of a mid-rise office building that was not sprinkler protected. Several crew members, including the deceased, ran out of breathing air which was attributed to the need for utilizing air during the stair ascent. An automatic sprinkler systems would have allowed firefighters, at a minimum, to not encounter such heavy smoke conditions on lower floors during entry and allow for their air supply to be more adequate for fire attack operations. Information on this fire an recommendations for the installation of fire suppression systems in these occupancies is found in the NIOSH firefighter fatality report # F2011-18.

Over the past 10 years, the State of New York has not been petitioned to omit the sprinkler system on the new construction of mid-rise office buildings (3-7 stories). Many find that the sprinkler system allows for the use of a Class 1 standpipe system. NFPA 14, the referenced standard for standpipe system installation, permits Class 1 standpipes to be of manual wet design. This allows a building with a marginal water supply to use either street pressure or a smaller fire pump to run the sprinkler system and allow the FD to pump the pressures required to the standpipe. Without the sprinkler system, the building is responsible for providing at least 100 psi for at least 750 GPM of flow (2 stairways minimum).

This proposal is submitted with the endorsement of the New York State Building Officials Conference, the New York State Fire Marshals and Inspectors Association, and the Association of Fire Districts of New York State.

Cost Impact: This proposal will add costs to the construction of 4 to 6 story buildings that are not already using sprinklers for a 'tradeoff' of other code requirements. Cost savings may be achieved by not requiring an automatic Class III standpipe, but a manual Class I standpipe.

F160 – 13*

907.2.6 (IBC [F] 907.2.6), 907.5.2.1 (IBC [F] 907.5.2.1), 907.5.2.3 (IBC [F] 907.5.2.3)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov)

Revise as follows:

907.2.6 (IBC [F] 907.2.6) Group I. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I occupancies. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2 and 907.2.6.3.3.

Exceptions:

1. Manual fire alarm boxes in sleeping units of Group I-1 and I-2 occupancies shall not be required at exits if located at all care providers' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.4.2.1 are not exceeded.
2. Occupant notification systems are not required to be activated where private mode signaling installed in accordance with NFPA 72 is approved by the fire code official <u>and staff evacuation responsibilities are included in the fire safety and evacuation plan required by Section 404.</u>

907.5.2.1 (IBC [F] 907.5.2.1) Audible alarms. Audible alarm notification appliances shall be provided and emit a distinctive sound that is not to be used for any purpose other than that of a fire alarm.

Exceptions:

1. ~~Visible alarm notification appliances shall be allowed in lieu of audible alarm notification appliances in critical care areas of Group I-2 occupancies~~. Audible alarm notification appliances are not required in critical care areas of Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
2. A visible alarm notification appliance installed in a nurses' control station or other continuously attended staff location in a Group I-2 Condition 2 suite shall be an acceptable alternative to the installation of audible alarm notification appliances throughout the suite in Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.

~~2~~ 3. Where provided, audible notification appliances located in each occupant evacuation elevator lobby in accordance with Section 3008.10.1 of the *International Building Code* shall be connected to a separate notification zone for manual paging only.

907.5.2.3 (IBC [F] 907.5.2.3) Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.4.

Exceptions:

1. Visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in exits as defined in Section 1002.1.
3. Visible alarm notification appliances shall not be required in elevator cars.
4. Visual alarm notification appliances are not required in critical care areas of Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 100 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

The proposed changes are a clarification of the application of 'private mode' signaling as allowed by NFPA 72 and provide linkage to the emergency action plan necessary for 'private mode' to be safely implemented. A section-by-section summary follows:

Section 907.2.6: The change to Exception 2 links the use of "private mode" signaling under NFPA 72 to the emergency action plan portion of the code. The use of private mode appliances relies on a trained staff to respond and provide for occupant evacuation/defend in place actions.

Section 907.5.2.1: Exception 1 is proposed for modification to eliminate the requirement for the visible signal and the audible signal in Group I-2 hospital critical care areas, operating rooms for example. In private mode, as permitted by Section 907.2.6, Exception 1, there is still a requirement for an audible alarm notification from appliances, though at a much lower decibel level meant to alert staff of the alarm activation. The current language at Section 907.5.2.1, Exception 1 allows that audible alarm to be eliminated from critical care areas (operating rooms) in exchange for a visual notification device. However, the visual signal device also creates a distraction in critical care areas that may not be able to immediately stop a patient procedure and this proposal is to eliminate the visual alarm notification and to link the exception back to the primary allowance for private mode where we have provided for a link to the emergency action plan. The emergency action plan would include provisions for alerting of critical area staff and the actions to be taken.

A new second exception is added to this section to allow for an alarm indicator in a control area of a hospital suite in lieu of audible devices throughout the suite. In a suite arrangement the "control area" is the centrally manned location for staff monitoring patients in the separate rooms. An alarm indicator at this location will alert staff for response in a more effective and efficient manner.

Section 907.5.2.3: A fourth exception is added here to correlate the allowance for eliminating the audible and visual alarm devices from the critical care areas and to link the exception back to the primary allowance for private mode where we have provided for a link to the emergency action plan.

The emergency plan should reflect the response to the private mode alarm signals including the response necessary in critical care areas and who is responsible for alerting critical care area staff.

Cost Impact: This proposal will not increase the cost of construction.

F182 – 13

908.7 (IBC[F] 908.7) , 908.7.1 (New) [IBC [F] 908.7.1 (New)], 908.7.1.1 (New) [IBC [F] 908.7.1.1 (New)], 908.7.1.2 (New) [IBC [F] 908.7.1.2 (New)]

Proponent: Roger Evans, Park City Municipal Corporation, representing the Utah Chapter of ICC (revans@parkcity.org)

Revise as follows:

908.7 (IBC[F] 908.7) Carbon monoxide ~~alarms~~ detection. Group I ~~or~~, R and E occupancies located in a building containing a fuel-burning appliance or in a building which has an attached garage shall be equipped with ~~single-station~~ carbon monoxide ~~alarms~~ detection. ~~The~~ Group I and R occupancies shall be equipped with single-station carbon monoxide alarms ~~shall be~~ listed as complying with UL 2034 and be installed and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. Group E occupancies shall be equipped with carbon monoxide detection in accordance with 907.1 and 907.2. An open parking garage ventilated in accordance with Section 404 of the International Mechanical Code shall not be considered an attached garage.

Exception: *Sleeping units* or *dwelling units* which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The *sleeping unit* or *dwelling unit* is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage;
2. The *sleeping unit* or *dwelling unit* is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and
3. The building is equipped with a common area carbon monoxide alarm system.

908.7.1 (IBC[F] 908.7.1) Group E Occupancy Locations. Where required by Section908.7, carbon monoxide detectors in Group E occupancies shall be installed in the locations specified in Sections 908.7.2 through 908.7.2.2.

908.7.1.1(IBC[F] 908.7.1.1) Fuel-burning appliances and fuel burning fireplaces. Carbon monoxide detectors shall be installed on the ceiling of a room containing a fuel-burning appliance or a fuel burning fireplace. The carbon monoxide alarm signal shall be automatically transmitted to a constantly attended on site location.

9**08.7.1.2 (IBC[F] 908.7.1.2) Forced air furnaces.** Carbon monoxide detectors shall be installed on the ceiling of a room containing a fuel-burning forced air furnace or in occupied rooms served by a fuel-burning, forced air furnace. The carbon monoxide alarm signal shall be automatically transmitted to a constantly attended on site location.

~~**908.7.1(IBC[F] 908.7.1)**~~ **908.7.2 (IBC[F] 908.7.2) Carbon monoxide detection systems.** Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.

Reason: This proposal is intended to protect students and faculty from serious injury or possibly death from unintentional non-fire related carbon monoxide (CO) exposure by mandating the installation of CO detection devices in education occupancies. In the absence of a model code for the installation of CO detection in education occupancies each jurisdiction is developing its own regulations with varying installation requirements. For example, after several CO incidents in Connecticut (Public Act 11-248) and in Maryland (SB 173), the Governors signed bills into law for the installation CO detection in education occupancies and left the location, performance, inspection, testing and maintenance of CO detection and warning equipment up to the Building Commission

or the State Fire Marshal. Section 610 of the 2010 Fire Code New York State (FCNYS) requires CO detection in Group E occupancies.

Also a result of the national publicity generated from an incident at an Atlanta school (ABC News) that sent 42 students to hospitals, three states have introduced legislation requiring CO detection in schools.

. Pennsylvania:
http://www.legis.state.pa.us/cfdocs/Legis/CSM/showMemoPublic.cfm?chamber=H&SPick=20130&cosponId=9878
. Florida: http://www.flsenate.gov/Session/Bill/20130116/BillText/Filed/HTML
.Georgia: HB 23

Attached are fifty three (53) reports of CO incidents in schools from 2005 through 2012. Thirty (30) of these incidents were caused by problems with a permanently installed fuel burning appliance.

This proposal models the location requirements for schools after the current requirements in the 2012 edition of the IFC for detection in hotels, dormitories and apartment buildings as a basis.

The efficacy of voluntary national consensus codes, such as the IFC, ensures a collaborative, balanced and consensus-based process.

Cost Impact: Minimal cost as a percentage of the building valuation.

F187–13

909.5.2 (IBC [F] 909.5.2, IMC [F] 513.5.2), 909.5.2.1 (New) [IBC [F] 909.5.2.1 (New), IMC [F] 513.5.2.1 (New)],

Proponent: Al Godwin, CBO, CPM, Aon Fire Protection Engineering, representing Aon Fire Protection Engineering Corporation (al.godwin@aon.com)

Revise as follows:

909.5.2 (IBC [F] 909.5.2, IMC [F] 513.5.2) Opening protection. Openings in *smoke barriers* shall be protected by automatic-closing devices actuated by the required controls for the mechanical smoke control system. Door openings shall be protected by fire door assemblies complying with Section 716.5.3 of the *International Building Code.*

Exceptions:

1. Passive smoke control systems with automatic-closing devices actuated by spot-type smoke detectors *listed* for releasing service installed in accordance with Section 907.3.
2. Fixed openings between smoke zones that are protected utilizing the airflow method.
3. In Group I-1 Condition 2, Group I-2 and ambulatory health care facilities, where ~~such doors are installed across *corridors*~~, a pair of opposite-swinging doors are installed across a corridor in accordance with Section 909.5.2.1, the doors shall not be required to be protected in accordance with Section 716 of the *International Building Code* ~~without a center mullion shall be installed having vision panels with fire protection-rated glazing materials in fire protection-protection rated frames, the area of which shall not exceed that tested~~. The doors shall be close-fitting within operational tolerances and shall not have a center mullion or undercuts in excess of ¾-inch, louvers or grilles. The doors shall have head and jamb stops, and astragals or rabbets at meeting edges and ~~shall automatic-closing by smoke detection in accordance with Section 716.5.9.3 of the *International Building Code*~~. Where permitted by the door manufacturer's listing, ~~P~~positive-latching devices are not required.
4. Group I-3.
5. Openings between smoke zones with clear ceiling heights of 14 feet (4267 mm) or greater and bank-down capacity of greater than 20 minutes as determined by the design fire size.

909.5.2.1 (IBC [F] 909.5.2.1, IMC [F] 513.5.2.1) Group I-1 Condition 2, I-2 and ambulatory care facilities. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, where doors are installed across a corridor, the doors shall be automatic closing by smoke detection in accordance with Section 716.5.9.3 of the *International Building Code* and shall have a vision panel with fire-protection rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested.

~~**909.5.2.1 (IBC [F] 909.5.2.1, IMC [F] 513.5.2.1)**~~ **909.5.2.2 (IBC [F] 909.5.2.2, IMC [F] 513.5.2.2) Ducts and air transfer openings.** *(No change to current text)*

Reason: Code changes FS76-07/08, G15-09/10 and FS40-12 have made amendments to IBC Section 709.5, exception 1 that are not reflected in Section 909.5.2. G31-12 added a new requirement for Group I-1 Condition 2 that needs to be picked up in 909.5.2.

Cost Impact: This is just a correlation between the two codes. Thus, there will be no increase in cost not already encountered.

F188–13
909.5.2 (IBC [F] 909.5.2, IMC [F] 513.5.2)

Proponent: John Woestman, Kellen Company, representing Builders Hardware Manufacturers Association (BHMA) (jwoestman@kellencompany.com)

Revise as follows:

909.5.2 (IBC [F] 909.5.2, IMC [F] 513.5.2) Opening protection. Openings in *smoke barriers* shall be protected by automatic-closing devices actuated by the required controls for the mechanical smoke control system. Door openings shall be protected by fire door assemblies complying with Section 716.5.3 of the *International Building Code.*

Exceptions:

1. Passive smoke control systems with automatic closing devices actuated by spot-type smoke detectors *listed* for releasing service installed in accordance with Section 907.10.
2. Fixed openings between smoke zones that are protected utilizing the airflow method.
3. In Group I-2 and ambulatory care facilities, where such doors are ~~installed across *corridors,* a~~ pair of opposite-swinging doors installed across a corridor and without a center mullion, ~~shall be installed having vision panels with fire protection rated glazing materials in fire protection rated frames, the area of which shall not exceed that tested. T~~the doors shall be close-fitting within operational tolerances and shall not have undercuts in excess of 1 inch, louvers or grilles. The doors shall have head and jamb stops, astragals or rabbets at meeting edges. Vision panels shall have fire-protection rated glazing materials in fire-protection-rated frames. The doors ~~and~~ shall be automatic-closing by smoke detection in accordance with Section 716.5.9.3 of the *International Building Code*. Where permitted by the door manufacturer's listing, ~~P~~positive-latching devices are not required.
4. In Group I-2 and ambulatory care facilities, where such doors are special purpose horizontal sliding, accordion, or folding door assemblies installed in accordance with Section 1008.1.4.3 and are automatic closing by smoke detection in accordance with Section 716.5.9.3 of the *International Building Code*.
~~4~~5. Group I-3.
~~5~~6. Openings between smoke zones with clear ceiling heights of 14 feet (4267 mm) or greater and bank-down capacity of greater than 20 minutes as determined by the design fire size.

Reason: IFC Section 909.5.2 (and IBC Section 909.5.2) addresses requirements for opening protection in smoke barriers, as does IBC Section 709.5. This proposal updates IFC Section 909.5.2 (and IBC Section 909.5.2). The charging language, in IFC Section 909.5, requires smoke barriers to comply with the IBC, thus this language provides greater consistency with pertinent IBC requirements.

Also, IBC Section 709.5 includes an exception for doors complying with 1008.1.4.3 of the IBC, and IBC Section 1008.1.4.3 was revised for the 2015 IBC. The proposed language in Exception 4 for special purpose horizontal sliding, accordion, or folding door assemblies is intended to reflect this.

Cost Impact: None

F216–13*
1103.3 (New), 1103.3.1 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov)

Revise as follows:

1103.3 Existing elevators. Existing elevators, escalators and moving walks shall comply with the requirements of Sections 1103.3.1 and 1103.3.2.

1103.3.1 Elevators, escalators and moving walks. Existing elevators, escalators and moving walks in Group I-2 Condition 2 occupancies shall comply with ASME A17.3.

~~**1103.3**~~ **1103.3.2 Elevator emergency operation.** Existing elevators with a travel distance of 25 feet (7620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for fire-fighting or rescue purposes shall be provided with emergency operation in accordance with ASME A17.3.

Reason: The healthcare industry has historically been required to comply with regulations set forth by accreditation and certification agencies, such as The Joint Commission. Because the ICC family of codes does not currently have an existing elevator standard, ASME A17.3 *Safety Code for Existing Elevators and Escalators* is proposed for compliance of existing elevators in Group I-2 Condition 2 occupancies. ASME A17.3 has been referenced by guidelines adopted by The Joint Commission for over a decade and this code change will provide correlation of the IFC with the mandated healthcare industry standard.

Adding a reference to ASME A17.3 will require that existing elevators escalators and moving walks and their related operating equipment in Group I-2 Condition 2 occupancies comply with a minimum level of safety. Because the occupants of these types of facilities are often incapable of self-preservation, it will also provide important features essential for occupant safety including escalator and moving walk emergency stop buttons and automatic skirt obstruction stop features. A new Section 1103.3 is included editorially to conform to established code style for multiple requirement sections.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Cost Impact: The code change proposal should not increase the cost of construction because compliance with similar requirements is already mandated by facility licensure requirements.

F217 – 13

1103.4, 1103.4.1, 1103.4.2, 1103.4.3, 1103.4.4, 1103.4.8 (New)

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

SECTION 1103
FIRE SAFETY REQUIREMENTS
FOR EXISTING BUILDINGS

1103.4 Vertical openings. Interior vertical ~~shafts~~ openings, including but not limited to *stairways,* elevator hoistways, service and utility shafts, that connect two or more stories of a building, shall be enclosed or protected as specified in Sections 1103.4.1 through 1103.4.7.

1103.4.1 Group ~~I~~ I-2 and I-3 occupancies. In Group ~~I~~ I-2 and I-3 occupancies, interior vertical openings connecting two or more stories shall be protected with 1-hour fire-resistance-rated construction.

Exception: In Group I-3 occupancies, exit stairways or ramps and exit access stairways or ramps constructed in accordance with Section 408 in the *International Building Code*.

1103.4.2 Three to five stories. In other than Group ~~I~~ I-2 and I-3 occupancies, interior vertical openings connecting three to five stories shall be protected by either 1-hour fire-resistance-rated construction or an *automatic sprinkler system* shall be installed throughout the building in accordance with Section 903.3.1.1 or 903.3.1.2.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages ~~and ramps~~.
3. Vertical opening protection for escalators shall be in accordance with Section 1103.4.5, 1103.4.6 or 1103.4.7.
4. Exit access stairways and ramps shall be in accordance with Section 1103.4.8.

1103.4.3 More than five stories. In other than Group ~~I~~ I-2 and I-3 occupancies, interior vertical openings connecting more than five stories shall be protected by 1-hour fire-resistance-rated construction.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages ~~and ramps~~.
3. Vertical opening protection for escalators shall be in accordance with Section 1103.4.5, 1103.4.6 or 1103.4.7.
4. Exit access stairways and ramps shall be in accordance with Section 1103.4.8.

1103.4.4 Atriums and covered malls. In other than Group ~~I~~ I-2 and I-3 occupancies, interior vertical openings in a covered mall building or a building with an atrium shall be protected by either 1-hour fire-resistance-rated construction or an *automatic sprinkler system* shall be installed throughout the building in accordance with Section 903.3.1.1 or 903.3.1.2.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages ~~and ramps~~.
3. Exit access stairways and ramps shall be in accordance with Section 1103.4.8.

1103.4.5 Escalators in Group B and M occupancies. Escalators creating vertical openings connecting any number of stories shall be protected by either 1-hour fire-resistance-rated construction or an *automatic sprinkler system* in accordance with Section 903.3.1.1 installed throughout the building, with a draft curtain and closely spaced sprinklers around the escalator opening.

1103.4.6 Escalators connecting four or fewer stories. In other than Group B and M occupancies, escalators creating vertical openings connecting four or fewer stories shall be protected by either 1-hour fire-resistance-rated construction or an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 shall be installed throughout the building, and a draft curtain with closely spaced sprinklers shall be installed around the escalator opening.

1103.4.7 Escalators connecting more than four stories. In other than Group B and M occupancies, escalators creating vertical openings connecting five or more stories shall be protected by 1-hour fire-resistance-rated construction.

1103.4.8 Occupancies other than Group I-2 and I-3. In other than Group I-2 and I-3 occupancies, floor openings containing exit access stairways or ramps that do not comply with one of the conditions listed in this section shall be protected by 1-hour fire-resistance-rated construction.

1. Exit access stairways and ramps that serve, or atmospherically communicate between, only two stories. Such interconnected stories shall not be open to other stories.
2. In Group R-1, R-2 or R-3 occupancies, exit access stairways and ramps connecting four stories or less serving and contained within an individual dwelling unit or sleeping unit or live/work unit.
3. Exit access stairways and ramps in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, where the area of the vertical opening between stories does not exceed twice the horizontal projected area of the stairway or ramp, and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13. In other than Groups B and M occupancies, this provision is limited to openings that do not connect more than four stories.
4. Exit access stairways and ramps within an atrium complying with the provisions of Section 404 of the International Building Code.
5. Exit access stairways and ramps in open parking garages that serve only the parking garage.
6. Exit access stairways and ramps serving open-air seating complying with the exit access travel distance requirements of Section 1028.7 of the International Building Code.
7. Exit access stairways and ramps serving the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, places of religious worship, auditoriums and sports facilities.

Reason: The intent of this code change is to resolve conflicts between the means of egress requirements in chapter 10 of both the IBC and IFC, and chapter 11 of the IFC regarding open exit access stairway and ramp construction. There are a number of building code provisions for new construction in current IBC/IFC chapter 10 Means of Egress that permit exit access stair floor openings without a fire rated enclosure. Many of these permitted floor openings are required to be fire rated by IFC chapter 11 Construction Requirements for Existing Buildings. This sets up a direct conflict not just between the IBC and IFC but between two chapters in the IFC. A building constructed under the 2012 IBC/IFC and in full compliance with chapter 10 of both codes is in violation of IFC sections 1103.4 through 1104.3.7 as soon as the certificate of occupancy issued. Cleary it was not the intent of IFC chapter 11 to contradict chapter 10 of the IFC or IBC. This code change takes the conditions that permit exit access stair and ramp floor openings and places them in IFC chapter 11 so that the requirements of IFC chapter 11 are consistent with IFC chapter 10 and IBC chapter 10.

Specific section changes:

Section 1103.4.1 was modified to specifically address groups I-2 and I-3 and 1103.4.2 through 1103.4.4 was modified to include I-1 and I-4 occupancies. This was done because the specific conditions that allow unenclosed exit access stairs in IBC and IFC chapter 10 differ based on that distinction. In addition the group I-3 exception was added to 1103.4.1 to be consistent with the current exception #10 to IFC/IBC section 1009.3 and the current single exception to IFC/IBC section 1022.2.

Sections 1103.4.2 through 1103.4.4 each had an exception added to refer to new section 1103.4.3 for conditions that allow unenclosed exit access stairs.

Section 1103.4.3 was added to provide all of the current conditions that allow an un-enclosed exit access stair or ramp. All of these conditions are existing from IFC/IBC chapter 10 section 1009.3. Note that in the 2015 IBC and IFC these conditions will be in new IFC/IBC section 1018. It is very important to note that this section and these conditions only apply to exit access stairs and ramps. This new section does not apply to exit stairs. Exit stairs are not exempted from enclosure.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as “areas of study”. Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/default.aspx. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public.

Cost Impact: None

F218–13*
1103.4.1

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov)

Revise as follows:

IFC 1103.4.1 Group I occupancies. In Group I occupancies, interior vertical openings connecting two or more stories shall be protected with 1-hour fire-resistance-rated construction.

Exceptions:

1. In Group I-2 Condition 2 equipped throughout with an automatic sprinkler system, vertical opening connecting two or more stories need not be protected with 1-hour fire-resistance-rated construction where both of the following conditions are met:
   1.1. The atrium volume is accounted for in the design of a smoke control system in accordance with Section 909.
   1.2 The floor levels within the vertical opening shall contain only low or ordinary fire hazard uses.
2. In Group I-2 Condition 2, where an automatic sprlnkler system is installed in accordance with Section 404.6 of the *International Building Code,* glass walls shall be considered to be equivalent to 1-hour fire-resistance-rated construction for purposes of this section. Where glass doors are provided in the glass wall, they shall be either self-closing or automatic-closing.
3. In Group I-2 Condition 2, 1-hour fire-resistance-rated construction is not required where a glass-block wall assembly complying with Section 2110 of the *International Building Code* and having a ¾-hour fire protection rating is provided.

Reason: The intent of this code change is to make the IFC consistent with federal standards that are in place for the maintenance of Group I-2 Condition 2 (hospitals) and to clarify the allowable use and construction of atria in hospitals. This adds language to clarify the fire hazard class allowed in the existing atrium (no higher than ordinary), as opposed to only low hazard class in new. A smoke control system is also acknowledged as a factor when it comes to separation of the atrium, and clarifies that the smoke control system's engineering analysis must account for any spaces open to it.

Glass walls points back to the language in IBC Section 404.6 in an attempt to set that as a minimum, retroactive standard. It is far simpler to address a potential deficiency with addition of a smoke control system or properly installed sprinklers at the glass, rather than reconstructing the walls themselves.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Cost Impact: This proposal would make the IFC consistent with federal standards that are in place for the maintenance of hospitals, and therefore would not represent an increase in cost.

F219–13
1103.4.1

Proponent: Robert J Davidson, Davidson Code Concepts, LLC, representing self (BFICOCS) (rjd@davidsoncodeconcepts.com)

Revise as follows:

1103.4.1 Group I-3 **occupancies.** In Group I-3 occupancies, interior vertical openings connecting two or more stories shall be protected with 1-hour fire-resistance-rated construction.

Exceptions:

1. In Group I-3 equipped throughout with an automatic sprinkler system, vertical opening connecting two or more stories need not be protected with 1-hour fire-resistance-rated construction where both of the following conditions are met:

1.1. The atrium and connecting stories are accounted for in the design of a smoke control system in accordance with Section 909.

1.2. The floor levels within the vertical opening shall contain only low or ordinary fire hazard uses.

2. In Group I-3 where an automatic sprlnkler system is installed throughout the building and in accordance with Section 404.6 of the *International Building Code,* glass walls shall be considered to be equivalent to 1-hour fire-resistance-rated construction for purposes of this section. Where glass doors are provided in the glass wall, they shall be either self-closing or automatic-closing.

3. In Group I-3, 1-hour fire-resistance-rated construction is not required where a glass- block wall assembly complying with Section 2110 of the *International Building Code* and having a ¾-hour fire protection rating is provided.

Reason: The intent of this code change is to clarify the allowable use and construction of atria in jail. This adds language to clarify the fire hazard class allowed in the existing atrium (no higher than ordinary), as opposed to only low hazard class in new. A smoke control system is also acknowledged as a factor when it comes to separation of the atrium, and clarifies that the smoke control systems engineering analysis must account for any spaces open to it.

Glass walls points back to the language in the IBC in an attempt to set that as a minimum, retroactive standard. It is far simpler to address a potential deficiency with addition of a smoke control system or properly installed sprinklers at glass, rather than reconstructing the walls themselves.

This is intended to coordinate with the Group I-2 provisions.

Cost impact:

F220–13

1103.4.8 (New), 1103.4.9 (New), 603.8.6 (New), 603.8.7 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Add new text as follows:

1103.4.8 Waste and linen chutes. In Group I-2 occupancies, existing waste and linen chutes shall comply with Sections 1103.4.8.1 through 1103.4.8.5.

1103.4.8.1 Enclosure. Chutes shall be enclosed with 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than1-hour.

1103.4.8.2 Chute intakes. Chute intakes shall comply with Section 1103.4.8.2.1 or 1103.4.8.2.2.

1103.4.8.2.1 Chute intake direct from corridor. Where intake to chutes is direct from a corridor, the intake opening shall be equipped with a chute intake door in accordance with Section 716 of the *International Building Code* and having a fire protection rating of not less than1-hour.

1103.4.8.2.2 Chute intake via a chute intake room. Where the intake to chutes is accessed through a chute intake room, the room shall be enclosed with 1-hour fire-resistance rated construction. Opening protectives for the intake room shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than ¾ hour. Opening protective for the chute enclosure shall be in accordance with Section 1103.4.8.1.

1103.4.8.3 Automatic sprinkler system. Chutes shall be equipped with an *approved automatic sprinkler system* in accordance with Section 903.2.11.2.

1103.4.8.4 Chute discharge rooms. Chutes shall terminate in a dedicated chute discharge room. Such rooms shall be separated from the remainder of the building by a minimum of 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than1-hour.

1103.4.8.5 Chute discharge protection. Chute discharges shall be equipped with a self-closing or automatic-closing opening protective in accordance with Section 716 of the *International Building Code* and having a fire protection rating of not less than 1-hour.

1103.4.9 Flue-fed incinerators. Existing flue-fed incinerator rooms and associated flue shafts shall be protected with 1-hour fire-resistance-rated construction and have no other vertical openings connected with the space other than the associated flue. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than1-hour.

Add new text as follows:

603.8.6 Flue-fed incinerators in Group I-2. In Group I-2 occupancies, the continued use of existing flue-fed incinerators is prohibited.

603.8.7 Incinerator inspections in Group I-2. Incinerators in Group I-2 occupancies shall be inspected at least annually in accordance wth the manufacturer's instructions. Inspection records shall be maintained on the premises and made available to the fire code officlal upon request.

Reason: The intent of this code change is to clarify the allowable use and construction of chutes and incinerators in Group I-2 occupancies. These items are still used as an integral part of the operation of a healthcare facility, especially the waste or linen chutes. Some incinerators are still in use, but this proposed requirement seeks to separate them from other vertical openings, especially a trash chute, by requiring a separate discharge room from the incinerator. Although newer incinerators are designed to contemporary codes, standards and regulations, most older incinerators are not in use or are otherwise abandoned in existing facilities because of other regulation from entities such as the EPA, this requirement seeks to separate and protect any potential hazard of inactive incinerator systems from the rest of the building.

Also, in older facilities that pre-date current requirements, there is the occasion that the chute door opens into a corridor. It was not prohibited at the time of construction, so it is not practical to reconstruct the chute to meet modern standards. Therefore, this section aims to directly address that situation by defining requirements for which it should be safely maintained.

This proposal would make the IFC consistent with federal standards that are in place to maintain hospitals, and therefore would not represent an increase in cost.

This proposal is submitted by the ICC Ad Hoc Committee on Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/default.aspx. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public. In 2012, three of the 25 face-to face meetings were held. In addition to the CTC meetings, the CTC established Study Groups (SG) of interested parties for each of the areas of study. These SG's are responsible for reviewing the available information and making recommendations to the CTC. All totaled, the SG's held over 70 conference calls in 2012.

Cost Impact: No increase in the cost of construction is associated with this code change. This change is consistent with existing federal certification requirements.

F223–13

1103.5.3 (New), 1103.5.3.1 (New), 1103.5.3.2 (New)

Proponent: Adolf Zubia. Chairman IAFC Fire and Life Safety Section, representing ICC Fire Code Action Committee (azubiamia@yahoo.com)

Add new text as follows:

1103.5.3 High-Rise Buildings. An automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout existing high-rise buildings.

Exceptions:

1. Airport traffic control towers.
2. Open parking structures.
3. Group U Occupancies.
4. Occupancies in Group F-2.
5. Buildings with an engineered fire protection plan in accordance with Section 1103.5.3.2

1103.5.3.1 Compliance Schedule. Building owners shall file a compliance schedule with the fire code official no later than 180 days after the first effective date of this code. The compliance schedule shall not exceed 12 years for an automatic sprinkler system retrofit and 5 years for an approved engineered fire protection plan.

1103.5.3.2 Engineered Fire Protection Plan. An approved engineered fire protection plan shall be developed by a design professional with experience in fire protection engineering. The engineered fire protection plan shall address the following fire protection and life safety goals:

1. The building is designed and equipped with safeguards against the spread of fire and products of combustion so that no person not directly adjacent to or involved in the ignition of a fire shall suffer serious injury or death from a fire and;
2. The building is designed and equipped with safeguards against the spread of fire so that the property losses are limited to the compartment of origin and;
3. The building is designed and constructed with fire protection features so that fire fighters can appropriately perform rescue operations, protect property, and utilize fire-fighting equipment and controls without unreasonable risk exposure and;
4. Other fire protection and life safety goals as specified by the fire code official based on the unique occupancy, size, construction and features of the building.

Reason: Modern fire and building codes require complete automatic fire sprinkler protection and a variety of other safety features in new high-rise construction. Many older high-rise buildings lack automatic fire sprinkler protection and other basic fire protection features necessary to protect the occupants, emergency responders, and the structure itself. Without complete automatic fire sprinkler protection, fire departments cannot provide the level of protection that high-rise buildings demand.
Existing high-rise buildings that are not protected with fire sprinklers represent a significant hazard to the occupants and firefighters. Additionally, High-Rise fires can significantly impact a communities' infrastructure and the economic viability.

Between 2003 and 2006, there was an average of 13,400 reported structure fires in high-rise buildings annually. These incidents resulted in 62 civilian deaths, 490 civilian injuries, and $179 million in direct property damage per year. Furthermore, from 1977 to 2009, 25 firefighters died from non-stress related cardiac death during fire suppression operations in high-rise buildings. By their very nature, high-rise fires present unique firefighting challenges that are extremely difficult for firefighters to mitigate without the presence of fire sprinkler systems. Some of these challenges include:

High-rise structure fires require significantly more resources, such as personnel and equipment, to extinguish than do fires in other types of occupancies. This further strains the responding fire department and firefighters.

Due to their height, smoke movement in high-rise structures is very different from that of other structures. Temperature gradients result in varying pressures throughout the structure, which can allow for the rapid, uncontrolled movement of smoke and flame (known as the "stack effect").

By design, exits from high-rise structures are limited. In an emergency, the movement of people out of a building is particularly difficult. A prime example of this hazard is the One Meridian Plaza fire. This fire occurred on the 22nd floor of the 38-story Meridian Bank Building and was reported to the Philadelphia Fire Department on February 23, 1991 at approximately 2040 hours and burned for more than 19 hours. The fire caused three firefighter fatalities and injuries to 24 firefighters. The 12-alarms brought 51 engine companies, 15 ladder companies, 11 specialized units, and over 300 firefighters to the scene. It was the largest high-rise office building fire in modern American history, completely consuming eight floors of the building, and was only controlled only when it reached a floor that was protected by automatic sprinklers. In 1999 the building was torn down amidst a storm of litigation.
The HVAC and other utilities in some high-rises service multiple levels and can facilitate the spread of smoke and flame through a building due to the height of the building, response times for the fire department to reach the actual fire itself are extended, contributing to larger fire growth thereby attributing to extensive smoke spread throughout the building.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the Fire-CAC has held 6 open meetings and numerous Regional Work Group and Task Group meetings and conference calls which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx.

Cost Impact: This change will increase the cost of operating an existing High-Rise building.

F224–13
1103.5.3 (New), Table 1103.1

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs Building/Fire Safety Division, representing self (ACApfelbeck@Altamonte.org)

Revise as follows:

1103.5.3 High-Rise Buildings. Existing high-rise buildings shall be equipped with either:

1. An automatic sprinkler system installed throughout the building in accordance with Section 903.3.1.1 or;
2. An approved engineered fire protection plan in accordance with Section 1103.5.3.1.

Exception: The provisions of this section shall not apply to the following:

1. Airport traffic control towers.
2. Open parking structures.
3. Group U Occupancies.
4. Occupancies in Group F-2.
5. Open air portions of Group A-5 Occupancies.

1103.5.3.1 Engineered Fire Protection Plan. Where required by Section 1103.5.3, an approved engineered fire protection plan shall be developed by a licensed design professional with experience in fire protection engineering. The fire protection plan shall address the following fire protection and life safety goals:

1. The building shall be designed, equipped and maintained with safeguards against the spread of fire and products of combustion so that no person not directly adjacent to or involved in the ignition of a fire shall suffer serious injury or death from a fire and;
2. The building shall be designed, equipped and maintained with safeguards that restrict the spread of fire through the building and;
3. The building shall be designed, equipped and maintained with fire protection features so that fire fighters can perform rescue operations, protect property, and utilize fire-fighting equipment and controls without being unduly hindered in suppression or rescue operations and;
4. Other fire protection and life safety goals based on the unique occupancy, size, construction and features of the building.

1103.5.3.2 Compliance Schedule. Building owners shall file a compliance schedule with the fire code official no later than 180 days after the first effective date of Section 1103.5.3. The compliance schedule shall not exceed 12 years for an automatic sprinkler system retrofit in accordance with Section 1103.5.1 (1) or 6 years for an engineered fire protection plan in accordance with Section 1103.5.3 (2).

1103.5.3.2.1 Compliance Extensions. The fire code official is authorized to approve up to two one year extensions to the compliance schedule specified in Section 1103.5.3.2 where the building owner has demonstrated to the fire code official that the compliance schedule has been pursued with due diligence.

Table 1103.1

OCCUPANCY AND USE REQUIREMENTS

Section	Use	Occupancy Classification																		
	High rise	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
1103.5.3	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

(Portions of table not shown remain unchanged)

Reason: Existing unsprinklered high-rise buildings continue to be a hazard to occupants, firefighters and their ability to mitigate damage from fires. As an example:

1. 1988 First Interstate Bank: $200 million in direct property damage, 64 fire companies, gutted 12th-16th floor.
2. 1991 One Meridian Plaza: $100 million in direct property damage, 18 hour fire gutting 22 floors.
3. 1996 Rockefeller Center: Fires in 5 separate electrical rooms, 300+ firefighters responded, television broadcasts interrupted.
4. 2003 Cook County Office Building: Six civilian deaths.
5. 2004 Caracas Tower: Fire spread to 26 floor and burned for 17 hours, 40 firefighters injured.
6. 2005 Madrid Windsor: 32 Story totally destroyed by fire.

The concern with existing high-rise buildings is best summed up in the Cook County Administration Fire Report, authored by James Lee Witt Associates, in major finding number 1: “Lack of an automatic fire sprinkler system. The building was not equipped with an automatic fire sprinkler system that would have controlled or extinguished the fire in the incipient stage.” The recommendations in the Cook County Administration Fire Report further state, “The State of Illinois and City of Chicago should amend their codes to include provisions for the mandatory retrofit installation of complete automatic fire sprinkler systems in all existing-high rise structures.” It is important to note that Mr. Witt brings significant credibility to this finding and recommendation as he is also the past CEO of the ICC.

If this finding and recommendation is valid for the City of Chicago and the State of Illinois for the protection of their citizens and firefighters, then this finding and recommendation is also valid as a base level of building and life safety protection within the IFC.

In addition, the NIST Final Report of the Collapse of the World Trade Center Tower states in recommendation 26: “NIST recommends that state and local jurisdictions adopt and aggressively enforce available provisions in building codes to ensure that egress and sprinkler requirements are met by existing buildings.”

The NFPA 101 Life Safety Code requires a similar level of protection as this proposal in requiring existing high-rise buildings to be equipped with fire sprinkler protection or an Engineered Life Safety System. This language has been in place within the Life Safety Code for numerous cycles. It is unclear why NFPA 101 specifies this level of protection but the IFC fails to provide a similar level of protection for the occupants and emergency responders.

This proposal attempts to mitigate some of the obvious economic impact by allowing for the use of a fire protection plan prepared by a design professional. While this fire protection plan will not provide an equivalent level of protection to a complete automatic fire sprinkler system, it will assist in addressing, and mitigating, a significant number of the risk factors to high-rise occupants and fire fighters who must confront these extremely hazardous fire conditions. The broad goals of the fire protection plan contained in 1103.5.2.1 are specifically derived from the goals contained in the ICC Code for Performance Based Design. These broad goals provide the designer with maximum flexibility in developing a reasonable code compliant approach.

Unfortunately, this and other fire sprinkler retrofit issues have been discussed as an issue of politics rather than as a technical code issue in past code change cycles. As an example: “The retroactive requiring of sprinklers in buildings should be left as a local decision due to the economic and political impact of such requirements.” (F116-04/05) By taking this type of response on a code issue, the committee removes itself from the making a technical decision based on the technical merit code change and inserts itself as a local political policy making body. The two roles are distinctly different. It is the responsibility of the code promulgation body to determine if there is sufficient technical justification to warrant the code change and if the code change is within the scope of the document. The scope of the IFC states:

102.1 Construction and design provisions.

The construction and design provisions of this code shall apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities and conditions when required in Chapter 11.
4. Existing structures, facilities and conditions which, in the opinion of the fire code official, constitute a distinct hazard to life or property.

This code change, and all retrofit code changes, are clearly within the scope of the IFC. The only question for the committee to answer is:Does an existing unsprinklered high-rise building provide a reasonable level of property protection, civilian life safety protection and firefighter protection? The technical evidence indicates that this is clearly not the case. By ignoring the technical need and deflecting responsibility for retrofit of existing high-rise as a political issue, a message is sent via this code to state and local government, that an unsprinklered existing high-rise building does provide a reasonable level of building and life safety protection. This is clearly not the case.

Cost Impact: This proposal will increase the code of construction. The impact of this change will be on existing high-rise buildings.

F225–13*
1103.5.3 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov)

Add new text as follows:

1103.5.3 Group I-2 Condition 2. In addition to the requirements of Section 1103.5.2, existing buildings of Group I-2 Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed by [DATE TO BE INSERTED BY THE JURISDICTION].

Reason: The intent of this code change is to make mandatory the use of an approved automatic sprinkler system throughout existing hospital (Group I-2 Condition 2) occupancies. The healthcare industry recognizes sprinkler systems are a vital component of the safety of the overall building systems and components. The current mandatory sprinkler retrofit requirement in Section 1103.5.2 first entered the Fire Code in the 2009 version, but does not require sprinklering the entire building throughout. The Ad Hoc for Healthcare, which is made up of representatives from both regulated facilities and enforcement, believe that it is time to take the requirement a step further and require the ENTIRE building to be sprinklered within a reasonable time frame.

To ensure continuous operation in healthcare facilities, the installation of sprinklers systems needs to be carefully planned so as to not adversely affect patient health. Accessing and exposing ceiling spaces can create conditions that will lead to infection and possibility death to patients with compromised or suppressed immune systems. In many situations, hospitals may not be able to appropriately retrofit the installation of a fire suppression system; in those situations, a time frame is needed to replace facilities. . The period for adoption of this proposed requirement has been left to the local authority having jurisdiction. Coordinating the timeframe for adoption with federal requirements is recommended. It is currently anticipated that the Centers for Medicaid and Medicare (the federal authority having jurisdiction) will require retroactive sprinklering of hospitals by the year 2021. However, the exact timeframe is uncertain at the time of development of this change.

Regardless, the federal government is considering the reasons noted above. This is an important next step in ensuring the safety of fragile population, Facilities need some time to accomplish this safety, without adversely affected the health of patients and disrupting patient care. These are the same factors that a jurisdiction should consider when choosing a date for adoption. It should be also clear that this change is a separate measure that must be taken in addition to the current requirement. It is not intended to allow a facility to have a timeframe for installing the current requirement (although jurisdictions may choose to do this). Nor is it intended to imply that the entire building containing a hospital should be sprinklered immediately. At a minimum, a three year timeframe is recommended for implementation of this requirement. This considers the process planning, capital approval, regulatory approval, design and installation of the sprinkler system. The capital planning piece of a large scale initiative, such as a building-wide sprinkler system, normally spans multiple fiscal years, and more can be considered if the regulatory environment allows.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Cost impact: This proposal would make the IFC consistent with the direction that federal standards are taking to maintain hospitals and therefore would not represent an increase in cost.

Analysis: The “Group I-2 Condition 2” terminology used in this proposal in lieu of “Group I-2 hospital” is the result of approved Group A code change G257-12.

F236–13*
1105 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Add new text as follows:

SECTION 1105
INCIDENTAL USES IN EXISTING GROUP I-2

1105.1 General. Incidental uses associated with and located within existing single occupancy or mixed occupancy Group I-2 buildings and that generally pose a greater level of risk to such occupancies shall comply with the provisions of Sections 1105.2 through 1105.4.2.1. Incidental uses in Group I-2 occupancies are limited to those listed in Table 1105.1.

1105.2 Occupancy classification. Incidental uses shall not be individually classified in accordance with Section 302.1 of the *International Building Code*. Incidental uses shall be included in the building occupancies within which they are located.

1105.3 Area limitations. Incidental uses shall not occupy more than 10 percent of the *building area* of the *story* in which they are located.

1105.4 Separation and protection. The incidental uses listed in Table 1105.1 shall be separated from the remainder of the building or equipped with an *automatic sprinkler system*, or both, in accordance with the provisions of that table.

1105.4.1 Separation. Where Table 1105.1 specifies a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the *building* in accordance with Section 509.4.1 of the *International Building Code*.

1105.4.2 Protection. Where Table 1105.1 permits an *automatic sprinkler system* without a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke in accordance with Section 509.4.2 of the *International Building Code*.

1105.4.2.1 Protection limitation. Except as otherwise specified in Table 1105.1 for certain incidental uses, where an *automatic sprinkler system* is provided in accordance with Table 1105.1, only the space occupied by the incidental use need be equipped with such a system.

TABLE 1105.1
INCIDENTAL USES IN EXISTING GROUP I-2 OCCUPANCIES

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Furnace room where any piece of equipment is over 400,000 Btu per hour input.	1 hour or provide automatic sprinkler system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Hydrogen cutoff rooms, not classified as Group H	2 hours
Incinerator rooms	2 hours and provide automatic sprinkler system
Paint shops not classified as Group H	2 hours; or 1 hour and provide automatic sprinkler system
Laboratories and vocational shops, not classified as Group H	1 hour or provide automatic sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system
Patient rooms equipped with padded surfaces	1 hour or provide automatic sprinkler system
Physical plant maintenance shops.	1 hour or provide automatic sprinkler system
Waste and linen collection rooms with containers	1 hour or provide automatic sprinkler system

ROOM OR AREA	SEPARATION AND/OR PROTECTION
with total volume of 10 cubic feet or greater.	
Storage rooms greater than 100 square feet	1 hour or provide automatic sprinkler system
Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons for flooded lead-acid, nickel cadmium or VRLA, or more than 1,000 pounds for lithium-ion and lithium metal polymer used for facility standby power, emergency power or uninterruptable power supplies	2 hours

For SI: 1 square foot = 0.0929 m^2, 1 pound per square inch (psi) = 6.9 kPa, 1 British thermal unit (Btu) per hour = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L.

(Renumber subsequent sections)

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/default.aspx. Since its inception in April/2005, the CTC has held twenty five meetings - all open to the public. In 2012, three of the 25 face-to face meetings were held. In addition to the CTC meetings, the CTC established Study Groups (SG) of interested parties for each of the areas of study. These SG's are responsible for reviewing the available information and making recommendations to the CTC. All totaled, the SG's held over 70 conference calls in 2012.

The provisions of this code change are being proposed for the IFC to establish requirements for the protection of incidental use areas in existing Group I-2 occupancies. Incidental use area provisions are applicable to new construction in Section 509 of the IBC, however similar provisions are needed for existing Group I-2 occupancies since the hazards posed by such rooms or spaces are no different for existing buildings than for new. Proposed Section and Table 1105.1 are very similar to and based upon IBC Section and Table 509, except that references to occupancies other than Group I-2 are not included. The basic requirements proposed for incidental uses in existing healthcare occupancies rely upon the provisions of the IBC for the specifics of construction and protection. Proposed Sections 1105.2 through 1105.4.2.1 are based on IBC Sections 509.2 through 509.4.2.1, editorially corrected for the IFC and for correlation. These proposed provisions will provide correlation with not only the IBC but also with the current operational and CMS program standards for existing Group I-2 occupancies. A section-by-section summary follows:

1105.1: This proposed section establishes the scope of Section 1105 and its applicability to Group I-2 occupancies. Incidental uses are rooms or areas that constitute special hazards or risks to life safety that are not typically addressed by the provisions for the occupancy group in which they occur even though such rooms or areas may functionally be an extension of the primary use. Only those rooms or areas indicated in Table 1105 are to be regulated as incidental uses. Incidental uses can be located within both single-occupancy and mixed-occupancy buildings. The concern is that those areas designated as incidental uses pose a risk to the remainder of the building, and as such, some degree of protection is required. In general, the nature of these incidental uses is such that they are small areas that are not frequented by the building occupants very often in which a fire could get underway and go unnoticed for a longer time than in a part of the building that is constantly occupied.

1105.2: Consistent with the IBC, this proposed section expressly states that incidental uses are not considered as separate and distinct occupancy classifications but, rather, are classified the same as the occupancies in which they are located. As an example, a waste and linen collection room in a hospital would be classified as a portion of the Group I-2 occupancy even though it may present a level of hazard more akin to a Group S-1 occupancy if it were to be classified separately.

1105.3: The proposed floor area limitation of 10 percent for incidental uses emphasizes the ancillary nature of such rooms and areas and correlates with the IBC. Each incidental use would be limited to a maximum floor area of 10 percent of the floor area of the story in which it is located. Where there are two or more tenants located on the same story, the 10 percent limitation is based upon the floor area of each individual tenant space rather than that of the entire story. The application of the limit on a tenant-by-tenant basis is consistent with the concept of incidental uses typically being ancillary only to a portion of the building, i.e., the specific tenant occupancy.

1105.4: In addition to identifying those rooms or areas that warrant regulation as incidental uses, proposed Table 1105.1 will also indicate the required degree of protection or separation. The requirements identified in Table 1105.1 vary depending on the incidental use. In some cases, a specific type of separation and/or protection is required, while in others there is an option.

1105.4.1: Where a fire-resistance rated separation would be required, the incidental use would need to be separated from other portions of the building in accordance with assemblies complying with the IBC.

1105.4.2: In this proposed section, where Table 1105.1 would allow protection by an automatic sprinkler system without a fire-resistance-rated separation, the construction enclosing the incidental use would still need to resist the passage of smoke. Construction details for resisting the passage of smoke are provided in the IBC.

1105.4.2.1: This proposed section makes it clear that the sprinkler systems stipulated in Table 1105 would be required for the incidental use area only.

TABLE 1105.1: Proposed Table 1105.1 identifies the incidental uses and the required separation or other protection that would need to be provided in all Group I-2 occupancies.

Information note: IBC Table 509 was revised by approved Group A code change G130-12, also submitted by the AHC, which is reproduced here below for reference purposes only:

G130 – 12
Table 509

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

Revise as follows:

TABLE 509
INCIDENTAL USES

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Furnace room where any piece of equipment is over 400,000 Btu per hour input.	1 hour or provide automatic sprinkler system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Hydrogen cutoff rooms, not classified as Group H	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies.
Incinerator rooms	2 hours and provide automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic sprinkler system
In Group E occupancies, laboratories and vocational shops~~,~~ not classified as Group H~~, located in Group E or I-2 occupancy~~	1 hour or provide automatic sprinkler system
In Group I-2 occupancies, laboratories not classified as Group H	1 hour and provide automatic sprinkler system
In ambulatory care facilities, laboratories not classified as Group H	1 hour or provide automatic sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system
In Group I-2, laundry rooms over 100 square feet	1 hour
Group I-3 cells and Group I-2 patient rooms equipped with padded surfaces	1 hour
In Group I-2, physical plant maintenance shops.	1 hour
In ambulatory care facilities or Group I-2 occupancies , waste and linen collection rooms ~~located in either Group I-2 occupancies or ambulatory care facilities~~ with containers that have an aggregate volume of 10 cubic feet or greater	1 hour
In other than ambulatory care facilities and Group I-2 occupancies, waste and linen collection rooms over 100 square feet	1 hour or provide automatic sprinkler system
In ambulatory care facilities or Group I-2 occupancies, storage rooms greater than 100 square feet	1 hour
Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons for flooded lead-acid, nickel cadmium or VRLA, or more than 1,000 pounds for lithium-ion and lithium metal polymer used for facility standby power, emergency power or uninterruptable power supplies	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies.

For SI: 1 square foot = 0.0929 m^2, 1 pound per square inch (psi) = 6.9 kPa, 1 British thermal unit (Btu) per hour = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L.

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare

facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Currently, more detail is needed in the Incidental Use table to add spaces currently being maintained in healthcare and ambulatory care occupancies. The above chart makes the noted tables consistent with current operational and programmatic standards in the Group I-2 occupancy.

The current version of the table does not address the occasion when materials in a laboratory increases, most notably in the aggregate of larger histology / cytology laboratories. Materials such as xylene, hydrochloric acid, ethanol and fixatives (among others) are present in these areas. Although they are stored in gallon and liter quantities, and not bulk storage, the quantities add up over the larger lab control areas when they are in use at the benches.

The distinction between smaller stat labs, largely found in ambulatory care facilities, and larger clinical labs, found in hospitals, is being proposed. Ambulatory care facilities has been added to the current laboratory category to address those support spaces such as stat labs that are set up for a specific time-sensitive purpose, such as blood draw and chemotherapy, to save time in the Group B occupancy setting. Larger scale or non-critical lab operations are typically sent out to proprietary labs from ambulatory facilities. When addressing labs crossing the threshold into one hour rated construction, these labs are typically constructed as stand-alone operations and commonly appear in Group B occupancies, and are subject to the current occupancy separation requirements.

Volume thresholds are being considered in waste and linen collection rooms because basic exam spaces contain some level of waste containers and linen hampers without rising to the level of storage. The 10 cubic foot threshold represents essentially two medium sized linen hampers and/or trash receptacles. Larger linen and waste receptacle containers, and not the smaller containers typically found in an exam room or patient sleeping room, are subject to volume rather than square footage of the room because a relatively small space, with the 10 cubic foot threshold crossed in a space well below, for example, 100 square feet.

Group I-2 is also being added to the requirement for one hour rating with rooms equipped with padded surfaces. The instance of these rooms existing in a hospital is rare. It is prudent, however, to add the requirement where there is the occasion that such rooms are used in areas such as emergency departments, inpatient psychiatric units, or similar areas.

Physical plant and maintenance shops are a very specific function in a hospital building, and are being added to the table to ensure protection due to the stored materials related to the physical plant operation.

Addition of storage rooms as an area requiring 1 hour rated protection is a key functional aspect of a Group I-2 healthcare building. Areas that become unused become storage areas very quickly. Specifically calling out storage areas helps define and control the storage of combustibles, and avoid creating random storage in otherwise unmonitored or unprotected areas.

Areas addressed in the past, but are no longer included in the table, are addressed in the International Fire Code (IFC). For example, storage of combustible gases is addressed in IFC Section 5306.2 and has specific references to the Group I-2 occupancy. Gift shops, formerly listed as an incidental area requiring protection, have largely been eliminated from these requirements in the I-Codes and other model codes, and are addressed in the context of being open to the corridor.
In consideration of ambulatory care facilities, where not otherwise specifically called out, categories that are required for both Group B and I occupancies are assumed to cover Group I-2 and ambulatory care facilities. Examples of this interpretation are hydrogen cut-off rooms and stationary battery storage.

Cost Impact: None

Cost Impact: The code change proposal should not increase the cost of construction because compliance with similar requirements is already required by facility licensure requirements.

F257–13
2310.5.3

Proponent: Marcelo M Hirschler, GBH International (gbhint@aol.com)

Revise as follows:

2310.5.3 Rubbish containers. ~~Metal containers with tight-fitting or self-closing lids shall be provided for the temporary storage of combustible trash or rubbish.~~ Containers with tight-fitting or self-closing lids shall be provided for temporary storage of combustible debris, rubbish and waste material. The rubbish containers shall be constructed entirely of materials that comply with any one of the following:

1. Noncombustible materials.
2. Materials that meet a peak rate of heat release not exceeding 300 kW/m^2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m^2 in the horizontal orientation.

Reason: Rubbish containers need not be constructed of metal but can be constructed of other noncombustible materials, including materials that have been shown to be safe by meeting a very severe fire test, just like those required by section 808 for I1, I2 and I3 occupancies. The key requirement that the lids be tight fitting or self closing is retained in the proposal. Note that the requirement covers all type of rubbish and is not intended to address spills of combustible or flammable liquids (or Class I, II or IIIA liquids), covered by 2310.5.2. The use of the phrase "combustible debris, rubbish and waste" makes this section consistent with other sections of the IFC.

Cost Impact: This should lower costs by offering more alternatives.

F291–13*
Table 5003.1.1(1) [IBC Table [F] 307.1(1)]

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

TABLE 5003.1.1(1) [IBC Table [F] 307.1(1)]
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD [a, j, m, n, p]

(Portions of table not shown remain unchanged)

a. through o. *(No change to current text)*

p. The following shall not be included in determining the maximum allowable quantities:
1. Liquid or gaseous fuel in fuel tanks on vehicles.
2. Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with this code.
3. Gaseous fuels in piping systems and fixed appliances regulated by the *International Fuel Gas Code.*
4. Liquid fuels in piping systems and fixed appliances regulated by the *International Mechanical Code*.
5. In Group I-2, alcohol based hand rubs classified as Class I or II liquids where installed in accordance with Sections 5705.5 and 5705.5.1. The location of the alcohol based hand rub (ABHR) dispensers shall be provided in the construction documents.

q. (No change to current text)

Reason: This proposed change will allow a reasonable amount of Alcohol based Hand Rub for infection control and patient life safety located in Group I-2 occupancies in appropriately sized dispensers to be located in control areas and permits the amounts not to be included in determining the maximum allowable quantities. IFC Section 5705.5 addresses the specifics regarding these amounts and locations.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/default.aspx. Since its inception in April/2005, the CTC has held twenty-five meetings - all open to the public. In 2012, three of the 25 face-to face meetings were held. In addition to the CTC meetings, the CTC established Study Groups (SG) of interested parties for each of the areas of study. These SG's are responsible for reviewing the available information and making recommendations to the CTC. All totaled, the SG's held over 70 conference calls in 2012.

Cost Impact: This proposal will not increase the cost of construction.

F307–13
5306.2

Proponent: Masoud Sabounchi, Advanced Consulting Engineers Inc., representing self (masoud@acecode.com)

Revise as follows:

5306.2 Interior supply location. Medical gases shall be stored in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the permit amount are located inside buildings, they shall be in a 1-hour exterior room, a 1-hour interior room or a gas cabinet in accordance with Section 5306.2.1, 5306.2.2 or 5306.2.3, respectively. Rooms or areas where medical gases are stored or used in quantities exceeding the *maximum allowable quantity per control area* as set forth in Section 5003.1 shall be in accordance with the *International Building Code* for high-hazard Group H occupancies.

Exceptions:

1. In Group I-2 and ambulatory health care occupancies, areas containing medical gas cabinets or medical gas rooms constructed in accordance with Sections 5306.2.1, 5306.2.2 or 5306.2.3, where quantity of the stored oxidizing gases exceeds the maximum allowable quantities shall not be considered Group H.
2. In Group I-2 and ambulatory health care occupancies, oxygen cylinders that are in use shall comply with applicable provisions of NFPA 99.

Reason: This proposal reverts the provisions of 2012 IFC Section 5306.2 to that of 2006 IFC Section 3006.2.1 regarding storage and use of the medical gases in health care occupancies without declaration of the storage/use rooms/areas as hazardous occupancy where quantity of oxidizing gases exceed the maximum allowable quantities (MAQs). This proposal does not change the existing requirements where flammable medical gases are used or stored.

IFC Section 5306 requires 1-hour fire resistance rated interior or exterior medical gas rooms where quantity of medical gases exceeds the permit amount. Per IFC Table 105.6.8 permit amounts of oxidizing gases is 504 cubic feet.

In a 10 story hospital, number of control areas and quantity of oxidizing gases per control area varies based on location of the control areas. Per IBC Table 414.2.2 floors (above grade plane) 4, 5 and 6 may have two control areas and limit quantity of hazardous materials to 12.5% of the MAQs. Quantity of oxidizing gases in each control area on floors 4, 5, and 6 would be limited to 1500 x 2 (due to sprinkler protection) x 12.5/100=375 cubic feet unless these rooms are considered H-3 Occupancy. This quantity is less than the 504 cubic feet which is the permit quantity. It is not clear if the 504 cubic feet permit limit or the limit of 375 cubic feet would govern the occupancy designation of the medical gas rooms.

If the 375 cubic feet limit is the MAQ, the control area has to be declared an H-3 occupancy. As such, IBC would require 2-hour fire resistance rated separation to enclose the medical gas storage rooms in hospitals and IBC Section 415.5 would require these H-3 occupancy medical gas storage rooms to have 25% of the wall area as exterior walls. Most health care occupancies have oxygen cylinders for patient use-if quantity of in use oxidizing gases exceed 375 cubic feet on floors 4, 5 and 6, the occupancy group of these health care floors would have to be H-3 which clearly is not the intent of the code.

On floors 7 and up quantity of oxidizing gases would be limited to 5% of MAQs or 150 cubic feet without declaration of an H-3 occupancy for the floor or reduction of the in use oxygen to less than 150 cubic feet and introduction of H-3 occupancy rooms for storage of oxidizing gases. This quantity is extremely limiting considering a large hospital floor area. On floor levels above the 9th, only one control area with total quantity of 150 cubic feet oxidizing gases is permitted which mandates creation of H-3 occupancy rooms and would limit total quantity of "in use" oxygen cylinders to 150 cubic feet in the remainder of the floor. Reference to NFPA 99 regarding "in use" quantities noted in exception number two would coordinate IFC provisions with NFPA 99.

Cost Impact: This change will not affect the cost of construction.

F308–13*

5306.2.1

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

5306.2.1 One-hour exterior rooms. A 1- hour exterior room shall be a room or enclosure separated from the remainder of the building by fire barriers constructed in accordance with Section 707 of the *International Building Code* or horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both, with a fire- resistance rating of not less than 1- hour. Openings between the room or enclosure and interior spaces shall be self-closing smoke- and draft-control

assemblies having a fire protection rating of not less than 1hour. Rooms shall have at least one exterior wall that is provided with at least two non-closable louvered vents. Each vent shall have a minimum free opening area of 24 square inches (155 cm^2) for each 1,000 cubic feet (28 m^3) at normal temperature and pressure (NTP) of gas stored in the room and shall not be less than ~~36~~ 72 square inches (~~0.023 m^2~~ 465 cm^2) in aggregate free opening area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with at least one automatic sprinkler to provide container cooling in case of fire.

Reason: The purpose of this proposal is to update Section 5306.2.1 on Medical Gas Systems to clarify and address the differences with the language in NFPA 99-2012, Section 9.3.7.5.2 with which hospitals are required to comply.

This proposed revision requires the vents to be of the non-closable type which is not currently required in the IFC, and to be of a larger size. It further defines the louver opening as "aggregate free opening" as required which is not currently specified in the IFC.

NFPA 99 is the more restrictive and sets the design of the louver to be specifically fixed where the IFC language may result is a "closable" louver which is not the intent of this code section. It also provides clarification on the sizing of the louver as it relates to the amount of gas being stored in the room where the IFC currently does not.

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Cost impact: The code change proposal should not increase the cost of construction because compliance is already required by facility licensure requirements.

F320–13*

5705.5, 5705.5.1

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

5705.5 Alcohol-based hand rubs classified as Class I or II liquids. The use of wall-mounted dispensers containing alcohol- based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

1. The maximum capacity of each dispenser shall be 68 ounces (2 L).
2. The minimum separation between dispensers shall be 48 inches (1219 mm).
3. The dispensers shall not be installed ~~directly adjacent to, directly~~ above**,** ~~or~~ below**,** or closer than 1 inch to an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or intervening counter top shall be free ~~remain clear and unobstructed~~ of electrical receptacles, switches, appliances, devices, or other ignition sources.
4. Dispensers shall be mounted so that the bottom of the dispenser is a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm) above the finished floor.

5. Dispensers shall not release their contents except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated "touch free" alcohol-based hand-rub dispensing devices with the following requirements:
    5.1. The facility or persons responsible for the dispensers shall test the dispensers each time a new refill is installed in accordance with the manufacturer's care and use instructions.
    5.2. Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing device are minimized. At a minimum, all devices subject to or used in accordance with this section shall have the following safety features:
        5.2.1. Any activations of the dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
        5.2.2. The dispenser shall not dispense more than the amount required for hand hygiene consistent with label instructions as regulated by the United States Food and Drug Administration (USFDA).
        5.2.3. An object placed within the activation zone and left in place will cause only one activation.
6. Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
7. Dispensers installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

5705.5.1 Corridor installations. In addition to the provisions of Section 5705.5, ~~W~~ where wall-mounted dispensers containing alcohol-based hand rubs are installed in corridors or rooms and areas open to the corridor, they shall be in accordance with all of the following:

1. Level 2 and 3 aerosol containers shall not be allowed in corridors.
2. The maximum capacity of each Class I or II liquid dispenser shall be 41 ounces (1.21 L) and the maximum capacity of each Level 1 aerosol dispenser shall be 18 ounces (0.51 kg).
3. The maximum quantity allowed in a corridor within a control area shall be 10 gallons (37.85 L) of Class I or II liquids or 1135 ounces (32.2 kg) of Level 1aerosols, or a combination of Class I or II liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gallons (37.85 L) or 1,135 ounces (32.2 kg) such that the sum of the ratios of the liquid and aerosol quantities divided by the allowable quantity of liquids and aerosols, respectively, shall not exceed one.

4. The minimum corridor width shall be 72 inches (1829 mm).
5. Projections into a corridor shall be in accordance with Section 1003.3.3.

Reason: Because ABHR dispensers are often installed above fixed casework countertops, Section 5705.5(3) is being revised to address the practical issue of clearances from the dispenser to ignition sources associated with the countertop installation. Establishing the minimum clearance requirements provides clarity to the fire code official and to designers and facility administrators.

As part of an institution's infection control protocol, many places where ABHR dispensers are installed in healthcare facilities are areas that are open to the corridor as permitted by Section 407 of the *International Building Code*. As such, Section 5705.5.1 is being revised to include such areas.

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Study Groups (SG) of interested parties for each of the areas of study. These SG's are responsible for reviewing the available information and making recommendations to the CTC. All totaled, the SG's held over 70 conference calls in 2012.

Cost impact: This proposal will not increase the cost of construction.

F348–13*

907.2.6.2 (IBC [F] 907.2.6.2); IBC [F] 407.8

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care (john.williams@doh.wa.gov) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@RJAGroup.com)

Revise as follows:

907.2.6.2 (IBC [F] 907.2.6.2) Group I-2. An automatic smoke detection system shall be installed in *corridors* in Group I-2 Condition 1 ~~*nursing homes*, long term care facilities, detoxification~~ facilities and spaces permitted to be open to the *corridors* by Section 407.2. The system shall be activated in accordance with Section 907.4. Group I-2 Condition 2 ~~Hospitals~~ shall be equipped with an automatic smoke detection system as required in Section 407.

Exceptions:

1. Corridor smoke detection is not required in smoke compartments that contain sleeping units where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each sleeping unit and shall provide an audible and visual alarm at the care provider's station attending each unit.
2. Corridor smoke detection is not required in smoke compartments that contain sleeping units where sleeping unit doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

IBC [F] 407.8 Automatic ~~fire~~ smoke detection. An automatic smoke detection system shall be installed in *corridors* in Group I-2 Condition 1 ~~*nursing homes*, long-term care facilities, *detoxification* *facilities*~~ and spaces permitted to be open to the *corridors* by Section 407.2 ~~shall be equipped with an automatic fire detection system~~. The system shall be activated in accordance with Section 907.4. Group I-2 Condition 2 ~~Hospitals~~ shall be equipped with an automatic smoke detection system as required in Section 407.2 and 407.4.3.

Exceptions:

1. *Corridor* smoke detection is not required ~~where sleeping rooms~~ in smoke compartments that contain sleeping units where such units are provided with *smoke detectors* that comply with UL 268. Such detectors shall provide a visual display on the *corridor* side of each sleeping ~~room and~~ unit and shall provide an audible and visual alarm at the care provider's station attending each unit.
2. *Corridor* smoke detection is not required ~~where sleeping room~~ in smoke compartments that contain sleeping units where sleeping unit doors are equipped with automatic door-closing devices with integral *smoke detectors* on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

Reason: The proposed language in IBC 407.8 and IBC/IFC 907.2.6.2 coordinates with the proposed language automatic smoke detection system requirements in IBC 407.4.3 submitted by the Adhoc Health Care committee during Group A hearings. The intent is also to make the language consistent between the two sections.

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safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering, a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April 2011, the AHC has held 8 open meetings and over 150 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

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Cost Impact: None

P1–13
IPC [F] 1202.1; IPC Chapter 14

Proponent: Jonathan Humble (Chairman), representing ICC Reference Standards Committee and Sharon Myers, RA, MPE, CBO. State of Ohio, representing Division of Industrial Compliance, Bureau of Building Code Compliance (SHARON.MYERS@COM.STATE.OH.US)

Revise as follows:

IPC [F] 1202.1 Nonflammable medical gases. Nonflammable medical gas systems, inhalation anesthetic systems and vacuum piping systems shall be designed and installed in accordance with NFPA 99~~C~~.

Exceptions:

1. This section shall not apply to portable systems or cylinder storage.
2. Vacuum system exhaust terminations shall comply with the *International Mechanical Code*.

Revise IPC Chapter 14 as follows:

NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	
Standard reference number	Title	Referenced in code section number
~~NFPA 99C-05~~ NFPA 99-2012	~~Gas and Vacuum Systems~~ Health Care Facilities Code	1202.1

Reason (Humble): NFPA has also announced that starting 2012 NFPA 99C will no longer be a stand-alone document, which makes this proposal necessary in order to be consistent with the updating of the NFPA referenced standards. NFPA 99C represented an "extract reprint" of NFPA 99, specifically from Chapter 5 of NFPA 99.

As a result, the proposal before you is recommending that the above changes be accepted to reflect the current state of the reference standards.

Further information about this change can be found on the www.nfpa.org web page or at http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=99&cookie%5Ftest=1 to view a copy of the read-only NFPA 99.

Reason (Myers): NFPA 99C has been incorporated into NFPA 99 and the reference is no longer valid. This proposal simply revises the reference to NFPA 99 and the edition to 2012 to be consistent with other references to NFPA 99 throughout the I-Codes.
Cost Impact: The code change proposal will not increase the cost of construction.