Ad Hoc Committee on Healthcare (AHC) Meeting #10 July 9-10, 2013

AHC Committee Review Report

This report identifies code changes considered at the 2013 Committee Action Hearings for which the action taken is different than the position taken by the AHC at their March meeting. It should be noted that AHC positions may have changed following the March meeting based on discussion with proponents or at the CAH (such as successful modifications). This report is intended to serve as the agenda for the AHC in order to develop public comments (due July 15th), if any, for the upcoming 2013 Group B Public Comment Hearings.

F31-13	F54-13
F33-13	F59-13
F106-13	EB26-13
F109-13	F240-13
F112-13	F241-13
F225-13	F242-13
F291-13	EB36-13

A separate report has been compiled for the AHC meeting which includes drafts of possible public comments developed by the Work Groups for code changes not included in this report.

F31 – 13 CAH: AM; AHC position: D 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 ^e	Annually	Employees
<u>Group B^c (transient^e)</u>	Annually	<u>Employees</u>
<u>Group B^c (nontransient^t)</u>	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)

Applicable to Group B occupancies primarily used by occupants for short term use for less than 30 days.
 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.

F31-13				
Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
,				405.2T #1-F-FRABLE

F31 - 13

Committee Action:

Approved as Modified

Modify the proposal as follows:

Replace the proposal 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 All Occupants
<u>Group B^c (Ambulatory Care</u> <u>Facilities)</u>	Annually	Employees
Group B ^c (Clinic, Outpatient)	Annually	Employees
Group E	Monthly ^a	All occupants
Group F	Annually	Employees
Group I	Quarterly on each shift	Employees [⊳]
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)

Committee Reason: The modification recognizes and includes the new categories of health care facilities now recognized in the IBC and will provide correlation with the efforts of the Ad Hoc Committee on Healthcare.

Assembly Action: None

F33 – 13 CAH: AM; AHC position: D 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
<u>High-rise buildings (transient^e)</u>	Annually	Employees
<u>High-rise buildings (non</u> <u>transient[*])</u>	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.

F33-13			
Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

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Committee Action:

Approved as Modified

Modify the proposal as follows:

Replace the proposal 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

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

Committee Reason: The modification recognizes that the table is occupancy driven and that high-rise buildings are not an occupancy but rather a building type.

Assembly Action:

None

F106 – 13 CAH: AS; AHC position: D 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 <u>Test Method 1 or Test Method 2</u>, as appropriate, of NFPA 701. Meeting the flame propagation performance criteria of <u>Test Method 1 or Test Method 2</u>, 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 <u>Test Method 1 or Test Method 2, as appropriate, of NFPA 701</u> 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 <u>Test Method 1 or Test Method 2</u>, 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 <u>Test</u> <u>Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall be noncombustible.</u>

807.1.2 (IBC [F] 806.1.2) Combustible decorative materials. The permissible amount of decorative materials meeting the flame propagation performance criteria of <u>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.</u>

Exceptions:

- 1. In auditoriums in Group A, the permissible amount of decorative material meeting the flame propagation performance criteria of <u>Test Method 1 or Test Method 2</u>, 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 <u>Test Method 1 or Test Method 2</u>, as appropriate, of NFPA 701, or such materials shall be noncombustible.

Reports of test results shall be prepared in accordance with <u>Test Method 1 or Test Method 2, as</u> <u>appropriate, of NFPA 701</u> 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 <u>Test Method</u> <u>1 or Test Method 2</u>, 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 <u>Test Method 1 or Test Method 2, as appropriate, of NFPA</u> 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 <u>Test</u> <u>Method 1 or Test Method 2</u>, 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 <u>Test Method 1 or Test Method 2</u>, 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, <u>fire performance, or</u> 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. Vinylcoated 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/m² (21 oz/yd²), 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/m² (21 oz/yd²).
- 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

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F106-13				
Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
,				806.2-F-EARL

F106-13

Committee Action:

Approved as Submitted

Committee Reason: This proposal was approved as it gets the correct NFPA 701 tests applied and is consistent with actions taken during the Group A code change cycle to the IBC. The committee noted that it was not their intention to place NFPA 701 back into Section 806.2 that was deleted by F105-13.

Assembly Action: None

F109 – 13 CAH: AM; AHC position: AS 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:

- Curtains, draperies, hangings and other decorative materials suspended from walls of slooping 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)
- 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

AHC #10 – Committee Review Report Page 7 of 45 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:

- <u>1.</u> In auditoriums in Group A, the permissible amount of <u>curtains, draperies, fabric hangings and</u> <u>other similar combustible</u> decorative materials <u>suspended from walls or ceilings</u> 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)
- <u>3.2.</u> 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) <u>807.4 (IBC [F] 806.4)</u> Acceptance criteria and reports. Where required to be flame resistant, <u>curtains, draperies, fabric hangings and other similar combustible</u> decorative materials <u>suspended from walls or ceilings</u> 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 <u>807.5</u> Occupancy-based requirements. In occupancies <u>specified in Group A, E and I-4 day care</u> facilities, <u>combustible</u> decorative materials <u>not complying with Section 807.3</u> other than decorative vegetation shall comply with Sections <u>807.5.1</u> 807.4.1 through 807.4.4.2 <u>807.5.7</u>.

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.

AHC #10 – Committee Review Report Page 8 of 45 **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.

<u>807.5.3.1</u> 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 <u>fire alarm</u> 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 Sections 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.
- Corridors protected by an approved smoke detection <u>fire alarm</u> 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* <u>Section 807.1</u>)

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, <u>fabric</u> hangings and other <u>similar</u> decorative materials suspended from walls <u>or ceiling of sleeping units and dwelling units in</u>

AHC #10 – Committee Review Report Page 10 of 45 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 <u>combustible</u> decorative materials, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are <u>shall be</u> 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 <u>be</u> 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				
Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
				807.1-F-CARPENTER.doc

F109-13

Committee Action:

Approved as Modified

Modify the proposal 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.

807.2 General. The following requirements shall apply to all occupancies:

- 1. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
- . 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. Furnishings or other objects shall not be placed to obstruct exits, access thereto, egress there from or visibility thereof.
- 4. The permissible amount of noncombustible decorative materials shall not be limited.

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

807.3 (IBC [F] 806.3) Combustible decorative materials. In other than Group I-3, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall <u>comply be flame resistant in accordance</u> with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which <u>they are it is</u> 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*, <u>shall comply with Section 803</u> 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 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. n 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. In Group B and M occupancies, the amount of <u>combustible</u> fabric partitions suspended from the ceiling and not supported by the floor <u>shall comply with Section 807.4 and</u> shall not be limited.

807.4 (IBC [F] 806.4) Acceptance criteria and reports. Where required to <u>exhibit improved fire performance be flame resistant</u>, 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 <u>Test 1 or Test 2</u>, as appropriate of NFPA 701 or exhibit a maximum rate of heat release of 100kW when tested in accordance with NFPA 289, using the 20 kW ignition source. Reports of test results shall be prepared in accordance with <u>the test method used NFPA 701</u> and furnished to the *fire code official* upon request.

807.5 Occupancy-based requirements. In occupancies, combustible decorative materials not complying with Section 807.3 shall comply with Sections 807.5.1 through 807.5.7.

807.5.1 General. The following requirements shall apply to all occupancies:

- 1. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
- . 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. Furnishings or other objects shall not be placed to obstruct exits, access thereto, egress there from or visibility thereof.

807.5.1 807.5.2 Group A. In Group A occupancies, the requirements in Sections 807.5.2.1 through 807.5.2.4 shall apply to occupancies in Group A.

807.5.1.1 807.5.2.1 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.

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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.

807.5.1.2 807.5.2.2 Motion Picture Screens. The screens upon which motion pictures are projected in new and existing buildings shall either 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*.

807.5.1.3 807.5.2.3 Wood use in places of religious worship. In places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall not be limited.

807.5.1.4 807.5.2.4 (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.

807.5.2 807.5.3 Group E. Group E occupancies, shall comply with Sections the requirements in Sections 807.5.3.1 through 807.5.3.3

807.5.2.1-807.5.3.1 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 fire alarm system installed in accordance with Section 907.
 - 3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.5.2.2 807.5.3.2 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.

807.5.2.3 807.5.3.3 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.

807.5.3 807.5.4 Group I-4, day care facilities. Group I-4 occupancies shall comply with, the requirements in Sections 807.5.4.1 through 807.5.4.2.

807.5.3.1 807.5.4.1 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 fire alarm system installed in accordance with Section 907.
- 3. Storage in metal lockers, provided the minimum required egress width is maintained.

807.5.3.2 807.5.4.2 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.

807.5.3.3 - 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.

807.5.4 807.5.5 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)*

807.5.5 807.5.6 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)

807.5.6 807.5.7 Group I-3. In Group I-3, combustible decorative materials are prohibited. (relocated from Section 807.1)

Committee Reason: This proposal was seen as a good clarification and organization of the requirements in Section 807. A modification was presented that combined elements from F110-13 and made some additional adjustments to clarify the proposal. Section 807.2 in the modification was relocated from the proposed location 807.5.1. Section 807.2 was relocated into item 4 in the new section 807.2. Other revisions related to the appropriate application of NFPA 701 and the addition of NFPA 289 as a viable test for decorative materials.

Assembly Action:

None

F112 – 13 CAH: D; AHC position: AS

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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, <u>UL 1313, or approved in accordance with FM 6051 and FM 6052</u> 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, <u>or approved in accordance</u> 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:

<u>6050-96</u>	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:

 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 form 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 fluid level. This continued until all the fuel inside 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.

F112-13				
Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	

F112-13

The following is an errata that was not posted to the ICC website.

The bolded current text was not printed with the original proposal:

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

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FΜ

1315 <u>or approved in accordance with FM 6921</u> 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 with Table 509 of the *International Building Code*.

(Portions of proposal not shown remain unchanged)

For staff analysis of the content of FM 6050-96, FM 6051 and 6052-76 and FM 6921-04 relative to CP#28, Section 3.6, please visit: http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/Proposed-B/ProposedStandards.pdf

Committee Action:

Disapproved

Committee Reason: The proposal was not ready for implementation. One particular concern was that Section 5705.2.4 addresses heated liquids, which is outside the scope of the proposed referenced standard UL1313. Also there was confusion with the term "approved" as it is used differently within the proposal than as defined in Section 202. There was also concern that materials other than metal were being addressed in a section only dealing with metal containers.

Assembly Action:

None

F225 – 13 CAH: AM; AHC position: AS 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

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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)

- The following shall not be included in determining the maximum allowable quantities:
 - 1. Liquid or gaseous fuel in fuel tanks on vehicles.
 - Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with this code.
 - Gaseous fuels in piping systems and fixed appliances regulated by the International Fuel Gas Code. 3.
 - 4 Liquid fuels in piping systems and fixed appliances regulated by the International Mechanical Code.

Revise as follows:

Committee (cbaldassarra@RJAGroup.com)

CAH: AM; AHC position: AS Table 5003.1.1(1) [IBC Table [F] 307.1(1)]

Analysis: The following is shown for illustration purposes only and is not part of the code change or the modification. If this code change is successful, the sample adopting ordinance for the IFC that appears in the IFC preface pages will be revised in Section 2 to read as follows:

Section 2. That the following sections are hereby revised:

Section 101.1. Insert: [NAME OF JURISDICTION]

Section 109.4. Insert: [OFFENSE, DOLLAR AMOUNT, NUMBER OF DAYS]

Modify the proposal 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 as established by the adopting ordinance by [DATE TO BE INSERTED BY THE

JURISDICTION].

Committee Reason: The committee approved the code change based on the proponent's reason statement. The modification is more in keeping with established code style for such provisions.

Committee Action:

Assembly Action:

F291 – 13

None

Approved as Modified

Section 111.4. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS]

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

Section 1103.5.3. Insert: [DATE BY WHICH SPRINKLER SYSTEM MUST BE INSTALLED]

(Portions of the ordinance not shown remain unchanged.)

F225-13

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.

Cost impact: This proposal would make the IFC consistent with the d	lirection that federal standards are taking to maintain hospitals
and therefore would not represent an increase in cost.	

F225-13 AS AM D DF

Public Hearing: Committee: Assembly: ASF AMF

1103.5.3 (NEW)-F-WILLIAMS-ADHOC

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.

F291-13

1201 10				
Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

5003.1.1(1)T-F-BALDASSARRA-WILLIAMS-ADHOC-CTC

F291-13

Committee Action:

Approved as Modified

Modify the proposal as follows:

 In Group I-2, Alcohol based hand rubs classified as Class I or II liquids where in dispensers that are 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.

(Portions of the proposal not shown remain unchanged.)

Committee Reason: The committee agreed with the proponent that the code change provides for a reasonable quantity of alcohol based hand rubs in dispensers installed in a facility to be excluded from the MAQ. The modification recognizes that ABHR dispensers are found in all manner of occupancies, not just Group I-2. It also clarifies that the ABHR quantities in storage are not included in the exclusion.

Assembly Action:

None

F54 – 13 CAH: AM; AHC position: AS 604.1.2 (New) (IBC [F] 2702.1.2), Chapter 80

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

Add new text as follows:

604.1.1(IBC [F] 2702.1.1) Stationary generators. Stationary emergency and standby power generators required by this code shall be *listed* in accordance with UL 2200

604.1.2 (IBC [F] 2702.1.2) Group I-2 Occupancies. In Group I-2 occupancies, where an essential electrical system is located in flood hazard areas established in Section 1612.3 of the *International Building Code*, the system shall be located and installed in accordance with ASCE 24.

Add new standard to Chapter 80 as follows:

ASCE 24-05 Flood Resistant Design and Construction 604.1.2

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 <u>American Society for Healthcare Engineering</u>, 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.

There is no way to get to the requirements or limitations regarding generator placement for healthcare facilities that are in the standard if the code text for the specific code section does not take you there.

The Adhoc committee on healthcare identified this coordination oversight as it has been identified in healthcare facilities and that generators are being installed in areas subject to flooding, and although they were designed to meet the structural loads for the flooding, they would operationally fail.

There is no cost impact for these requirements because the compliance with ASCE 24 is required for these facilities; specific reference to ASCE for coordination of requirements applicable to healthcare facilities that require emergency or standby power systems per federal, state and licensing agency requirements and references. Also, both this section and this proposal are not intended to be retroactive in application. The AHC has a separate code change that would require facilities to do a risk assessment of existing installations.

It is an installation construction requirement that is not specifically addressed in the code; emergency and standby power by generators is necessary for life safety and preservation for healthcare and for other occupancies and uses as specified in 2702.

Note that G80-12 added requirements for essential electrical systems in I-2 occupancies. This is simply a continuation of that concept. This proposal is furthering the reliability of the essential electrical systems when they will be needed most by specifically referencing to ASCE 24. The additional language referencing Section 1612.3 is similar to that used in Section 3001.2 for elevators.

Cost impact: The code change proposal should not increase the cost of construction because compliance is already required by facility licensure requirements.

Analysis: The standard proposed for inclusion in the code, ASCE 24-05, is currently referenced in the IBC. An update in the year edition of that standard will be accomplished by an administrative standards update code change to be heard by the ADM Code Development Committee.

F54-13

Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
				604.1.2 (NEW)-F-WILLIAMS-ADHOC

F54-13

For staff analysis of the content of ASCE/SEI 24-05 relative to CP#28, Section 3.6, please visit: http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/Proposed-B/ProposedStandards.pdf

Committee Action:

Approved as Modified

Modify the proposal as follows:

604.1.2 (IBC [F] 2702.1.2) Group I-2 Occupancies. In Group I-2 occupancies, in new construction or where the building is substantially damaged, where an essential electrical system is located in flood hazard areas established in Section 1612.3 of the *International Building Code*, the system shall be located and installed in accordance with ASCE 24.

(Portions of the proposal not shown remain unchanged.)

Committee Reason: The committee approved the code change based on the proponent's reason statement and agreed that the proposal provides for important protection for critical systems. The modification clarifies that the applicability of the section would be to existing buildings only when they sustain substantial damage such as from the recent east coast hurricane.

Assembly Action:

None

F59 – 13 CAH: AM; AHC position: AS 604 (IBC [F] 2702) among others; 907.5.2.2.5 (IBC [F] 907.5.2.2.5); IMC [F] 513.11, [F]513.11.1 (New); IWUIC 404.10.3; IEBC 805.4.5

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

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE IFC COMMITTEE AND PART II WILL BE HEARD BY THE IEBC COMMITTEE AS TWO SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDER FOR THOSE COMMITTEES.

PART I - INTERNATIONAL FIRE CODE

EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 402.7.3 <u>Emergency</u> Standby power. Covered mall buildings greater than 50,000 square feet (4645 m2) in area and open mall buildings greater than 50,000 square feet (4645 m2) within the established perimeter line shall be provided with standby <u>emergency</u> power systems that <u>is are</u>-capable of operating the emergency voice/alarm communication system in accordance with Section 2702.

[F] 907.5.2.2.5 Emergency power. Emergency voice/alarm communications systems shall be provided with an *approved* emergency power source in accordance with Section 2702. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

[F] 2702.2.1 Group A occupancies. Emergency power shall be provided for emergency voice/alarm communication systems in Group A occupancies in accordance with Section 907.5.2.2.4.

[F] 2702.2.14 Covered and open mall buildings. Standby power shall be provided for voice/alarm communication systems in *covered and open mall buildings* in accordance with Section 402.7.3.

[F] <u>2702.2.1 Emergency voice/alarm communication systems.</u> Emergency power shall be provided for emergency voice/alarm communication systems as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

Revise the IFC as follows:

604.2.1 Group A occupancies. Emergency power shall be provided for emergency voice/alarm communication systems in Group A occupancies in accordance with Section 907.2.1.1.

604.2.13 Covered and open mall buildings. Covered mall buildings exceeding 50,000 square feet (4645 m2) and open mall buildings exceeding 50,000 square feet (4645 m2) within the established perimeter line shall be provided with standby power systems that are capable of operating the emergency voice/alarm communication system.

604.2.1 Emergency voice/alarm communication systems. Emergency power shall be provided for emergency voice/alarm communication systems as required in Section 907.5.2.2.5. 5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

907.5.2.2.5 Emergency power. Emergency voice/alarm communications systems shall be provided with an *approved* emergency power source-in accordance with Section 604. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

SMOKE CONTROL SYSTEMS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 404.7 Standby power. Equipment required to provide smoke control shall be <u>provided with standby</u> <u>power in accordance with connected to a standby power system in accordance with Section 909.11.</u>

[F] 909.11 <u>Standby power</u> Power systems. The sS moke control systems shall be provided with standby power in accordance with Section 2702. shall be supplied with two sources of power. Primary power shall be from the normal building power systems. Secondary power shall be from an approved standby source complying with Chapter 27 of this code.

[F] <u>909.11.1 Equipment room.</u> The standby power source and its transfer switches shall be in a room separate from the normal power transformers and switch gears and ventilated directly to and from the exterior. The room shall be enclosed with not less than 1-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. The transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power.

909.20.6.2 Standby power. Mechanical vestibule and *stair* shaft ventilation systems and automatic fire detection systems shall be <u>provided with</u> powered by an *approved* standby power in accordance with <u>Section 2702.</u> system conforming to Section 403.4.8 and Chapter 27.

909.21.5 Standby power. The pressurization system shall be provided with standby power in accordance with Section 2702. from the same source as other required emergency systems for the building.

[F] 2702.2.2 Smoke control systems. Standby power shall be provided for smoke control systems <u>as</u> required in <u>in accordance with</u> Sections <u>404.7</u>, 909.11, <u>909.20.6.2</u>, and <u>909.21.5</u>.

[F] 2702.2.20 Smokeproof enclosures. Standby power shall be provided for smokeproof enclosures as required by <u>in</u> Section 909.20.6.2.

Revise the IFC as follows:

604.2.2 Smoke control systems. Standby power shall be provided for smoke control systems <u>as</u> required in in accordance with Section 909.11.

909.11 <u>Standby power</u> Power systems. The sSmoke control systems shall be provided with standby power in accordance with Section 2702. shall be supplied with two sources of power. Primary power shall be from the normal building power systems. Secondary power shall be from an approved standby source complying with Chapter 27 of this code.

<u>909.11.1 Equipment room.</u> The standby power source and its transfer switches shall be in a room separate from the normal power transformers and switch gears and ventilated directly to and from the exterior. The room shall be enclosed with not less than 1-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. The transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power.

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Revise the IMC as follows:

[F] 513.11 Power systems. The <u>sSmoke</u> control system shall be supplied with <u>standby power in</u> <u>accordance with Section 2702 of the International Building Code.</u> two sources of power. Primary power shall be the normal building power systems. Secondary power shall be from an *approved* standby source complying with Chapter 27 of the *International Building Code*.

[F] <u>513.11.1 Equipment room.</u> The standby power source and its transfer switches shall be in a room separate from the normal power transformers and switch gear and ventilated directly to and from the exterior. The room shall be enclosed with not less than 1-hour fire-resistance rated 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. Power distribution from the two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with NFPA 70.</u>

EXIT SIGNS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 2702.2.3 Exit signs. Emergency power shall be provided for *exit* signs <u>as required in in accordance</u> with Section 1011.6.3. <u>The system shall be capable of powering the required load for a duration of not</u> less than 90 minutes.

Revise the IFC as follows:

604.2.3 Exit signs. Emergency power shall be provided for *exit* signs <u>as required in in accordance with</u> Section 1011.6.3. <u>The system shall be capable of powering the required load for a duration of not less</u> than 90 minutes.

MEANS OF EGRESS ILLUMINATION

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 2702.2.4 Means of egress illumination. Emergency power shall be provided for *means of egress* illumination <u>as required in in accordance with</u> Section 1006.3. <u>The system shall be capable of powering</u> the required load for a duration of not less than 90 minutes.

Revise the IFC as follows:

604.2.4 Means of egress illumination. Emergency power shall be provided for *means of egress* illumination in accordance with Sections 1006.3 and 1104.5.1.

1104.5.1 Emergency power duration and installation. Emergency power for means of egress illumination shall be provided in accordance with Section 604. In other than Group I-2, the emergency power system shall provide power shall be provided for not less than 60 minutes. and consist of storage batteries, unit equipment or an on-site generator. In Group I-2, the emergency power system shall be provided for not less than 90 minutes. and consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604.

ELEVATORS AND PLATFORM LIFTS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] <u>2702.2.5 Elevators and platform lifts.</u> Standby power shall be provided for elevators and platform lifts as required in Sections 1007.4, 1007.5, 3003.1, 3007.9 and 3008.9.

[F] 2702.2.5 Accessible means of egress elevators. Standby power shall be provided for elevators that are part of an *accessible means of egress* in accordance with Section 1007.4.

[F] 2702.2.6 Accessible means of egress platform lifts. Standby power in accordance with this section or ASME A 18.1 shall be provided for platform lifts that are part of an *accessible means of egress* in accordance with Section 1007.5.

[F] 2702.2.19 Elevators. Standby power for elevators shall be provided as set forth in Sections 3003.1, 3007.9 and 3008.9.

Revise the IFC as follows:

604.2.5 Accessible means of egress elevators. Standby power shall be provided for elevators that are part of an accessible *means of egress* in accordance with Section 1007.4.

604.2.6 Accessible means of egress platform lifts. Standby power in accordance with this section or ASME A18.1 shall be provided for platform lifts that are part of an accessible *means of egress* in accordance with Section 1007.5.

604.2.18 Elevators and platform lifts. Standby power shall be provided for elevators and platform lifts as required in Sections 607.2, 1007.4, and 1007.5.

Relocate IFC sections and renumber the remaining sections.

<u>607.2 Standby power.</u> <u>604.2.18 Elevators.</u> In buildings and structures where standby power is required or furnished to operate an elevator, <u>standby power shall be provided in accordance with Section 604.</u> the e<u>O</u>peration <u>of the system</u> shall be in accordance with Sections 604.2.18.1 through 604.2.18.4 <u>607.2.1</u> through 607.2.4.

607.2.1 -604.2.18.1 Manual transfer. (No change to current text.)

607.2.2 604.2.18.2 One elevator. (No change to current text.)

607.2.3 604.2.18.3 Two or more elevators. (No change to current text.)

607.2.4 604.2.18.4 Machine room ventilation. (No change to current text.)

HORIZONTAL SLIDING DOORS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 2702.2.7 Horizontal sliding doors. Standby power shall be provided for horizontal sliding doors <u>as</u> required in in accordance with Section 1008.1.4.3. The standby power supply shall have a capacity to operate a minimum of 50 closing cycles of the door.

Revise the IFC as follows:

604.2.7 Horizontal sliding doors. Standby power shall be provided for horizontal sliding doors <u>as</u> required in in accordance with Section 1008.1.4.3. The standby power supply shall have a capacity to operate a minimum of 50 closing cycles of the door.

MEMBRANE STRUCTURES

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 2702.2.9 Membrane structures. Standby power shall be provided for auxiliary inflation systems in permanent membrane structures as required in in accordance with Section 3102.8.2. Standby power shall be provided for a duration of not less than four hours. Auxiliary inflation systems in temporary air-supported and air-inflated membrane structures shall be provided in accordance with Section 3103.10.4 of Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with the *International Fire Code*.

Revise the IFC as follows:

604.2.9 Membrane structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1.

Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with <u>Section 2702 of</u> the *International Building Code*. <u>Auxiliary inflation systems shall be</u> provided in temporary air-supported and air-inflated membrane structures in accordance with Section 3103.10.4.

3103.10.4 Auxiliary <u>inflation systems</u> power. Places of public assembly for more than 200 persons shall be furnished with <u>an auxiliary inflation system capable of powering a blower with the capacity to maintain full inflation pressure with normal leakage in accordance with Section 3103.10.3 for a minimum duration of four hours. The auxiliary inflation system can be either a fully automatic auxiliary engine-generator set capable of powering one blower continuously for 4 hours, or a supplementary blower powered by an internal combustion engine which shall be automatic in operation. The system shall be capable of automatically operating the required blowers at full power within 60 seconds of a commercial power failure.</u>

SEMICONDUCTOR FABRICATION FACILITIES

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 415.10.10 Emergency power system. An emergency power system shall be provided in Group H-5 occupancies in accordance with Section 2702. where required in Section 415.10.10.1. The emergency power system shall be designed to supply power automatically to required the electrical systems specified in Section 415.10.10.1 when the normal electrical supply system is interrupted.

[F] 415.10.10.1 Required electrical systems. Emergency power shall be provided for electrically operated equipment and connected control circuits for the following systems:

- 1. through 6. (No change to current text.)
- 7. Manual and automatic fire alarm systems.
- 8. through 11. (No change to current text.)

[F] 2702.2.8 Semiconductor fabrication facilities. Emergency power shall be provided for semiconductor fabrication facilities <u>as required in in accordance with</u> Section 415.10.10.

Revise the IFC as follows:

604.2.8 Semiconductor fabrication facilities. Emergency power shall be provided for semiconductor fabrication facilities <u>as required in</u> in accordance with Section 2703.15.

2703.15 Emergency power system. An emergency power system shall be provided in Group H-5 occupancies in accordance with where required by Section 604. The emergency power system shall be designed to supply power automatically to required the electrical systems specified in Section 2703.15.1 when the normal supply system is interrupted.

HAZARDOUS MATERIALS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 414.5.3 Emergency or standby power. Where mechanical *ventilation*, treatment systems, temperature control, alarm, detection or other electrically operated systems are required by the *International Fire Code* or this code, such systems shall be provided with an emergency or standby power system in accordance with <u>Section 2702</u> Chapter 27. **Exceptions:** 1.

[F] <u>414.5.3.1 Exempt applications</u>. Emergency or standby power are not required for the following storage areas: 1.1. M mechanical ventilation systems provided for:

- 1. <u>Setorage</u> of Class IB and Class IC flammable and combustible liquids in closed containers not exceeding 6.5 gallons (25 L) capacity.
 - 1.2<u>1.1.</u> Storage areas for of Class 1 and 2 oxidizers.
 - 1.3<u>1.2</u>. Storage areas for of Class II, III, IV and V organic peroxides.
 - 1.4<u>1.3.</u> Storage, use and handling areas for of asphyxiant, irritant and radioactive gases.
 - 1.5. For storage, use and handling areas for highly toxic or toxic materials, see Sections 6004.2.2.8 and 6004.3.4.2 of the *International Fire Code*.

[F] <u>414.5.3.2 Fail-safe engineered systems.</u> Standby power for mechanical ventilation, treatment systems and temperature control systems shall not be required where an *approved* fail-safe engineered system is installed.

[F] 421.8 Standby power. Mechanical *ventilation* and gas detection systems shall be connected to a <u>provided with standby power system</u> in accordance with <u>Section 2702</u>. Chapter 27.

[F] 2702.2.10 Hazardous materials. Emergency or standby power shall be provided in occupancies with hazardous materials <u>as required in</u> in accordance with Sections 414.5.3 and 421.8 and the *International Fire Code*.

Revise the IFC as follows:

604.2.10 Hazardous materials. Emergency or standby power shall be provided in occupancies with hazardous materials as required in the following in accordance with sections 5004.7 and 5005.1.5.:

<u>Hazardous materials – 5001.3.3.10</u> <u>Highly toxic and toxic gases - 6004.2.2.8, 6004.3.4.2</u> <u>Organic peroxides - 6204.1.11</u>

5004.7 Standby or emergency power. Where mechanical ventilation, treatment systems, temperature control, alarm, detection or other electrically operated systems are required, such systems shall be provided with an emergency or standby power system in accordance with NFPA 70 and Section 604.

Exceptions:

5004.7.1 Exempt applications. Standby or emergency power is not required for <u>Mm</u>echanical ventilation systems provided for:

- <u>1.</u> <u>S</u>torage of Class IB and Class IC flammable and *combustible liquids* in closed containers not exceeding 61/2 gallons (25 L) capacity.
- 2. Storage areas for of Class 1 and 2 oxidizers.
- 3. Storage areas for of Class II, III, IV and V organic peroxides.
- 4. Storage areas for of asphyxiant, irritant and radioactive gases.
- 5. For storage areas for highly toxic or toxic materials, see Sections 6004.2.2.8 and 6004.3.4.2.

5004.7.2 Fail-safe engineered systems. 6-. Standby power for mechanical ventilation, treatment systems and temperature control systems shall not be required where an *approved* fail-safe engineered system is installed.

5005.1.5 Standby or emergency power. Where mechanical ventilation, treatment systems, temperature control, manual alarm, detection or other electrically operated systems are required in this code, such systems shall be provided with an emergency or standby power system in accordance with NFPA 70 and Section 604.

Exceptions: 1.

5005.1.5.1 Exempt applications. Standby power for mechanical ventilation, treatment systems and temperature control systems shall not be required where an *approved* fail-safe engineered system is installed.

2. Systems for highly toxic or toxic gases shall be provided with emergency power in accordance with Sections 6004.2.2.8 and 6004.3.4.2.

6004.2.2.8 Emergency power. Emergency power <u>shall be provided for the following systems in</u> accordance with the Section 604. and NFPA 70 shall be provided in lieu of standby power where any of the following systems are required:

1. through 7. (No change to current text.)

<u>6004.2.2.8.1 Fail-safe engineered systems.</u> Exception: Emergency power is <u>shall</u> not <u>be</u> required for mechanical exhaust ventilation, treatment systems and temperature control systems where *approved* fail-safe engineered systems are installed.

6204.1.11 Standby power. Standby power in accordance with Section 604 shall be provided for storage areas of Class I and unclassified detonable organic peroxide. shall be provided in accordance with Section 604 for the following systems used to protect Class I and unclassified detonable organic peroxide:

1. through 7. (No change to current text.)

<u>6204.1.11.1 Fail-safe engineered systems.</u> Exception: Standby power shall not be required for mechanical exhaust ventilation, treatment systems and temperature control systems where *approved* fail-safe engineered systems are installed.

HIGH RISE BUILDINGS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 403.4.8 Standby <u>and emergency power.</u> A standby power system complying with <u>Section 2702</u> Chapter 27 and Section 3003 shall be provided for <u>the</u> standby power loads specified in 403.4.8.2. <u>An</u> emergency power system complying with Section 2702 shall be provided for the emergency power loads specified in Section 403.4.8.3. Where elevators are provided in a *high-rise building* for accessible means of egress, fire service access or occupant self-evacuation, the standby power system shall also comply with Sections 1007.4, 3007 or 3008, as applicable.

[F] 403.4.8.1 Equipment room. Special requirements for standby power systems. If the standby <u>or</u> <u>emergency power</u> system <u>includes</u> is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. System supervision with manual start and transfer features shall be provided at the *fire command center*.

[F] 403.4.8.2 Standby power loads. The following are classified as standby power loads:

- 1. Power and lighting for the *fire command center* required by Section 403.4.6;
- 2. Ventilation and automatic fire detection equipment for smokeproof enclosures; and
- 3. Elevators.
- 4. Where elevators are provided in a *high-rise building* for *accessible means of egress*, fire service access or occupant self-evacuation, the standby power system shall also comply with Sections 1007.4, 3007 or 3008, as applicable.

[F] 403.4.9 Emergency power systems. An emergency power system complying with Chapter 27 shall be provided for emergency power loads specified in Section 403.4.9.1.

[F] 403.4.9.1 403.4.8.3 Emergency power loads. The following are classified as emergency power loads:

- 1. Exit signs and *means of egress* illumination required by Chapter 10;
- 2. Elevator car lighting;
- 3. Emergency voice/alarm communications systems;
- 4. Automatic fire detection systems;
- 5. Fire alarm systems; and
- 6. Electrically powered fire pumps.

[F] 2702.2.15 High-rise buildings. Emergency and standby power systems shall be provided in high-rise buildings <u>as required in</u> in accordance with Sections 403.4.8 and 403.4.9.

Revise the IFC as follows:

604.2.14 High-rise buildings. Standby power <u>and emergency power</u>, light and emergency systems in high-rise buildings shall <u>be provided as required in Section</u> 403 of the International Building Code, and shall be in accordance with Section 604. comply with the requirements of Sections 604.2.14.1 through 604.2.14.3.

AHC #10 – Committee Review Report Page 27 of 45 **604.2.14.1 Standby power.** A standby power system shall be provided. Where the standby system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour 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. System supervision with manual start and transfer features shall be provided at the *fire command center*.

604.2.14.1.1 Fuel supply. An on-promises fuel supply, sufficient for not less than 2-hour full-demand operation of the system, shall be provided. **Exception:** When approved, the system shall be allowed to be supplied by natural gas pipelines.

604.2.14.1.2 Capacity. The standby system shall have a capacity and rating that supplies all equipment required to be operational at the same time. The generating capacity is not required to be sized to operate all of the connected electrical equipment simultaneously.

604.2.14.1.3 Connected facilities. Power and lighting facilities for the *fire command center* and elevators specified in Sections 403.4.8.2 and 403.6 of the *International Building Code*, as applicable, shall be transferable to the standby source. Standby power shall be provided for at least one elevator to serve all floors and be transferable to any elevator.

604.2.14.2 Separate circuits and luminaires. Separate lighting circuits and luminaires shall be required to provide sufficient light with an intensity of not less than 1 footcandle (11 lux) measured at floor level in all *means of egress corridors, stairways,* smokeproof enclosures, elevator cars and lobbies, and other areas that are clearly a part of the escape route.

604.2.14.2.1 Other circuits. Circuits supplying lighting for the *fire command center* and mechanical equipment rooms shall be transferable to the standby source.

604.2.14.3 Emergency systems. *Exit* signs, *exit* illumination as required by Chapter 10, electrically powered fire pumps required to maintain pressure, and elevator car lighting are classified as emergency systems and shall operate within 10 seconds of failure of the normal power supply and shall be capable of being transferred to the standby source.

Exception: *Exit* sign, *exit* and *means of egress* illumination are permitted to be powered by a standby source in buildings of Group F and S occupancies.

UNDERGROUND BUILDINGS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 405.8 Standby <u>and emergency</u> power. A standby power system complying with <u>Section 2702</u> <u>Chapter 27</u> shall be provided for the standby power loads specified in Section 405.8.1. <u>An emergency</u> power system complying with Section 2702 shall be provided for the emergency power loads specified in <u>Section 405.8.2</u>.

[F] 405.8.1 Standby power loads. The following loads are classified as standby power loads:

- 1. Smoke control system.
- 2. Ventilation and automatic fire detection equipment for smokeproof enclosures.
- 3. Fire pumps.
- 4. <u>Standby power shall be provided for e</u>Elevators, as required in in accordance with Section 3003.

[F] 405.8.2 Pick-up time. The standby power system shall pick up its connected loads within 60 seconds of failure of the normal power supply.

[F] 405.9 Emergency power. An emergency power system complying with Chapter 27 shall be provided for emergency power loads specified in Section 405.9.1.

[F] 405.9.1 405.8.2 Emergency power loads. The following loads are classified as emergency power loads:

1. through 5. (No change to current text.)

[F] 2702.2.16 Underground buildings. Emergency and standby power shall be provided in underground buildings <u>as required in</u> in accordance with Sections 405.8 and 405.9.

Revise the IFC as follows:

604.2.15 Underground buildings. Emergency and standby power systems shall be provided in underground buildings covered as required in Chapter 4 Section 405 of the International Building Code shall comply with Sections 604.2.15.1 and 604.2.15.2. and shall be in accordance with Section 604.

604.2.15.1 Standby power. A standby power system complying with this section and NFPA 70 shall be provided for standby power loads as specified in Section 604.2.15.1.1.

604.2.15.1.1 Standby power loads. The following loads are classified as standby power loads:

- 1. Smoke control system.
- 2. Ventilation and automatic fire detection equipment for smokeproof enclosures.
- 3. Fire pumps.
- Standby power shall be provided for elevators in accordance with Section 3003 of the International Building Code.

604.2.15.1.2 Pickup time. The standby power system shall pick up its connected loads within 60 seconds of failure of the normal power supply.

604.2.15.2 Emergency power. An emergency power system complying with this code and NFPA 70 shall be provided for emergency power loads as specified in Section 604.2.15.2.1.

604.2.15.2.1 Emergency power loads. The following loads are classified as emergency power loads:

- 1. Emergency voice/alarm communication systems.
- 2. Fire alarm systems.
- 3. Automatic fire detection systems.
- 4. Elevator car lighting.
- 5. Means of egress lighting and exit sign illumination as required by Chapter 10.

GROUP I-3 OCCUPANCY DOOR LOCKS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part. See Part XX for this subject in the IEBC.

Revise the IBC as follows:

[F] 408.4.2 Power-operated doors and locks. Power-operated sliding doors or power-operated locks for swinging doors shall be operable by a manual release mechanism at the door. Emergency power shall be provided for the doors and locks in accordance with Section 2702. and either emergency power or a remote mechanical operating release shall be provided.

Exceptions:

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

[F] 2702.2.17 Group I-3 occupancies. Emergency power shall be provided for <u>power operated</u> doors <u>and locks</u> in Group I-3 occupancies <u>as required in</u> in accordance with Section 408.4.2.

Revise the IFC as follows:

604.2.16 Group I-3 occupancies. Power-operated sliding doors or power-operated locks for swinging doors shall be operable by a manual release mechanism at

the door. Emergency power shall be provided for the doors and locks in accordance with Section 604. and either emergency power or a remote mechanical operating release shall be provided.

Exceptions:

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

AIRPORT TRAFFIC CONTROL TOWERS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] 2702.2.18 Airport traffic control towers. Standby power shall be provided in airport traffic control towers in accordance with Section 412.3.4.

[F] 412.3.4 Standby power. A standby power system that conforms to Chapter 27 shall be provided in airport traffic control towers more than 65 feet (19 812 mm) in height. Power shall be provided to the following equipment:

- 1. Pressurization equipment, mechanical equipment and lighting.
- 2. Elevator operating equipment.
- 3. Fire alarm and smoke detection systems.

Revise the IFC as follows:

604.2.17 Airport traffic control towers. A standby power system shall be provided in airport traffic control towers more than 65 feet (19 812 mm) in height. Power shall be provided to the following equipment:

- 1. Pressurization equipment, mechanical equipment and lighting.
- 2. Elevator operating equipment.
- 3. Fire alarm and smoke detection systems.

SMOKE ALARMS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

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Revise the IBC as follows:

[F] 907.2.11.4 Power source. In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system <u>in accordance with Section 2702</u>. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system <u>that complies with Section 2702.</u>

Revise the IFC as follows:

907.2.11.4 Power source. In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery back-up shall be connected to an emergency electrical system in accordance with Section 604. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system <u>that complies with Section 604.</u>

EMERGENCY ALARM SYSTEMS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Revise the IBC as follows:

[F] <u>414.7.4 Emergency alarm systems. *Emergency alarm systems* shall be provided with emergency power in accordance with Section 2702.</u>

[F] <u>2702.2.21 Emergency alarm systems.</u> Emergency power shall be provided for emergency alarm systems as required by Section 414.7.4.

Revise the IFC as follows:

604.2.19 Emergency alarm systems. Emergency power shall be provided for emergency alarm systems as required by Section 414 of the International Building Code.

EMERGENCY RESPONDER RADIO COVERAGE SYSTEMS

NOTE: The normal convention for portraying code changes to duplicated texts is by showing the parallel section numbers (e.g., "907.5.2 (IBC [F] 907.5.2)" or "1011.6.3 (IFC [B] 1011.6.3"). In this code change, however, for improved clarity, duplicate texts are shown for each code in this part.

Add a new Section 2702.2.21 to the IBC as follows:

[F] 2702.2.21 Emergency responder radio coverage systems. Standby power shall be provided for emergency responder radio coverage systems required in Section 915 and the *International Fire Code*. The standby power supply shall be capable of operating the emergency responder radio coverage system for a duration of not less than 24 hours.

Revise the IFC as follows:

510.4.2.3 <u>Standby power.</u> <u>Secondary power.</u> Emergency responder radio coverage systems shall be provided with an *approved* secondary source of <u>standby</u> power <u>in accordance with Section 604</u>. The <u>secondary standby</u> power supply shall be capable of operating the emergency responder radio coverage system for a period of at least <u>duration of not less than</u> 24 hours. When primary power is lost, the power supply to the emergency responder radio coverage system shall automatically transfer to the secondary power supply.

604.2.19 Emergency responder radio coverage systems. Standby power shall be provided for emergency responder radio coverage systems as required in Section 510.4.2.3. The standby power supply shall be capable of operating the emergency responder radio coverage system for a duration of not less than 24 hours.

FLARING SYSTEMS FOR MECHANICAL REFRIGERATION

Revise the IFC as follows:

606.12.5 Flaring systems. Flaring systems for incineration of flammable refrigerants shall be designed to incinerate the entire discharge. The products of refrigerant incineration shall not pose health or environmental hazards. Incineration shall be automatic upon initiation of discharge, shall be designed to prevent blowback and shall not expose structures or materials to threat of fire. Standby fuel, such as LP gas, and standby power shall have the capacity to operate for one and one-half the required time for complete incineration of refrigerant in the system. <u>Standby electrical power, where required to complete the incineration process, shall be in accordance with Section 604.</u>

WATER SUPPLY POWER

Revise the IWUIC as follows:

404.10.3 Standby power. Standby power shall be provided to pumps, controllers and related electrical equipment so that Stationary water supply facilities within the *wildland-urban interface area* that are dependent on electrical power can provide the required to meet adequate water supply. The standby power system shall be demands shall provide standby power systems in accordance with Section 2702 Chapter 27 of the International Building Code, and Section 604 of the International Fire Code. and NFPA 70 to ensure that an uninterrupted water supply is maintained. The standby power source shall be capable of providing power for a minimum of two hours.

Exceptions: (No change to current text.)

PART II - INTERNATIONAL EXISTING BUILDING CODE

GROUP I-3 OCCUPANCY DOOR LOCKS

Revise the IEBC as follows:

IEBC 805.4.5 Emergency power source in Group I-3. <u>Power-operated sliding doors or power-operated</u> locks for swinging doors shall be operable by a manual release mechanism at the door. Emergency power shall be provided for the doors and locks in accordance with Section 2702 of the International Building Code.

Exceptions:

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

Work areas in buildings of Group I-3 occupancy having remote power unlocking capability for more than 10 locks shall be provided with an emergency power source for such locks. Power shall be arranged to operate automatically upon failure of normal power within 10 seconds and for a duration of not less than 1 hour.

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 is part of a comprehensive rewrite of the I-Codes emergency and standby power requirements. Some edits are made to provide consistency in how standby power is referenced in the codes.

Part I - INTERNATIONAL FIRE CODE

Emergency voice/alarm communication systems: Emergency voice/alarm communication systems are required to include an emergency power source in IBC/IFC Section 907.5.2.2.5. A reference to these systems has been added to IBC 2702.2 and IFC 604.2. With the addition of this requirement it is no longer necessary to indicate that these systems are required in covered malls and Group A occupancies, which are just two of the many occupancies and building types that require emergency voice/alarm communication systems.

All reference in the IFC and IBC to emergency voice/alarm communication systems requires them to be provided with a source of emergency power, except for IBC Section 402.7.3. This oversight was corrected.

Smoke control systems: Smoke control systems are required to include a standby power source in IBC/IFC Section 909.11. In addition the IBC requires standby power to be provided for smoke control systems or components of the systems in Sections 404.7, 909.20.6.2, and 909.21.5. A reference to these section have been added to IBC 2702.2.

By referencing section 909.20.6.2 in Section 2702.2.2, it is no longer necessary to include Section 2702.2.20 smokeproof enclosure reference.

IBC/IFC 909.11and IMC 513.11 were rather lengthy and included requirements for standby power equipment rooms. These were broken off and put in Section 909.11.1 and 513.11.1. The reference to automatically transferring to standby power within 60 seconds is included in a separate code proposal for Sections 2702.1 and 604.1, and does not need to be repeated here.

Exit signs: The proposal updates references to emergency power requirements by including the appropriate IFC and IBC code sections that specify requirements for emergency power supply and operation of Exit Signs.

Means of egress illumination: Details on system components in 1006.3.1 have been eliminated because these are covered in the revised IFC Section 604.1 and IBC Section 2702.1 requirements. The last part of IFC Section 1006.3 was renumbered 1006.3.1 to match the format used in the equivalent IBC requirements.

Elevators and platform lifts: In IBC Section 2702.2 and IFC Section 604.2, references to three types of elevators or platform lifts were consolidated into a single reference to elevators and platform lifts.

Requirements for the specific rating of the standby systems required in 3007.9 and 3008.9 were removed since they are covered under another comprehensive rewrite of IBC Section 2702.1 and IFC Section 604.1.

Elevator requirements in IFC Section 604.2.18 were relocated to IFC Section 607, which covers similar elevator requirements.

Horizontal sliding doors: The requirement for the standby power supply to have a capacity to operate a minimum of 50 opening and closing cycles of the door is based on requirements in NFPA 80, Section 9.4.2.2.2.

Membrane structures: The IBC and IFC require auxiliary inflation systems to be provided for air-supported and air-inflated membrane structures. (The IBC covers permanent membrane structures and the IFC covers temporary membrane structures). The differences are that permanent air-inflated membrane structures include standby power as covered by Section 2702 of the IBC. Temporary air-inflated membrane structures are required to include an automatic engine-generator set or a blower powered by an internal combustion engine to serve as an auxiliary inflation system in the event of a commercial power failure. These are not required to be permanently installed.

Semiconductor fabrication facilities: Automatic fire alarm systems are required to be provided with emergency power, which is consistent with NFPA 72.

Hazardous materials: Reference in Section 2702 of the IBC for emergency power for pyrophoric materials to be provided in accordance with the IFC was removed since backup power is not required in IFC Chapter 64.

IBC Section 414.5.3 and IFC Section 5004.7 were reformatted with no substantive changes to the systems that do not require emergency or standby power and fail-safe engineered systems.

In IBC Section 414.5.3 the requirements to provide emergency power for ventilation systems required by the IBC (or this code) were removed. This eliminates the need to provide emergency power for normal building ventilation systems as required by Section 1203. In looking at the hazardous material related systems that require a secondary power source, they all fall under the definition of emergency power system as included in NFPA 110. Therefore reference to standby power was removed from this section. References for emergency power were added to Sections 53, 54, 55, 57, 61 and 63 since these sections include requirements for system that require emergency power per Section 5001.3.3.10.

High rise buildings: The scope of IFC Section 604 covers emergency and standby power system, and yet sections 604.2.14.1 through 604.2.14.3 either duplicated requirements in revised Section 604.1, (covered under a separate proposal), or covered electrical system components that are not part of the standby or emergency power system. These requirements were eliminated. If the desire is to include these systems in the IFC they should be placed in a more appropriate location.

Underground buildings: Sections 604.2.15.1 through 604.2.15.2.1 duplicate some, but not all of the IBC requirements for underground buildings, and were therefore eliminated. If the desire is to include these details in the IFC they should be added in their entirety.

Group I-3 occupancy door locks: The proposal updates references to emergency power requirements by including the appropriate IFC and IFC code sections that specify requirements for emergency power supply and operation of power-operated door locks.

Airport traffic control towers: There is no reason to call out emergency and standby power requirements for aircraft traffic control towers. These requirements are specified for the types of electrical systems that will be provided, such as exit signs, egress illumination, elevators, smoke control, etc. In addition there is an error in some of the criteria since emergency power is required for fire alarm and smoke detection equipment and lighting of the means of egress. If the desire is to include a list of all possible emergency and standby power loads that can be included in these towers that can be done.

Smoke alarms: The proposal updates references to emergency power requirements by including the appropriate IFC and IBC code sections that specify requirements for emergency power supply and operation of Smoke Alarms.

Emergency alarms systems: Emergency power for emergency alarm systems is not currently required in either the IBC or the IFC, but it should be, based on the proposed definition of emergency power system.

Emergency responder radio coverage systems: Reference to standby power for emergency responder radio coverage systems was inadvertently left out of IBC Section 2702 and IFC Section 604.

Flaring systems for mechanical refrigeration: The proposal updates references to emergency power requirements by including the appropriate IFC code sections that specify requirements for emergency power supply and operation of flaring systems for mechanical refrigeration.

Clothes dryer exhaust systems: The proposal updates IMC references to stand-by power requirements by including the appropriate IBC code sections that specify requirements for stand-by power supply and operation of clothes dryer exhaust systems.

Water supply power: The proposal updates IWUI references to stand-by power requirements for pumps, controllers and related electrical equipment so that stationary water supply facilities within the *wildland-urban interface* by including the appropriate IFC and IBC code sections that specify requirements for stand-by power supply and operation of specified water supply equipment.

Part II - INTERNATIONAL EXISTING BUILDING CODE

Group I-3 occupancy door locks in the IEBC: The IEBC format was revised to more closely correlate with the IBC and IFC.

Cost Impact: This code change will increase the cost of construction

F59-13

PART	I – INTE	RNATION	IAL FIRE	CODE

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

PART II - INTERNATIONAL EXISTING BUILDING CODE

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

604.2.1(NEW)-F-ZUBIA-FCAC

F59-13

PART I – IFC

Committee Action:

Approved as Modified

Modify the proposal as follows:

HIGH-RISE BUILDINGS

IBC [F] 403.4.8.1 Equipment room. If the standby or emergency power system includes a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. System supervision with manual start and transfer features shall be provided at the *fire command center*.

Exception: In Group I-2 Condition 2, manual start and transfer features for the critical branch of the emergency power are not required to be provided at the fire command center.

(Portions of the proposal not shown remain unchanged.)

Committee Reason: The committee approved the code change based on the proponent's reason statement and agreed that the proposal accomplishes much needed revisions and clarifications to the emergency and standby power system requirements. The modification leaves the control of critical circuits in the hands of the hospital engineers.

Assembly Action:

None

EB26 – 13 CAH: AM; AHC position: AS 803.6 (NEW)

Proponent: Robert J. Davidson, Davidson Code Concepts, LLC, representing self (rjd@davidsoncodeconcepts.com) and David S. Collins, FAIA, The Preview Group, Inc. (dcollins@preview-group.com), representing The American Institute of Architects

Add new text as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the *International Building* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable fire protection requirements of Chapter 9 of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

Reason: The topic of allowing the ability to apply sprinkler protection trade-offs that exist in the current code has been a matter of discussion in the code development arena for some time. How to apply the allowance for a potential reduction in fire-resistance ratings and in what code they belong have been discussed without a consensus.

The concept is that once a building without sprinkler protection has been sprinklered throughout, whether due to renovations or retroactive code application, the designer should be permitted to allow the same fire resistance rating provisions for new construction in an existing sprinklered building. The issue is how to provide for that application of code and ensure a proper review by the building code official is performed to ensure there are no impediments to granting an approval that may result in the reduction of existing levels of protection.

This proposal attempts to provide for that process by adding a new section to the IEBC under Section 806 Building Elements and Materials. The suggested language provides that once an existing building is sprinklered throughout and meets the other fire protection requirements of Chapter 9 of the IBC, plans, investigation and evaluation reports, and other data can be submitted seeking approval of the code official for the assignment of the new fire-resistance ratings which might me a reduction, or potentially an increase.

The suggested language also requires that any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted. This is to ensure special conditions are identified that may prevent a reduction in fire-resistance ratings.

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

EB26-13

Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
				803.6 (NEW)-EB-DAVIDSON.doc

EB26-13

Committee Action:

Approved as Modified

Modify the proposal as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable fire protection requirements of Chapter 9 of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

Committee Reason: The proposal was approved based upon the fact that it provides flexibility in existing buildings and encourages the installation of sprinkler systems. The proposal was preferred to F212 Part II. It was noted that it would be more consistent if this method was also allowed for the other compliance methods found in the IEBC. The modification simply recognizes this allowance for both NFPA 13 and NFPA 13R systems.

Assembly Action:

None

F240 – 13 CAH: AM; AHC position: AS 1105.4 (New), 1104.5.1, 1104.7, 1104.15, 1104.17.2, Table 1104.17.2, 1104.22

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 1105 CONSTRUCTION REQUIREMENTS FOR EXISTING GROUP I-2

1105.4 Means of egress. In addition to the means of egress requirements in Section 1104, Group I-2 facilities shall meet the means of egress requirements in Section 1105.4.1 through 1105.4.7.

1105.4.1 Exit signs and emergency illumination. The power system for exit signs and emergency illumination for the means of egress shall provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator.

1105.4.2 Emergency power for operational needs. The essential electrical system shall be capable of supplying services in accordance with NFPA 99.

1105.4.3 Size of Door. Means of egress doors used for the movement of patients in beds shall provide a minimum clear width of 41.5 inches (1054 mm). The height of door opening shall not be less than 80 inches (2032 mm).

Exception: Door closers and door stops shall be permitted to be 78 inches minimum above the floor.

1105.4.4 Ramps. In areas where ramps are used for movement of patients in beds, the clear width of the ramp shall not be less than 48 inches (1219 mm).

1105.4.5 Corridor width. In areas where corridors are used for movement of patients in beds, the clear width of the corridor shall not be less than 48 inches (1219 mm).

1105.4.6 Dead end corridors. In smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall not exceed 30 feet unless approved by the fire official.

1105.4.7 Seperation of exit access doors. Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors.

1105.4.8 Aisles. In areas where aisles are used for movement of patients in beds, the clear width of the aisle shall not be less than 48 inches (1219 mm).

1104.5.1 Emergency power duration and installation. In other than Group I-2, <u>systems requiring the</u> emergency power system shall provide power for not less than 60 minutes and consist of storage batteries, unit equipment or an on-site generator. In Group I-2, the <u>emergency power essential electrical</u> systems shall <u>comply with Sections 1105.4.1 and 1105.4.2</u> provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604.

1104.7 Size of doors. The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. In Group I-2, doors serving as means of egress doors in an occupancy in Group I-2 and used for the movement of patients in beds shall comply with Section 1105.4.3. provide a clear width not less than 41.5 inches (1054 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The height of doors openings shall not be less than 80 inches (2032 mm).

Exceptions:

- 1. The minimum and maximum width shall not apply to door openings that are not part of the required means of egress in occupancies in Groups R-2 and R-3.
- 2. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum width.
- 3. Width of door leafs in revolving doors that comply with Section 1008.1.4.1 shall not be limited.
- 4. Door openings within a dwelling unit shall not be less than 78 inches (1981 mm) in height.
- 5. Exterior door openings in dwelling units, other than the required exit door, shall not be less than 76 inches (1930 mm) in height.
- 6. Exit access doors serving a room not larger than 70 square feet (6.5 m²) shall be not less than 24 inches (610 mm) in door width.
- 7. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the door.

1104.15 Width of ramps. Existing Ramps are permitted to have a minimum width of 30 inches (762 mm) but not less than the width required for the number of occupants served as determined by Section 1005.1. In Group I-2, ramps serving as a means of egress and used for the movement of patients in beds shall comply with Section 1105.8.

1104.17.2 1104.18 Dead ends end corridors. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends do not exceed the limits specified in

Table 1104.17.2 <u>18. In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall be comply with Section 1105.7.</u>

Exception: A dead-end passageway or corridor shall not be limited in length where the length of the dead end passageway or corridor is less than 2.5 times the least width of the dead-end passageway or corridor.

	COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy)							
OCCUPANC	COMMON PATH LIMIT		DEAD-END LIMIT		TRAVEL DISTANCE LIMIT			
Y	Unsprinklere	Sprinklere	Unsprinklere	Sprinklere	Unsprinklere	Sprinklere		
	d (feet)	d (feet)	d (feet)	d (feet)	d (feet)	d (feet)		
Group I-1	75	75	20	50	200	250		
Group I-2	NR ^e	NR ^e	NR-Note f	NR-Note f	150	200 [°]		
(Health care)			IND INDIE I	INC INCLE I	150	200		
Group I-3								
(Detention								
and								
correctional	100	100	NR	NR	150 [°]	200 ^c		
Use								
Conditions II,								
III, IV, V)								
Group I-4								
(Day Care	NR	NR	20	20	200	250		
Centers)								

TABLE 1104.17.2 1104.18 COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy)

(Portions of table not shown remain unchanged)

NR = No requirements.

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2 .

a. 20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.

b. See Section 1028.9.5 for dead-end aisles in Group A occupancies.

c. This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter.

d. See the International Building Code for special requirements on spacing of doors in aircraft hangars.

e. In Group I-2, separation of exit access doors within a Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors shall comply with Section 1105.4.7.

In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall comply with Section 1105.4.6.

<u>g.f.</u> Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common path of egress travel shall not be more than 100 feet.

1104.22 Minimum aisle width. The minimum clear width of aisles shall be:

1. Forty-two inches (1067 mm) for aisle stairs having seating on each side.

Exception: Thirty-six inches (914 mm) where the aisle serves less than 50 seats.

2. Thirty-six inches (914 mm) for stepped aisles having seating on only one side.

Exception: Thirty inches (760 mm) for catchment areas serving not more than 60 seats.

- 3. Twenty inches (508 mm) between a stepped aisle handrail or guard and seating when the aisle is subdivided by the handrail.
- 4. Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.

Exception: Thirty-six inches (914 mm) where the aisle serves less than 50 seats.

5. Thirty-six inches (914 mm) for level or ramped aisles having seating on only one side.

Exception: Thirty inches (760 mm) for catchment areas serving not more than 60 seats.

- 6. Twenty-three inches (584 mm) between a stepped stair handrail and seating where an aisle does not serve more than five rows on one side.
- 7. In Group I-2, where aisles are used for movement of patients in beds aisles shall comply with 1105.4.8.

Reason: This change adds minimum requirements for existing Group I-2 into Chapter 11. The intent is to increase the bare minimum safety requirements due to the fragile and sensitive populations within these facilities. These requirements are meant to be applied retroactively. This is not a new concept for these facilities – it aligns with the current approach by the Center for Medicaid and Medicare Services (CMS), the federal authority having jurisdiction. Hospitals are now required by CMS to have a life safety survey on a regular basis. If the facility does not meet certain life safety minimums, they are required to upgrade their existing facility. This code change will align the Fire Code with those CMS minimum requirements and will hopefully lead to industry consolidation. These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities and are consistent with the inspections required by federal laws for certification and reimbursement. The requirements consider the minimum previously approved construction methods. These requirements will provide jurisdictions the ability to adopt minimum retroactive provisions that have been vetted by the industry as well as code officials and that are consistent with current national standards used by the Federal Government providing a more uniform level of safety and eliminating many of the current code conflicts for existing facilities.

We looked at several sources to determine what the appropriate minimum bar should be, including the current building and fire code, current CMS guidelines, and previous versions of the ICC and model codes. On all issues, enforcement agencies and the regulated facilities weighed in to ensure that these changes are both necessary and achievable.

These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities. These inspections are required by federal laws for certification and reimbursement, and is designed to assist those that are already tasked with performing those inspections. It is not the intention to add responsibility to the fire official to perform additional inspections. Rather, it is the intention to better define the minimum previously approved construction methods as it relates to the healthcare building type, and are consistent with the federal requirements that these facilities are currently held too.

This newly proposed section has been formatted to consolidate requirements, and is mostly just a move of existing fire code provisions. Since the current provisions are applicable to all Group I-2, this section is written addressing all Group I-2 where applicable. Means of egress in areas where there are movement of patients in stretchers or beds has been reordered to be consistent with IFC 1104. It is noted that many areas of nursing homes do not include movement of patients in beds.

The following is a synopsis of the provisions listed above that have been relocated from other sections:

- 1105.4 Means of egress Means of egress in areas where there are movement of patients in beds. The order is consistent with IFC 1104.
- 1105.4.1 Exit signs and emergency illumination existing facilities can continue to use battery packs for exits signs and emergency lighting
- 1105.4.2 Emergency power for operational needs extending section 1104.5.1 by adding requirements from and references to NFPA 99. Similar to IFC 604.3, requires the facility to analyze the hazards in their particular region and prepare accordingly.
- 1105.4.3 Size of door Existing language that has been transferred from IFC 1104.7; follows format of IBC 1008.1.1.
- 1105.4.4 Ramps References from IFC 1104.15 to the healthcare specific requirements.
- 1105.4.5 Corridor width Follows current federal guidance for existing buildings.
- 1105.4.6 Dead end corridors References from IFC 1104.15 to the healthcare specific requirements.
- 1105.4.7 Separation of exit access doors Moved a healthcare specific requirement from footnote e in Table 1014.7.2 into Section 1105.
- 1105.4.8 Aisles Provides a reference from IFC 1104.22 to more specific healthcare requirements.

Finally, in no way does this change affect the current requirement that existing, approved construction must be maintained in the manner that it was approved. The fire code clearly states that existing, approved safety feature must be maintained to the code at the time of construction. Most hospitals have been around for many decades and have several vintages of construction. This change simply provides a tool for evaluating historical conditions.

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 <u>American Society for Healthcare Engineering</u>, 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

AHC #10 – Committee Review Report Page **39** of **45** 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

F240-13

1240 10			
Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F240-13

Committee Action:

Approved as Modified

1105.4 (NEW)-F-BALDASSARRA-WILLIAMS-ADHOC

Modify the proposal as follows:

1105.4.3 Size of Door. Means of egress doors used for the movement of patients in beds shall provide a minimum clear width of 41.5 inches (1054 mm). The height of door opening shall not be less than 80 inches (2032 mm).

Exceptions:

- 1. Door closers and door stops shall be permitted to be 78 inches minimum above the floor.
- 2. In Group I-2 Condition 1, existing means of egress doors used for the movement of patients in beds that provide a minimum clear width of 32 inches shall be permitted to remain.

(Portions of the proposal not shown remain unchanged.)

Committee Reason: The committee agreed with the proponent that the code change reflects an important and needed coordination effort to correlate the IFC with Federal Center for Medicaid and Medicare Services (CMS) healthcare regulations with which all facilities must now comply and that it will eliminate costly conflicting requirements among different codes applicable to such facilities. The modification exempts existing nursing homes from the retroactive width requirement.

Assembly Action: F241 – 13 CAH: AM' AHC position: AS

None

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

Add new text as follows:

1105.5 (New)

SECTION 1105 CONSTRUCTION REQUIREMENTS FOR EXISTING GROUP I-2

1105.5 Smoke compartments. Smoke compartments shall be provided in existing Group I-2 Condition 2, in accordance with Sections 1105.5.1 through 1105.5.4.

1105.5.1 Design. Smoke barriers shall be provided to subdivide each story used for patients sleeping with an occupant load of more than 30 patients into no fewer than two smoke compartments.

1105.5.1.1 Refuge areas. Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments.

The size of the refuge area shall provide the following:

- 1. Not less than 30 net square feet (2.8 m²) for each care recipient confined to bed or stretcher.
- Not less than 15 square feet (1.4 m²) for each resident in a Group I-2 using mobility assistance devices.
- 3. Not less than 6 square feet (0.56 m²) for each occupant not addressed in Items 1 and 2.

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

1105.5.2 Smoke barriers. Smoke barriers shall be constructed in accordance with Section 709 of the *International Building Code.*

Exceptions:

- 1. Existing smoke barriers with a minimum of 1/2 –hour fire-resistance rating are permitted to remain.
- 2. Smoke barriers shall be permitted to terminate at an atrium enclosure in accordance with Section 404.6 of the International Building Code.

1105.5.3 Opening protectives. Openings in smoke barriers shall be protected in accordance with Section 716 of the *International Building Code*. Opening protectives shall have a with a minimum fire-protection-rating of 1/3 hours.

Exception: Wired glass vision panels in doors shall be permitted to remain.

1105.5.4 Duct and air transfer openings. Penetrations in a smoke barrier by duct and air transfer openings shall comply with Section 717 of the *International Building Code*.

Exception: Where existing duct and air transfer openings in smoke barriers exist without smoke dampers, they shall be permitted to remain. Any changes to existing smoke dampers shall be submitted for review and approved in accordance with IBC Section 717 of the *International Building* <u>Code</u>.

Reason: This change adds minimum requirements for existing hospitals (Group I-2, Condition 2) into Chapter 11. The intent is to increase the bare minimum safety requirements due to the fragile and sensitive populations within these facilities. These requirements are meant to be applied retroactively. This is not a new concept for these facilities – it aligns with the current approach by the Center for Medicaid and Medicare Services (CMS), the federal authority having jurisdiction. Hospitals are now required by CMS to have a life safety survey on a regular basis. If the facility does not meet certain life safety minimums, they are required to upgrade their existing facility. This code change will align the Fire Code with those CMS minimum requirements and will hopefully lead to industry consolidation. These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities and are consistent with the inspections required by federal laws for certification and reimbursement. The requirements consider the minimum previously approved construction methods. These requirements will provide jurisdictions the ability to adopt minimum retroactive provisions that have been vetted by the industry as well as code officials and that are consistent with current national standards used by the Federal Government providing a more uniform level of safety and eliminating many of the current code conflicts for existing facilities.

We looked at several sources to determine what the appropriate minimum bar should be, including the current building and fire code, current CMS guidelines, and previous versions of the ICC and model codes. On all issues, enforcement agencies and the regulated facilities weighed in to ensure that these changes are both necessary and achievable.

This provision is written in regard to the design, construction and application of smoke compartments for Group I-2 hospital facilities. Smoke compartments are a key component of the defend in place strategy, a strategy where victims are protected from fire without relocation, used in healthcare facilities to limit the movement of smoke. These compartments act as safe locations for patients by preventing the spread of smoke. Through compartmentalization, patients may remain safely in their rooms as fire suppression systems and fire responders extinguish the fire. Under severe fire conditions that threaten the immediate compartment area, patients may be evacuated horizontally to the safety of an adjacent compartment on the same floor. Being able to do this is critical since due to the health status of many patients their evacuation from the building might put them in grave danger. The proper design, construction and application of smoke compartments will provide added protection, buy valuable time and save lives of critically ill patients before a total evacuation may become necessary.

These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities. These inspections are required by federal laws for certification and reimbursement. This requirement considers the minimum previously approved construction methods. This is consistent with the federal requirements that these facilities are currently held too. Specific concepts include:

• 1105.5 Smoke compartments – The defend-in-place concept is a basic minimum level of safety for these facilities. Every facility should be equipped at least two smoke compartments for temporary relocation of patients.

• 1105.5.1 Design - This section addresses existing acceptable configuration of smoke barrier walls and smoke barriers for existing hospitals in areas with sleeping rooms.

• 1105.5.1.1 Refuge area – Addresses adequate sizing of refuge areas. IBC 407.5.1 also includes requirements for independent egress and horizontal assemblies.

• 1105.5.2 Smoke barriers – The intent is to bring noncompliant smoke barriers to at least ½ hour fire resistance rating. Previously approved smoke barriers are not intended to be reduced to ½. Chapter 7 of the IFC would require maintenance of approved construction.

• 1105.5.3 Opening protectives - Address doors in smoke barriers in existing Group I-2 occupancies. Reference to 716 is so you that don't loose other requirements.

• 1105.5.4, Guides the inspector of existing facilities on how they would look at opening protectives. Smoke dampers have not always been required in hospitals, and the 2015 IBC would not require them. Therefore, in those hospitals that were originally approved without smoke dampers required, that condition is allowed to remain in place. Any modification of existing smoke dampers would have to go throught he normal process for making an alteration to existing construction.

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 <u>American Society for Healthcare Engineering</u>, 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: None

F241-13

12-11 10				
Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
				1105.5 (NEW)-F-WILLIAMS-ADHOC

F241-13

Committee Action:

Approved as Modified

Modify the proposal as follows:

1105.5.2 Smoke barriers. Smoke barriers shall be constructed in accordance with Section 709 of the International Building Code.

Exceptions:

Assembly Action:

- 1. Existing smoke barriers with a minimum of 1/2 hour fire-resistance rating are permitted to remain where the existing smoke barrier has a minimum fire resistance rating of 1/2 hour.
- 2. Smoke barriers shall be permitted to terminate at an atrium enclosure in accordance with Section 404.6 of the *International Building Code.*

(Portions of the proposal not shown remain unchanged.)

Committee Reason: The committee agreed with the proponent that the code change reflects an important and needed coordination effort to correlate the IFC with Federal Center for Medicaid and Medicare Services (CMS) healthcare regulations with which all facilities must now comply and that it will eliminate costly conflicting requirements among different codes applicable to such facilities. The modification clarifies the applicability of the exception.

None

F242 – 13 CAH: AM; AHC position: AS 1105.6 (New), Table 1104.17.2

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

IFC SECTION 1105 CONSTRUCTION REQUIREMENTS FOR EXISTING GROUP I-2

1105.6 Group I-2 care suites. Care suites in existing Group I-2 Condition 2 occupancies shall comply with Section 407.4.3 through 407.4.3.6.2 of the International Building Code.

TABLE 1104.17.2 1104.18 COMMON PATH. DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy)

OCCUPANCY	COMMON PATH LIMIT		DEAD-END LIMIT		TRAVEL DISTANCE LIMIT	
	Unsprinkle red (feet)	Sprinklere d (feet)	Unsprinkler ed (feet)	Sprinkler ed (feet)	Unsprinkler ed (feet)	Sprinkler ed (feet)
Group I-1	75	75	20	50	200	250
Group I-2 (Health care)	NR- <u>Note</u> e	NR <u>Note</u> e	NR	NR	150	200 ^c
Group I-3 (Detention and correctional—Use Conditions II, III, IV, V)	100	100	NR	NR	150 [°]	200 [°]
Group I-4 (Day Care Centers)	NR	NR	20	20	200	250

(Portions of table not shown remain unchanged)

NR = No requirements.

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2 .

20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons. a.

See Section 1028.9.5 for dead-end aisles in Group A occupancies. b.

This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For c. travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter. See the International Building Code for special requirements on spacing of doors in aircraft hangars. d.

In Group I-2 Condition 2, Any patient care recipient sleeping room, or any suite that includes patient sleeping rooms, of more e. than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors shall comply with Section 1105.6.

Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common f. path of egress travel shall not be more than 100 feet.

Reason: This change adds minimum requirements for existing hospitals (Group I-2, Condition 2) into Chapter 11. The intent is to increase the bare minimum safety requirements due to the fragile and sensitive populations within these facilities. These requirements are meant to be applied retroactively. This is not a new concept for these facilities - it aligns with the current approach by the Center for Medicaid and Medicare Services (CMS), the federal authority having jurisdiction. Hospitals are now required by CMS to have a life safety survey on a regular basis. If the facility does not meet certain life safety minimums, they are required to upgrade their existing facility. This code change will align the Fire Code with those CMS minimum requirements and will hopefully lead to industry consolidation. These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities and are consistent with the inspections required by federal laws for certification and reimbursement. The requirements consider the minimum previously approved construction methods. These requirements will provide jurisdictions the ability to adopt minimum retroactive provisions that have been vetted by the industry as well as code officials and that are consistent with current national standards used by the Federal Government providing a more uniform level of safety and eliminating many of the current code conflicts for existing facilities.

We looked at several sources to determine what the appropriate minimum bar should be, including the current building and fire code, current CMS guidelines, and previous versions of the ICC and model codes. On all issues, enforcement agencies and the regulated facilities weighed in to ensure that these changes are both necessary and achievable.

This proposal defines the requirements for care suites (both sleeping and non-sleeping) which are an integral design concept for many areas within a hospital. Typical uses include ICU's, Operating Rooms, Emergency Departments and Imaging Departments. The suites allow for better and safer care than non-suite options. The new provisions deal with common path of travel, separation of exit access doors, and number of doors passed through (i.e. previously intervening rooms) in suites. This is much more complete than the current text.

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

> AHC #10 - Committee Review Report Page 43 of 45

highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the <u>American Society for Healthcare Engineering</u>, 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: None

F242-13

Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
				1105.6-F-WILLIAMS-ADHOC

F242-13

Committee Action:

Approved as Modified

Modify the proposal as follows:

e. In Group I-2 Condition 2, care recipient sleeping room, or any suite that includes patient care recipient sleeping rooms shall comply with Section 1105.6.

(Portions of the proposal not shown remain unchanged.)

Committee Reason: The committee agreed with the proponent that the code change reflects an important and needed coordination effort to correlate the IFC with Federal Center for Medicaid and Medicare Services (CMS) healthcare regulations with which all facilities must now comply and that it will eliminate costly conflicting requirements among different codes applicable to such facilities. The modification corrects the term to current terminology.

Assembly Action:

None

EB36 – 13 CAH: AM; AHC position: AS 805.3.1.2

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Healthcare (John.Williams@DOH.WA.GOV)

Revise as follows:

805.3.1.2 Fire escapes required. For other than Group I-2 Condition 2, where When more than one exit is required, an existing or newly constructed fire escape complying with Section 805.3.1.2.1 shall be accepted as providing one of the required means of egress.

Reason: Based on the approval as modified of code change G257-12, Group I-2 hospitals are now classified as Group I-2, Condition 2. Where a Level 2 Alteration occurs, this proposal is intended to limit the use of fire escapes to all occupancies other than hospitals. Hospitals are a unique environment which employ the defend in place strategy which is one for which the use of a fire escape is neither practical nor appropriate. The minimum number of exits from such facilities needs to be held to the highest possible standard – that of new construction as stipulated in Section 805.3.1.

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 <u>American Society for Healthcare Engineering</u>, 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 will not increase the cost of construction.

EB36-13				
Public Hearing: Committee:	AS	AM	D	
Assembly:	ASF	AMF	DF	
				805.3.1.2-EB-WILLIAMS-ADHOC

EB36-13

Committee Action:

Approved as Modified

Modify the proposal as follows:

805.3.1.2 Fire escapes required. For other than Group I-2 Condition 2, where more than one exit is required, an existing or newly constructed fire escape complying with Section 805.3.1.2.1 shall be accepted as providing one of the required means of egress.

Committee Reason: The proposal is consistent with the federal requirements for hospitals. A modification was made to apply the provisions to all Group I-2 Occupancies not just hospitals. This was also consistent with federal requirements for healthcare occupancies.

Assembly Action:

None