2006 INTERNATIONAL FIRE CODE DOCUMENTATION
IBC - GENERAL

Code Change No: G13-07/08

Original Proposal

Sections: 202, 502.1, 902.1 (IFC [B] 902.1), 1612.2, 412.2.2, [F] 415.4, [F] 903.2.8.1 (IFC 903.2.8.1), 1203.3, 1915.5, 2111.13.3, 2308.11.2, 2308.12.2

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

Revise as follows:

SECTION 202
DEFINITIONS

BASEMENT (for other than flood loads). See Sections 502.1 ~~and 1612.2~~.

BASEMENT (for flood loads). See Section 1612.2.

STORY ABOVE GRADE PLANE. (Supp) Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor or roof next above is:

1. More than 6 feet (1829 mm) above grade plane; or
2. More than 12 feet (3658 mm) above the finished ground level at any point.

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

BASEMENT. (Supp) A story that is not a story above grade plane (See "Story above grade plane" in Section 202).

The definition of "Basement" does not apply to the provisions of Section 1612 for flood loads (see "Basement" in Section 1612.2).

902.1 (IFC [B] 902.1) Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

FIRE AREA. The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or fire resistance-rated horizontal assemblies of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

1612.2 Definitions. The following words and terms shall, for the purposes of this section, have the meanings shown herein.

BASEMENT. The portion of a building having its floor subgrade (below ground level) on all sides.

The definition of "Basement" is limited in application to the provisions of Section 1612 (see "Basement" in Section 502.1).

412.2.2 Basements. Where hangars have basements, ~~the~~ floor over ~~the~~ basements shall be of Type IA construction and shall be made tight against seepage of water, oil or vapors. There shall be no opening or communication between ~~the~~ basements and the hangar. Access to ~~the~~ basements shall be from outside only.

[F] 415.4 Special provisions for Group H-1 occupancies. Group H-1 occupancies shall be in buildings used for no other purpose, shall not exceed one story in height and be without ~~a~~ basements, crawl spaces or other under-

floor spaces. Roofs shall be of lightweight construction with suitable thermal insulation to prevent sensitive material from reaching its decomposition temperature. Group H-1 occupancies containing materials which are in themselves both physical and health hazards in quantities exceeding the maximum allowable quantities per control area.

[F] 903.2.8.1 (IFC 903.2.8.1) (Supp) Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 10,000 square feet (929 m_2).
2. Buildings no more than one story above grade plane, with a fire area containing a repair garage exceeding 12,000 square feet (1115 m^2).
3. Buildings with a repair garages servicing vehicles parked in ~~the~~ basements.

1203.3 Under-floor ventilation. The space between the bottom of the floor joists and the earth under any building except spaces occupied by ~~a~~ basements or cellars shall be provided with ventilation openings through foundation walls or exterior walls. Such openings shall be placed so as to provide cross ventilation of the under-floor space.

1915.5 (Supp) Fire-resistance-rating protection. Pipe columns shall be of such size or so protected as to develop the required fire-resistance ratings specified in Table 601. Where an outer steel shell is used to enclose the fire protective covering, the shell shall not be included in the calculations for strength of the column section. The minimum diameter of pipe columns shall be 4 inches (102 mm) except that in structures of Type V construction not exceeding three stories or 40 feet (12 192 mm) in height, pipe columns used in ~~the~~ basements and as secondary steel members shall have a minimum diameter of 3 inches (76 mm).

2111.13.3 Exterior air intake. The exterior air intake shall be capable of providing all combustion air from the exterior of the dwelling. The exterior air intake shall not be located within ~~the~~ a garage, attic, basement or crawl space of the dwelling nor shall the air intake be located at an elevation higher than the firebox. The exterior air intake shall be covered with a corrosion-resistant screen of $^1/_4$-inch (6.4 mm) mesh.

2308.11.2 (Supp) Concrete or masonry. Concrete or masonry walls and stone or masonry veneer shall not extend above ~~the~~ a basement.

Exceptions:

1. Stone and masonry veneer is permitted to be used in the first two stories above grade plane or the first three stories above grade plane where the lowest story has concrete or masonry walls in Seismic Design Category B, provided that structural use panel wall bracing is used and the length of bracing provided is one- and one half times the required length as determined in Table 2308.9.3(1).
2. Stone and masonry veneer is permitted to be used in the first story above grade plane or the first two stories above grade plane where the lowest story has concrete or masonry walls in Seismic Design Category B or C.
3. Stone and masonry veneer is permitted to be used in the first two stories above grade plane in Seismic Design Categories B and C, provided the following criteria are met:
   3.1. Type of brace per Section 2308.9.3 shall be Method 3 and the allowable shear capacity in accordance with Table 2306.4.1 shall be a minimum of 350 plf (5108 N/m).
   3.2. The bracing of the top story shall be located at each end and at least every 25 feet (7620 mm) o.c. but not less than 40 percent of the braced wall line. The bracing of the first story shall be located at each end and at least every 25 feet (7620 mm) o.c. but not less than 35 percent of the braced wall line.
   3.3. Hold-down connectors shall be provided at the ends of braced walls for the second floor to first floor wall assembly with an allowable design of 2,000 pounds (8896 N). Hold-down connectors shall be provided at the ends of each wall segment of the braced walls for the first floor to foundation with an allowable design of 3,900 pounds (17 347 N). In all cases, the hold-down connector force shall be transferred to the foundation.
   3.4. Cripple walls shall not be permitted.

2308.12.2 (Supp) Concrete or masonry. Concrete or masonry walls and stone or masonry veneer shall not extend above ~~the~~ a basement.

Exception: Stone and masonry veneer is permitted to be used in the first story above grade plane in Seismic Design Category D, provided the following criteria are met:

1. Type of brace in accordance with Section 2308.9.3 shall be Method 3 and the allowable shear capacity in accordance with Table 2306.4.1 shall be a minimum of 350 plf (5108 N/m).
2. The bracing of the first story shall be located at each end and at least every 25 feet (7620 mm) o.c. but not less than 45 percent of the braced wall line.
3. Hold-down connectors shall be provided at the ends of braced walls for the first floor to foundation with an allowable design of 2,100 pounds (9341 N).
4. Cripple walls shall not be permitted.

Reason: Proposal G8-06/07-AMPC1 revised the definition of "basement" to be a story that is not a story above grade plane. The proposal extends these changes to other sections of the IBC. A "story" is a vertical space between each floor and between the upper floor and the roof. There are instances where a basement is assumed to be all stories below grade plane instead of an individual story below grade plane. The proposal makes the necessary corrections for consistency with the revised definition of "basement."

A comprehensive review of the 2006 IBC and 2007 Supplement was made during the preparation of this proposal and it was determined that, except for flood loads (below), the code sections referring to basements do so consistent with the revised definition of "basement" except for the code sections in this proposal. Approximately 50 such code sections were studied.

The definition of "story "in Section 202 establishes the vertical space as "between the upper surface of a floor and the upper surface of the floor or roof next above." The proposal revises the definitions of "story above grade plane" in Section 202 and "fire area" in Section 902.1 for consistency with this definition.

The definition of "basement" in Section 502.1 applies to all provisions of the IBC except for flood loads in Section 1612 for which there is a separate definition of "basement" (see Section 1612.2). This proposal adds language following the definitions in Sections 502.1 and 1612.2 and revises Section 202 to clarify the application of both definitions.

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

Public Hearing Results

Committee Action: **Approved as Submitted**

Committee Reason: The proposal provides a necessary editorial clean up of the definition of the term basement and its use throughout the code.

Assembly Action: **None**

Public Comments

Individual Consideration Agenda

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

Public Comment:

Lori Lee Graham, City of Portland, OR, representing herself requests Approval as Modified by this public comment.

Modify proposal as follows:

SECTION 202
DEFINITIONS

STORY ABOVE GRADE PLANE. (Supp) Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor ~~or roof~~ next above is:

1. More than 6 feet (1829 mm) above grade plane; or
2. More than 12 feet (3658 mm) above the finished ground level at any point.

(Portions of proposal not shown remain unchanged)

Commenter's Reason: Measuring to the roof next above is problematic. On a mansard roof, where do I measure? On a pitched roof, where do I measure? If the roof is flat, I have a good idea where I measure, but in all other instances I don't. It is inappropriate to determine whether a story is a story above grade based on something as variable as the roof surface.

Final Hearing Results

G13-07/08 **AMPC**

Code Change No: G14-07/08

Original Proposal

Sections: 202 (New), 403.1, 707.14.1; IFC 903.3.5.2 (IBC [F] 903.3.5.2), 903.4.3 (IBC [F] 903.4.3), 907.2.12 (IBC [F] 907.2.12), 907.7.3.2 (IBC [F] 907.7.3.2)

Proponent: Tom Lariviere, Madison Fire Department, MS, representing the Joint Fire Service Review Committee

THESE PROPOSALS ARE ON THE AGENDA OF THE IBC GENERAL AND IFC CODE DEVELOPMENT COMMITTEES AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IBC GENERAL

1. Add a new definition as follows:

SECTION 202
DEFINITIONS

HIGH-RISE BUILDING. A building with an occupied floor located more than 75 feet (23 m) above the lowest level of fire department vehicle access.

2. Revise as follows:

403.1 Applicability. ~~The provisions of this section shall apply to buildings with an occupied floor located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.~~ High rise buildings shall comply with Section 403.2 through 403.18.

Exception: The provisions of ~~this~~ Section 403.2 through 403.18 shall not apply to the following buildings and structures:

1. Airport traffic control towers in accordance with Section 412.
2. Open parking garages in accordance with Section 406.3.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1.
4. Low-hazard special industrial occupancies in accordance with Section 503.1.1.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.

707.14.1 (Supp) Elevator lobby. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the street floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies.
3. Where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. In other than Group I-2 and I-3~~,~~ and high-rise buildings ~~having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access~~, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2.

PART II – IFC

Revise as follows:

903.3.5.2 (IBC [F] 903.3.5.2) Secondary water supply. A secondary on-site water supply equal to the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for high-rise buildings required to comply with Section 403 of the *International Building Code* in Seismic Design Category C, D, E or F as determined by this code. The secondary water supply shall have a duration of not less than 30 minutes as determined by the occupancy hazard classification in accordance with NFPA 13.

~~Exception:~~ ~~Existing buildings.~~

903.4.3 (IBC [F] 903.4.3) Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in high-rise buildings required to comply with Section 403 of the *International Building Code*.

907.2.12 (IBC [F] 907.2.12) (Supp) High-rise buildings. ~~Buildings with a floor used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access~~ High rise buildings shall be provided with an automatic fire alarm system and an emergency voice/alarm communication system in accordance with Section 907.6.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Sections 907.2.21 and 412.
2. Open parking garages in accordance with Section 406.3.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1.
4. Low-hazard special occupancies in accordance with Section 503.1.1.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.
6. In Group I-1 and I-2 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the paging system.

907.7.3.2 (IBC [F] 907.7.3.2) (Supp) High-rise buildings. In ~~buildings with a floor used for human occupancy that is located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access,~~ high rise buildings required to comply with Section 403 of the *International Building Code*, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.

Reason: The term “High-Rise Building” is utilized in numerous locations through-out the IBC and IFC. However, there is no definition for a “High-Rise Building.” This definition is proposed from and is consistent with the high-rise building applicability language in section 403.1 of the IBC. The definition will be applied to both the IFC and the IBC and provide consistency.

Additionally, Section 903.3.5.2 is revised by deleting the exception. The exception refers to existing buildings and is not necessary in this section. IFC Section 903.6 deals specifically with existing buildings and this provision is not required in that section. Therefore, it is not necessary under the major section 903.3 since it does not address existing buildings at all.

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

Public Hearing Results

PART I – IBC GENERAL
Committee Action: **Approved as Submitted**

Committee Reason: Clarifies throughout the code that a high rise building is a building with an occupied floor located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

Assembly Action: **None**

PART II – IFC
Committee Action: **Disapproved**

Committee Reason: The proposed added text would be redundant since high-rise buildings must already comply with IBC Section 403. The deletion of the exception in Section 903.3.5.2 is inappropriate in light of the difficulties in retrofitting existing buildings.

Assembly Action: **None**

Public Comments

Individual Consideration Agenda

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

Public Comment:

Tom Lariviere, Madison Fire Department, MS, representing the Joint Fire Service Review Committee requests Approval as Modified by this public comment for Part II.

Modify proposal as follows:

903.3.5.2 (IBC [F] 903.3.5.2) Secondary water supply. A secondary on-site water supply equal to the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for high-rise buildings ~~required to comply with Section 403 of the *International Building Code*~~ in Seismic Design Category C, D, E or F as determined by this code. The secondary water supply shall have a duration of not less than 30 minutes as determined by the occupancy hazard classification in accordance with NFPA 13.

Exception: Existing buildings.

903.4.3 (IBC [F] 903.4.3) Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in high-rise buildings ~~required to comply with Section 403 of the International Building Code~~.

907.2.12 (IBC [F] 907.2.12) (Supp) High-rise buildings. High rise buildings shall be provided with an automatic fire alarm system and an emergency voice/alarm communication system in accordance with Section 907.6.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Sections 907.2.21 and 412.
2. Open parking garages in accordance with Section 406.3.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1.
4. Low-hazard special occupancies in accordance with Section 503.1.1.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.
6. In Group I-1 and I-2 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the paging system.

907.7.3.2 (IBC [F] 907.7.3.2) (Supp) High-rise buildings. In high rise buildings ~~required to comply with Section 403 of the *International Building Code*,~~ a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.

Commenter's Reason: The term "High-Rise Building" is utilized in numerous locations through-out the IBC and IFC. Part I was Approved as Submitted by the IBC General Committee which added the definition of "High-Rise Building" to the IBC. This definition is consistent with, and replaces the language used in each of the sections.

The revisions in this Public Comment to Part II will utilize the same definition in the IFC and provide consistency between the codes. The phrase "required to comply with Section 403 of the IBC" has been deleted since it is redundant and Section 403 only addresses high rise buildings.

Additionally, Section 903.3.5.2 is revised by re-inserting the exception. The exception refers to existing buildings and would only apply when an existing high rise is being retrofit with fire sprinklers. The difficulty in retrofitting existing high rise buildings would only be compounded if this exception is deleted, and the high rise building is not structurally designed to support the secondary water supply.

Final Hearing Results

G14-07/08, Part I	**AS**
G14-07/08, Part II	**AMPC**

Code Change No: G16-07/08

Original Proposal

Sections: 202 (New); IECC 202; IFC 202; IFGC 202; IMC 202; IPMC 202; IRC 202

Proponent: Bob Eugene, Underwriters Laboratories Inc.

THESE PROPOSALS ARE ON THE AGENDA OF THE IBC GENERAL, IECC, IFC, IFGC, IMC, IPMC AND IRC BUILDING/ENERGY CODE DEVELOPMENT COMMITTEES AS 7 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IBC GENERAL

Add new definition as follows:

SECTION 202
DEFINITIONS

LABELED. Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

PART II – IECC

Revise as follows:

SECTION 202
GENERAL DEFINITIONS

LABELED. ~~Devices, equipment, or materials to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items that attests to compliance with a specific standard.~~

Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

PART III – IFC

Revise as follows:

SECTION 202
GENERAL DEFINITIONS

LABELED. ~~Equipment or material to which has been attached a label, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling is indicated compliance with nationally recognized standards or tests to determine suitable usage in a specified manner.~~

Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

PART IV – IFGC

Revise as follows:

SECTION 202 (IFGC)
GENERAL DEFINITIONS

LABELED. ~~Devices, equipment, appliances or materials to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and by whose label the manufacturer attests to compliance with applicable nationally recognized standards.~~

Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

PART V – IMC

Revise as follows:

SECTION 202
GENERAL DEFINITIONS

LABELED. ~~Devices, equipment, appliances or materials to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and by whose label the manufacturer attests to compliance with applicable nationally recognized standards.~~

Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

PART VI – IPMC

Revise as follows:

SECTION 202
GENERAL DEFINITIONS

LABELED. ~~Devices, equipment, appliances, or materials to which has been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and by whose label the manufacturer attests to compliance with applicable nationally recognized standards.~~

Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

PART VII – IRC BUILDING/ENERGY

Revise as follows:

LABELED. ~~Devices, equipment or materials to which have been affixed a label, seal, symbol or other identifying mark of a testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above labeled items that attests to compliance with a specific standard.~~

Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

Reason: The term "labeled" is used throughout the *International Building* Code and other I-Codes. It is preferred to have such a definition in Chapter 2 rather than elsewhere in code. The definition complements the definition of "LABEL" currently in IBC Section 1702.1 and the requirements of IBC Section 1703.5. Through a series of proposals, the exact same generic text is being proposed for each of the I-codes where the term is used.

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

Public Hearing Results

PART I – IBC GENERAL
Committee Action: **Approved as Submitted**

Committee Reason: Defining the term 'labeled' provides a necessary definition and will add clarity and consistency to the code.

Assembly Action: **None**

PART II – IECC
Committee Action: **Approved as Submitted**

Committee Reason: This definition for "labeled" needs to be the same definition throughout the I-Codes for purposes of uniform application of the codes for products requiring third party certification.

Assembly Action: **None**

PART III – IFC
Committee Action: **Approved as Submitted**

Committee Reason: The change will provide a clearer definition that is correlated with its companion term "Listed". Approval is also consistent with the actions taken on Parts I and II, and IV through VI to correlate with the other I-Codes.

Assembly Action: **None**

PART IV – IFGC
Committee Action: **Approved as Modified**

Modify proposal as follows:

LABELED. Equipment, appliances, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, appliance, material or product meets identified standards or has been tested and found suitable for a specified purpose.

Committee Reason: The proposed definition will provide consistent text throughout the codes in the ICC family. The modification adds "appliances" because the IFGC regulates gas appliances which do not fall under the definition of equipment and which are required to be listed and labeled.

Assembly Action: **None**

PART V – IMC
Committee Action: **Approved as Modified**

Modify proposal as follows:

LABELED. Equipment, appliances, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

Committee Reason: The latter part of this definition was reworded to better clarify what labeling a product signifies. The definition will be coordinated with all other I-codes. The modification added the term "appliances" back into the definition from the existing language to complete the list of items which receive labels.

Assembly Action: **None**

PART VI – IPMC
Committee Action: **Approved as Submitted**

Committee Reason: The proposal was approved to provide consistency across the I-Codes with respect to the technical definition of the term "label."

Assembly Action: **None**

PART VII – IRC-B/E
Committee Action: **Disapproved**

Committee Reason: The committee preferred the current language in the code for consistency across the International Codes with respect to the technical definition of the term "labeled."

Assembly Action: **Approved as Submitted**

Public Comments

Individual Consideration Agenda

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

Public Comment:

Bob Eugene, Underwriters Laboratories Inc. requests Approval as Submitted for Part IV.

Commenter's Reason: Although "appliances" would not be included under the term "equipment", they would be included under the term "products", so the definition as submitted is not flawed. Appliances are products that are required to be listed and labeled elsewhere in the code. The definition for "Labeled" was approved as Submitted in the International Building Code, International Energy Conservation Code, International Fire Code and International Property Maintenance Code. For the sake of consistency and user-friendliness, the definition proposed needs to be Approved as Submitted.

Public Comment:

Bob Eugene, Underwriters Laboratories Inc. requests Approval as Submitted for Part V.

Commenter's Reason: Although "appliances" would not be included under the term "equipment", they would be included under the term "products", so the definition as submitted is not flawed. Appliances are products that are required to be listed and labeled elsewhere in the code. Additionally, the definition of "labeled" as modified by the Mechanical Committee is flawed. The term "appliances" was added only in the first line by the committee, but omitted in the fourth line. The definition for "Labeled" was approved as Submitted in the International Building Code, International Energy Conservation Code, International Fire Code and International Property Maintenance Code. For the sake of consistency and user-friendliness, the definition proposed needs to be Approved as Submitted.

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

Public Comment:

Bob Eugene, Underwriters Laboratories Inc. requests Approval as Submitted for Part VII.

Commenter's Reason: The membership in attendance at Palm Springs recognized the benefit of having a consistent definition for the term "labeled" as used throughout the family of International Codes. The definition for "Labeled" was Approved as Submitted in the International Building Code, International Energy Conservation Code, International Fire Code and International Property Maintenance Code. The Fuel Gas and Mechanical Committees each modified the definition differently from the submitted definition and from each other's modified definitions. For the sake of consistency and user-friendliness, the definition proposed needs to be Approved as Submitted.

Final Hearing Results

G16-07/08, Part I	**AS**
G16-07/08, Part II	**AS**
G16-07/08, Part III	**AS**
G16-07/08, Part IV	**AS**
G16-07/08, Part V	**AS**
G16-07/08, Part VI	**AS**
G16-07/08, Part VII	**AS**

Code Change No: G17-07/08

Original Proposal

Sections: 202; IECC 202; IFC 202 (IBC [F] 902.1); IFGC 202; IMC 202; IRC 202

Proponent: Bob Eugene, Underwriters Laboratories Inc.

THESE PROPOSALS ARE ON THE AGENDA OF THE IBC GENERAL, IECC, IFC, IFGC, IMC AND IRC BUILDING/ENERGY CODE DEVELOPMENT COMMITTEES AS 6 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IBC GENERAL

1. Revise as follows:

SECTION 202
DEFINITIONS

LISTED. ~~See Section 902.1.~~ Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

PART II – IECC

Revise as follows:

SECTION 202
GENERAL DEFINITIONS

LISTED. ~~Equipment, appliances, assemblies or materials included in a list published by an approved testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of production of listed equipment, appliances, assemblies or material, and whose listing states either that the equipment, appliances, assemblies, or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner.~~

Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

PART III – IFC

Revise as follows:

SECTION 202 (IBC [F] 902.1)
GENERAL DEFINITIONS

LISTED. ~~Equipment or materials included on a list published by an approved testing laboratory, inspection agency or other organization concerned with current product evaluation that maintains periodic inspection of production of listed equipment or materials, and whose listing states that equipment or materials comply with approved nationally recognized standards and have been tested or evaluated and found suitable for use in a specified manner.~~

Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

PART IV – IFGC

Revise as follows:

SECTION 202
GENERAL DEFINITIONS

LISTED. ~~Equipment, appliances or materials included in a list published by a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of production of listed equipment, appliances or materials, and whose listing states either that the equipment, appliance or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner. The means for identifying listed equipment, appliances or materials may vary for each testing laboratory, inspection agency or other organization concerned with product evaluation, some of which do not recognize equipment, appliances or materials as listed unless they are also labeled. The authority having jurisdiction shall utilize the system employed by the listing organization to identify a listed product.~~

Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

PART V – IMC

Revise as follows:

SECTION 202
GENERAL DEFINITIONS

LISTED. ~~Equipment, appliances or materials included in a list published by a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of production of listed equipment, appliances or materials, and whose listing states either that the equipment, appliances or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner. Not all testing laboratories, inspection agencies and other organizations concerned with product evaluation use the same means for identifying listed equipment, appliances or materials. Some do not recognize equipment, appliances or materials as listed unless they are also labeled. The authority having jurisdiction shall utilize the system employed by the listing organization to identify a listed product.~~

Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

PART VI – IRC BUILDING/ENERGY

LISTED ~~AND LISTING.~~ ~~Terms referring to equipment that is shown in a list published by an approved testing agency qualified and equipped for experimental testing and maintaining an adequate periodic inspection of current productions and whose listing states that the equipment complies with nationally recognized standards when installed in accordance with the manufacturer's installation instructions.~~

Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

Reason: The term "listed" is used in nearly every chapter of the *International Building Code* and throughout the other I-Codes. It is preferred to have such a definition in Chapter 2 of the IBC rather than in Chapter 9. The definition is somewhat revised from the definition currently in IBC Chapter 9, but through a series of proposals, the exact same generic text is being proposed for each of the I-codes where the term is used.

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

Public Hearing Results

PART I – IBC GENERAL
Committee Action: **Approved as Submitted**

Committee Reason: Defining the term 'listed' provides a necessary definition and will add clarity and consistency to the code.

Assembly Action: **None**

PART II – IECC
Committee Action: **Approved as Submitted**

Committee Reason: This definition for "listed" needs to be the same throughout the I-Codes for purposes of uniform application of the codes for products that need to be listed by an agency.

Assembly Action: **None**

PART III – IFC
Committee Action: **Approved as Submitted**

Committee Reason: The proposal was approved for consistency with the action taken on code change G16-07/08, Part III.

Assembly Action: **None**

PART IV – IFGC
Committee Action: **Approved as Modified**

Modify proposal as follows:

LISTED. Equipment, appliances, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment, appliances or materials or periodic evaluation of services and whose listing states either that the equipment, appliance, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

Committee Reason: The proposed definition will provide consistent text throughout the codes in the ICC family. The modification adds "appliances" because the IFGC regulates gas appliances which do not fall under the definition of equipment and which are required to be listed and labeled.

Assembly Action: **None**

PART V – IMC
Committee Action: **Approved as Modified**

Modify the proposal as follows:

LISTED. Equipment, appliances, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

Committee Reason: The definition was simplified to clarify the meaning of a listed item and to delete a requirement that did not belong in a definition. The modification added the term “appliances” back into the definition from the existing language to complete the list of items that can be listed.

Assembly Action: **None**

PART VI – IRC-B/E
Committee Action: **Disapproved**

Committee Reason: The committee preferred the current language in the code for consistency across the International Codes with respect to the technical definition of the term “listed”.

Assembly Action: **Approved as Submitted**

Public Comments

Individual Consideration Agenda

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

Public Comment:

Bob Eugene, Underwriters Laboratories Inc. requests Approval as Submitted for Part IV.

Commenter’s Reason: Although “appliances” would not be included under the term “equipment”, they would be included under the term “products”, so the definition as submitted is not flawed. Appliances are products that are required to be listed and labeled elsewhere in the code. The definition for “Listed” was approved as Submitted in the International Building Code, International Energy Conservation Code and International Fire Code. For the sake of consistency and user-friendliness, the definition proposed needs to be Approved as Submitted.

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

Public Comment:

Bob Eugene, Underwriters Laboratories Inc. requests Approval as Submitted for Part V.

Commenter’s Reason: Although “appliances” would not be included under the term “equipment”, they would be included under the term “products”, so the definition as submitted is not flawed. Appliances are products that are required to be listed and labeled elsewhere in the code. The Fuel Gas and Mechanical Committees each modified the definition differently from the submitted definition and from each others modified definitions. The definition of “labeled” as modified by the Mechanical Committee is flawed. The term “appliances” was added only in the first line by the committee, but omitted in the third and fourth lines. The definition for “Listed” was approved as Submitted in the International Building Code, International Energy Conservation Code, and International Fire Code. For the sake of consistency and user-friendliness, the definition proposed needs to be Approved as Submitted.

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

Public Comment:

Bob Eugene, Underwriters Laboratories Inc. requests Approval as Submitted for Part VI.

Commenter’s Reason: The definition as submitted expands the definition beyond “equipment.” Products other than “equipment” are required to be listed and labeled elsewhere in the code. The definition for “Listed” was approved as Submitted in the International Building Code, International Energy Conservation Code, and International Fire Code. The Fuel Gas and Mechanical Committees each modified the definition differently from the submitted definition and from each others modified definitions. For the sake of consistency and user-friendliness, the definition proposed needs to be Approved as Submitted.

Final Hearing Results

G17-07/08, Part I	**AS**
G17-07/08, Part II	**AS**
G17-07/08, Part III	**AS**
G17-07/08, Part IV	**AS**
G17-07/08, Part V	**AS**
G17-07/08, Part VI	**AS**

Code Change No: G23-07/08

Original Proposal

Sections: 304.1, 202 (New) [IFC [B] 202 (New)], 421 (New); IFC 903.2.2 (New) [IBC [F] 903.2.2 (New)], 907.2.2 (IBC [F] 907.2.2)

Proponent: John Williams, State of Washington Department of Health, Construction Review Services, WA

THESE PROPOSALS ARE ON THE AGENDA OF THE IBC GENERAL AND IFC CODE DEVELOPMENT COMMITTEES AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IBC GENERAL

1. Revise as follows:

304.1 (IFC [B] 202) Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers
Ambulatory health care facilities (see section 421)
Animal hospitals, kennels and pounds
Banks
Barber and beauty shops
Car wash
Civic administration
Clinic—outpatient
Dry cleaning and laundries: pick-up and delivery stations and self-service
Educational occupancies for students above the 12th grade
Electronic data processing
Laboratories: testing and research
Motor vehicle showrooms
Post offices
Print shops
Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
Radio and television stations
Telephone exchanges
Training and skill development not within a school or academic program

2. Add new definition as follows:

SECTION 202 (IFC 202)
DEFINITIONS

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

3. Add new text as follows:

SECTION 421
AMBULATORY CARE FACILITIES

421.1 General. Occupancies classified as Group B Ambulatory Health Care Facilities shall comply with the provisions of this section and other applicable provisions of this code.

421.2 Smoke barriers. Smoke barriers shall be provided to subdivide every ambulatory care facility greater than 10,000 square feet (929 m^2) into a minimum of two smoke compartments. The travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be installed in accordance with Section 709.

421.3 Refuge area. At least 30 net square feet (2.8 m^2) per nonambulatory patient shall be provided within the aggregate area of corridors, patient rooms, treatment rooms, lounge or dining areas and other low-hazard areas on each side of each smoke barrier.

421.4 Independent egress. A means of egress shall be provided from each smoke compartment created by smoke barriers without having to return through the smoke compartment from which means of egress originated.

421.5 Automatic Sprinkler Systems. Automatic sprinklers systems shall be provided for ambulatory care facilities in accordance with Section 903.2.2.

421.6 Fire alarm systems. A fire alarm system shall be provided in accordance with Section 907.2.2.

PART II – IFC

1. Add new text as follows:

903.2.2 (IBC [F] 903.2.2) Group B ambulatory health care facilities. An automatic sprinkler system shall be provided for Group B Ambulatory Health Care Facility occupancies when either of the following conditions are met:

1. Four or more care recipients are incapable of self preservation at any given time.
2. One or more care recipients that are incapable of self preservation are located at other than the level of exit discharge.

(Renumber subsequent sections)

2. Revise as follows:

907.2.2 (IBC [F] 907.2.2) (Supp) Group B. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B occupant load of all floors is 500 or more.
2. The Group B occupant load is more than 100 persons above or below the lowest level of exit discharge.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

A manual and automatic fire alarm system shall be installed in all Group B Ambulatory Health Care Facilities.

Reason: This code change is intended to address the issue of ambulatory surgery centers. Thirty years ago, few surgical procedures were performed outside of the hospital. Today, complex outpatient surgeries outside of the hospital are commonplace. They are performed in facilities often called “day surgery centers” or “Ambulatory surgical centers (ASC’s)” because patients are able to walk in and walk out the same day. Procedures render patients temporarily incapable of self-preservation by application of nerve blocks, sedation, or anesthesia. Patients in these facilities typically recover quickly.

The IBC identifies the healthcare Group I occupancies as having 24 hour stay. Without 24 stay these surgery centers are being classified as Group B. Essentially this allows you to render an unlimited number of people incapable of self preservation with no more protection than a business office. Since there is no distinct classification for ASC’s in the I codes, the total number of these facilities cannot be quantified. These types of facilities contain distinctly different hazards to life and safety than other Business Occupancies, such as:

- Patients incapable of self-preservation require rescue by other occupants or fire personnel.
- Medical staff must stabilize the patient prior to evacuation; therefore, staff may require evacuation as well.
- Use of oxidizing medical gases such oxygen and nitrous oxide
- Prevalence of surgical fires.

Past changes have tried to force these occupancies into the Group I-2 category. This is a poor fit, because these are not hospitals. Other Federal and State jurisdictions have recognized that there is a middle ground somewhere in between Group B and I-2. This proposal provides a scaled approach to protection. Occupancy classification stays as group B. A fire alarm is required in all facilities for increased staff awareness. A sprinkler is required when several people are incapable of self preservation. In larger facilities, a smoke compartment is provided to allow more of a protect in place environment. These allow staff a safer environment to stabilize the patients before evacuation, and protection for fire personnel who may have to evacuate both patients and staff.

An ICC CTC study group was formed last year to examine these facilities and determine what if any changes to the code are necessary. Unfortunately, scheduling did not allow enough time for the study group to complete a proposal for a code change. Hundreds of these facilities are being built every year, and those are the ones that we know about. Please do not wait until 2012 to provide a safer environment for this very sensitive population of patients.

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

Public Hearing Results

PART I – IBC GENERAL
Committee Action: Approved as Modified

Modify the proposal as follows:

304.1 (IFC [B] 202) Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers
Ambulatory health care facilities ~~(see section 421)~~
Animal hospitals, kennels and pounds
Banks
Barber and beauty shops
Car wash
Civic administration
Clinic—outpatient
Dry cleaning and laundries: pick-up and delivery stations and self-service
Educational occupancies for students above the 12th grade
Electronic data processing
Laboratories: testing and research
Motor vehicle showrooms
Post offices
Print shops
Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
Radio and television stations
Telephone exchanges
Training and skill development not within a school or academic program

421.2 Smoke barriers. Smoke barriers shall be provided to subdivide every ambulatory care facility greater than 10,000 square feet (929 m^2) into a minimum of two smoke compartments per story. The travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be installed in accordance with Section 709.

(Portions of proposal not shown remain unchanged)

Committee Reason: The proposal was felt to comprehensively address the issue of surgery centers that are not classified as Group I occupancies but need increased regulation based upon the conditions of the people being treated at these facilities. There were two modifications made. The first was simply an editorial revision to remove an unnecessary reference in the occupancy classifications to the new Section 421. The second clarifies that each story needs to be divided into at least 2 smoke compartments. This addresses multiple story facilities. The committee also felt that an issue to be addressed during public comment would be the threshold number of patients that classify an occupancy as an ambulatory health care facility.

Assembly Action: None

PART II – IFC
Committee Action: Approved as Modified

Modify the proposal as follows:

903.2.2 (IBC [F] 903.2.2) ~~Group B~~ ambulatory health care facilities. An automatic sprinkler system shall be ~~provided for~~ installed throughout all fire areas containing a ~~Group B~~ Ambulatory Health Care Facility occupancies when either of the following conditions ~~are met~~ exist at any given time:

1. Four or more care recipients are ~~rendered~~ incapable of self preservation ~~at any given time~~
2. One or more care recipients that are incapable of self preservation are located at other than the level of exit discharge.

[F] 907.2.2 Group B. A manual fire alarm system ~~that activates the occupant notification system in accordance with Section 907.6~~ shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B occupant load of all floors is 500 or more.
2. The Group B occupant load is more than 100 persons above or below the lowest level of exit discharge.
3. Fire areas containing a Group B occupancy classified as an ambulatory health care facility

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

~~A manual and automatic fire alarm system shall be installed in all Group B ambulatory health care facilities.~~

[F] 907.2.2.2 Group B - Ambulatory health care facilities. Fire areas containing ambulatory health care facilities shall be provided with an electrically supervised automatic smoke detection system installed within the ambulatory health care facility and in public use areas outside of tenant spaces, including public corridors and elevator lobbies.

Exception: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 provided the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

Committee Reason: The committee agreed that the proponent's reason statement accurately and adequately substantiates the need for the change. This code change represents a co-operative effort of concerned parties through the ICC Code Technology Committee's Care Study Group to resolve a long-standing problem in how the code deals with the subject facilities. This also correlates with the action taken by the IBC-G Committee in Part I. The modification represents additional consensus on the level of protection that should be afforded these facilities.

Assembly Action: **None**

Final Hearing Results

G23-07/08, Part I **AM**
G23-07/08, Part II **AM**

Code Change No: G24-07/08

Original Proposal

Sections: 304.1.1 (IFC [B] 202)

Proponent: Roger Severson, RSA Consulting, representing the Oregon Department of Health Services

Add new text as follows:

304.1.1 (IFC [B] 202) Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

CLINIC-OUTPATIENT. A medical office or facility serving patients who are capable of self-preservation, or where not more than three patients are rendered incapable of self-preservation and the facility is on the level of exit discharge. Facilities with four or more patients who are rendered incapable of self-preservation or where one or more patients that are incapable of self preservation are located at other than the level of exit discharge are Ambulatory Health Care Facilities (see Section 421.)

Reason: This code change is intended to be submitted in collaboration with the state of Washington to correlate with their new proposal in Section 421 for Ambulatory Health Care Facilities. Oregon, as well as other states, have made modifications to areas of the code affected by Clinic-outpatient facilities. These modifications and national certification requirements recognize that there are additional levels of protection required where patients are not capable of caring for them self. Finding common ground and putting these modifications into the model code would provide greater consistency across the country.

The amendment in Section 304.1 simply limits the number of patients who are not capable of self-preservation to three or fewer by adding a definition. There is also a reference that sends the reader to Section 421 for facilities that provide service to more than three patients incapable of self preservation.

Cost Impact: For facilities abiding by the requirements for federal funding, or for those areas who are modifying the code in a similar respect, the code change proposal will not increase the cost of construction.

However, for areas where outpatient clinics are allowed to provide services that would render patients incapable of self-preservation and be classified as a B occupancy, there would be an increase to the cost of construction.

Additionally, when a facility is not built to the standards required to receive federal funding, and they would then choose to become certified later, another additional cost could be imposed upon the facility.

Analysis: Note that the Section 421 that is referenced in this definition is a new section proposed in code change proposal Williams G23-07/08.

Public Hearing Results

Committee Action: **Approved as Modified**

Modify the proposal as follows:

304.1.1 (IFC [B] 202) Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

CLINIC-OUTPATIENT. ~~A medical office or facility serving patients who are capable of self-preservation, or where not more than three patients are rendered incapable of self-preservation and the facility is on the level of exit discharge. Facilities with four or more patients who are rendered incapable of self-preservation or where one or more patients that are incapable of self-preservation are located at other than the level of exit discharge are Ambulatory Health Care Facilities (see Section 421.)~~ Buildings or portions thereof used to provide medical care on less than a 24-hour basis to individuals who are not rendered incapable of self-preservation by the services provided.

Committee Reason: The definition clarifies the difference between ambulatory surgery centers as addressed in G23-07/08 and doctors offices. The modification is simply to correlate more closely with G23-07/08.

Assembly Action: **None**

Final Hearing Results

G24-07/08 **AM**

Code Change No: G25-07/08

Original Proposal

Sections: 306.2 (IFC [B] 202), 311.2 (IFC 202.1), 311.3 (IFC 202.1), 421.2.1(New), [F] 412.2.6 (IFC 914.8.2), Table [F] 421.2.6 (IFC Table 914.8.2) (New), [F] 412.2.6.1 (IFC 914.8.2.1) (New), [F] 412.2.6.2 (IFC 914.8.2.2) (New)

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing the Joint Fire Service Review Committee

THESE PROPOSALS ARE ON THE AGENDA OF THE IBC GENERAL AND IFC CODE DEVELOPMENT COMMITTEES AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IBC GENERAL

Revise as follows:

306.2 (IFC 202) Factory Industrial F-1 Moderate-hazard Occupancy. Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Aircraft (manufacturing, not to include repair)
Appliances
Athletic equipment
Automobiles and other motor vehicles
Bakeries
Beverages; over 12-percent alcohol content
Bicycles
Boats
Brooms or brushes
Business machines
Cameras and photo equipment

Canvas or similar fabric
Carpets and rugs (includes cleaning)
Clothing
Construction and agricultural machinery
Disinfectants
Dry cleaning and dyeing
Electric generation plants
Electronics
Engines (including rebuilding)
Food processing
Furniture
Hemp products
Jute products
Laundries
Leather products
Machinery
Metals
Millwork (sash & door)
Motion pictures and television filming (without spectators)
Musical instruments
Optical goods
Paper mills or products
Photographic film
Plastic products
Printing or publishing
Refuse incineration
Shoes
Soaps and detergents
Textiles
Tobacco
Trailers
Upholstering
Wood; distillation
Woodworking (cabinet)

311.2 (IFC 202) Moderate-hazard storage, Group S-1. Buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

Aerosols, Levels 2 and 3
Aircraft ~~repair~~ hangar
Bags: cloth, burlap and paper
Bamboos and rattan
Baskets
Belting: canvas and leather
Books and paper in rolls or packs
Boots and shoes
Buttons, including cloth covered, pearl or bone
Cardboard and cardboard boxes
Clothing, woolen wearing apparel
Cordage
Dry boat storage (indoor)
Furniture
Furs
Glues, mucilage, pastes and size
Grains
Horns and combs, other than celluloid
Leather
Linoleum
Lumber

Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.1(1) (see Section 406.6)
Photo engravings
Resilient flooring
Silks
Soaps
Sugar
Tires, bulk storage of
Tobacco, cigars, cigarettes and snuff
Upholstery and mattresses
Wax candles

311.3 (IFC 202) Low-hazard storage, Group S-2. Includes, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products are permitted to have a negligible amount of plastic trim, such as knobs, handles or film wrapping. Storage uses shall include, but not be limited to, storage of the following:

~~Aircraft hangar~~
Asbestos
Beverages up to and including 12-percent alcohol in metal, glass or ceramic containers
Cement in bags
Chalk and crayons
Dairy products in nonwaxed coated paper containers
Dry cell batteries
Electrical coils
Electrical motors
Empty cans
Food products
Foods in noncombustible containers
Fresh fruits and vegetables in nonplastic trays or containers
Frozen foods
Glass
Glass bottles, empty or filled with noncombustible liquids
Gypsum board
Inert pigments
Ivory
Meats
Metal cabinets
Metal desks with plastic tops and trim
Metal parts
Metals
Mirrors
Oil-filled and other types of distribution transformers
Parking garages, open or enclosed
Porcelain and pottery
Stoves
Talc and soapstones
Washers and dryers

PART II – IFC

1. Revise as follows:

[F] 412.2.6 (IFC 914.8.2) Fire suppression. Aircraft hangars shall be provided with a fire suppression system designed in accordance with ~~as required by~~ NFPA 409, based upon the classification for the hangar given in Table 412.2.6.

Exception: When a Fixed Base Operator has separate repair facilities on site, Group II hangars operated by a Fixed Base Operator used for storage of transient aircraft only~~, as defined in NFPA 409, storing private aircraft without major maintenance or overhaul are~~ shall have a fire suppression system, but the system is exempt from foam ~~suppression~~ requirements.

2. Add new table and text as follows:

[F] TABLE 412.2.6 (IFC TABLE 914.8.2)
HANGAR FIRE SUPPRESSION REQUIREMENTS[a,b]

Maximum Single Fire Area, sq. ft. (m^2)	Type of Construction								
	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
>40,001 (3,716)	Group I	Group I	Group I	Group I	Group I	Group I	Group I	Group I	Group I
40,000 (3,716)	Group II	Group II	Group II	Group II	Group II	Group II	Group II	Group II	Group II
30,000 (2,787)	Group III	Group II	Group II	Group II	Group II	Group II	Group II	Group II	Group II
20,000 (1,858)	Group III	Group III	Group II	Group II	Group II	Group II	Group II	Group II	Group II
15,000 (1,394)	Group III	Group III	Group III	Group II	Group III	Group II	Group III	Group II	Group II
12,000 (1,115)	Group III	Group III	Group III	Group III	Group III	Group III	Group III	Group II	Group II
8,000 (743)	Group III	Group III	Group III	Group III	Group III	Group III	Group III	Group III	Group II
5,000 (465)	Group III	Group III	Group III	Group III	Group III	Group III	Group III	Group III	Group III

a. Aircraft hangars with a door height greater than 28 feet shall be provided with fire suppression for a Group I hangar regardless of maximum fire area.
b. Groups shall be as classified in accordance with NFPA 409.

[F] 412.2.6.1 (IFC 914.8.2.1) Hazardous Operations. Any Group III aircraft hangar according to Table 914.8.2 that contains hazardous operations including, but not limited to, the following shall be provided with a Group I or Group II fire suppression system in accordance with NFPA 409 as applicable:

1. Doping.
2. Hot work including, but not limited to welding, torch cutting, and torch soldering.
3. Fuel transfer.
4. Fuel tank repair or maintenance not including de-fueled tanks per NFPA 409, inerted tanks or tanks that have never been fueled.
5. Spray finishing operations.
6. Total fuel capacity of all aircraft within the non-sprinklered single fire area in excess of 1,600 gal (6057 L).
7. Total fuel capacity of all aircraft within the maximum single fire area in excess of 7,500 gal (28,390 L) for a hangar with a fire sprinkler system per Section 903.3.1.1.

[F] 412.2.6.2 (IFC 914.8.2.2) Separation of maximum single fire areas. Maximum single fire areas established in accordance with hangar classification and construction type in Table 914.8.2 shall be separated by 2 hour fire walls constructed in accordance with Section 705.

412.2.1 DEFINITIONS. The following word and term shall, for the purposes of this chapter and as used elsewhere in this code, have the meaning shown herein.

FIXED BASE OPERATOR (FBO). A commercial business granted the right by the airport sponsor to operate on an airport and provide aeronautical services such as fueling, hangaring, tie-down and parking, aircraft rental, aircraft maintenance, and flight instruction.

TRANSIENT AIRCRAFT. Aircraft based at another location and is at the transient location for not more than 90 days.

Reason: The current fire suppression requirements found in the IBC and IFC for aircraft hangars are confusing at best. The IBC and IFC require: "Aircraft hangars shall be provided with fire suppression as required by NFPA 409." Neither the IBC nor the IFC gives any guidance when going to NFPA 409 on how to use that standard. In addition, the exception to the fire suppression requirements uses two terms that have no definition. Those terms are: "private aircraft" and "major maintenance or overhaul."

"Private aircraft" is difficult to define. For example, is a Cessna 210 owned my a corporation a private aircraft or the Gulfstream V (which carries over 6,700 gallons of fuel and has a range of that similar to a 737) owned by a celebrity a private aircraft? The FAA does not define aircraft this way and the reference to "private aircraft" is confusing and difficult to enforce and administer.

"Major maintenance or overhaul" is another term that is difficult to define. The FAA cannot even define "major maintenance" in a way intended by the IBC and IFC. The FAA has a document that all aircraft owners and operators have. It is CFR Part 43 Appendix A. There is no definitive list is this document that the code official can use when determining the extent of maintenance in an aircraft hangar. In addition, NFPA 409 makes no mention of "maintenance" for any of its requirements except for certain "hazardous operations" in Group III hangars.

This proposal will eliminate these two terms because they are difficult to define and they are not necessary when determining the fire suppression requirements from NFPA 409. There is an exception for the foam requirements in the IBC and IFC that use these terms. The

exception to 914.8.2 is intended for those aircraft hangars that Flight Base Operators (FBO) use for visiting aircraft to an airport. The FBO will have other repair facilities on the airport and the "storage" hangar is intended for short-term storage only inside a hangar from the weather.

In place of the "private aircraft" and "major maintenance" terms, this proposal adds the term "transient aircraft." This better identifies the intent of this type of aircraft hangar. It seems that most frequently, the owner that wants to develop an aircraft hangar that fits the Group II category, will do no "major maintenance" and will only "store" airplanes in their hangar. This becomes a significant enforcement issue after the hangar is built and occupied, as everyone will then only be doing minor repair even though the aircraft engine is in pieces or a wing is lying on the floor of the hangar. NFPA 409 does not use "maintenance" as a criterion to determine the fire suppression requirements for any aircraft hangars except for Group III hangars where certain "hazardous" operations are conducted. Even then, if those "hazardous" operations are done, the group type of the hangar goes from a Group III hangar to a Group II.

The other aspect of maintenance that the IBC and IFC ignore is that of the maintenance of "experimental" aircraft. The experimental aircraft owner will always maintain and repair his or her aircraft as an FAA mechanic "will not" work on an experimental aircraft. An FAA mechanic cannot work on an experimental aircraft because there is no "service manual" for the aircraft like there is for a factory built aircraft. On every airport in the country where there are T-hangars, one will find experimental aircraft. As the codes currently read, this then becomes an enforcement problem requiring the code official to monitor maintenance in the T-hangars, which is not the intent of NFPA 409. NFPA 409 intends that maintenance be done in the small hangars just like in the large hangars.

Because repair is intended in NFPA 409 in aircraft hangars, this proposal eliminates the S-2 occupancy classification for "storage" aircraft hangars. The S-2 occupancy classification is confusing to the designer and code official and serves no purpose. The S-1 occupancy classification is all that is needed. When one looks at NFPA 409 to determine the fire suppression requirements, one will find that the Group III hangars have no fire suppression requirements except for during certain hazardous operations. NFPA 409 recognizes that in these small aircraft hangars there will be repair operations and has determined that fire suppression is not required due to the small size of the aircraft hangars. As the IBC and IFC are currently worded, if a designer were to select the S-2 occupancy classification, that hangar could not contain any repair operations. This does a disservice to the hangar owner and anyone who may lease or rent an aircraft space in that hangar. A Group III hangar could be as large as 12,000 square feet in area with Type IIB construction without any fire suppression systems and NFPA 409 would allow repair activities in that aircraft hangar.

NFPA 409 also limits the size of the small hangars with the definitions of a "single hangar building" and the "cluster hangar" for Group III aircraft hangars. These two definitions limit the size and location separations of these two types of hangars, which is part of the fire suppression scheme for Group III hangars. NFPA handles the lack of required separation of hangar buildings by requiring two two-hour walls on each hangar building. This seems to be like a "fire wall" as defined by IBC Section 705. This proposal thus adds this requirement for separation of single hangar buildings with a fire wall as defined by IBC Section 705 in lieu of the NFPA 409 requirement of two 2-hour walls.

NFPA 409 specifies fire protection for aircraft hangars based on Group I, Group II or Group III hangar, but the IBC and IFC do not define aircraft hangars using these terms. This proposal adds a table that coordinates the IBC/IFC terms and construction requirements with the fire protection design requirements found in NFPA 409 for Group I, II and III hangars. This table is based on correlating the NFPA construction and area limits with the IBC and IFC construction requirements. This table combines several tables in NFPA 409 into a single table that allows determination of the group type for aircraft hangars based on construction type and area before proceeding to NFPA 409 for the suppression requirements.

This proposal will simplify the current IBC and IFC requirements for aircraft hangars and make the codes easier to use by both the aircraft hangar designer and the code official.

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

Public Hearing Results

PART I – IBC GENERAL

Committee Action: **Approved as Modified**

Modify proposal as follows:

311.2 (IFC 202) Moderate-hazard storage, Group S-1. Buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

Aerosols, Levels 2 and 3
Aircraft hangar (storage and repair)
Bags: cloth, burlap and paper
Bamboos and rattan
Baskets
Belting: canvas and leather
Books and paper in rolls or packs
Boots and shoes
Buttons, including cloth covered, pearl or bone
Cardboard and cardboard boxes
Clothing, woolen wearing apparel
Cordage
Dry boat storage (indoor)
Furniture
Furs
Glues, mucilage, pastes and size
Grains
Horns and combs, other than celluloid
Leather
Linoleum
Lumber
Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.1(1) (see Section 406.6)

Photo engravings
Resilient flooring
Silks
Soaps
Sugar
Tires, bulk storage of
Tobacco, cigars, cigarettes and snuff
Upholstery and mattresses
Wax candles

(Portions of proposal not shown remain unchanged)

Committee Reason: The proposal was approved as it was felt that Group S1 is a more appropriate classification and that a Group H classification would be too limiting. The modification clarifies that repairs can occur in Group S-1 occupancies which as originally written would have been unclear.

Assembly Action: **None**

PART II – IFC
Committee Action: **Approved as Modified**

Modify the proposal as follows:

[F] TABLE 412.2.6 (IFC TABLE 914.8.2)
HANGAR FIRE SUPPRESSION REQUIREMENTS [a,b,c]

(No change to table contents)

a. Aircraft hangars with a door height greater than 28 feet shall be provided with fire suppression for a Group I hangar regardless of maximum fire area.
b. Groups shall be as classified in accordance with NFPA 409.
c. Membrane structures complying with Section 3102 of the *International Building Code* shall be classified as a Group IV hangar.

(Portions of proposal not shown remain unchanged)

Committee Reason: The committee agreed that the proponent's reason statement accurately and adequately substantiates the need for the change. This code change represents a comprehensive effort to resolve a long-standing problem in how to apply the provisions of NFPA 409 as referenced without creating conflict with the construction requirements of the IBC. This also correlates with the action taken by the IBC-G Committee in Part I. The modification provides additional guidance on the appropriate treatment of membrane structures which are often used to shelter aircraft.

Assembly Action: **None**

Final Hearing Results

G25-07/08, Part I	**AM**
G25-07/08, Part II	**AM**

Code Change No: G26-07/08

Original Proposal

Sections: 306.2, 306.3, 311.3 (IFC [B] 202)

Proposed Change as Submitted:

Proponent: Gary L. Rencehausen, Lewiston, ID, representing himself

1. Revise as follows:

306.2 (IFC [B] 202) Factory Industrial F-1 Moderate-hazard Occupancy. Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Aircraft
Appliances
Athletic equipment
Automobiles and other motor vehicles
Bakeries
Beverages; over ~~12-~~ 16-percent alcohol content
Bicycles
Boats
Brooms or brushes
Business machines
Cameras and photo equipment
Canvas or similar fabric
Carpets and rugs (includes cleaning)
Clothing
Construction and agricultural machinery
Disinfectants
Dry cleaning and dyeing
Electric generation plants
Electronics
Engines (including rebuilding)
Food processing
Furniture
Hemp products
Jute products
Laundries
Leather products
Machinery
Metals
Millwork (sash & door)
Motion pictures and television filming (without spectators)
Musical instruments
Optical goods
Paper mills or products
Photographic film
Plastic products
Printing or publishing
Recreational vehicles
Refuse incineration
Shoes
Soaps and detergents
Textiles
Tobacco
Trailers
Upholstering
Wood; distillation
Woodworking (cabinet

306.3 (IFC [B] 202) Factory Industrial F-2 Low-hazard Occupancy. Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials which during finishing, packing or processing do not involve a significant fire hazard shall be classified as F-2 occupancies and shall include, but not be limited to, the following:

Beverages; up to and including ~~12-~~ 16-percent alcohol content
Brick and masonry
Ceramic products
Foundries
Glass products
Gypsum
Ice
Metal products (fabrication and assembly)

311.3 (IFC [B] 202) Low-hazard storage, Group S-2. Includes, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products are permitted to have a negligible amount of plastic trim, such as knobs, handles or film wrapping. Storage uses shall include, but not be limited to, storage of the following:

Aircraft hangar
Asbestos
Beverages up to and including ~~12-~~ 16-percent alcohol in metal, glass or ceramic containers
Cement in bags
Chalk and crayons
Dairy products in nonwaxed coated paper containers
Dry cell batteries
Electrical coils
Electrical motors
Empty cans
Food products
Foods in noncombustible containers
Fresh fruits and vegetables in nonplastic trays or containers
Frozen foods
Glass
Glass bottles, empty or filled with noncombustible liquids
Gypsum board
Inert pigments
Ivory
Meats
Metal cabinets
Metal desks with plastic tops and trim
Metal parts
Metals
Mirrors
Oil-filled and other types of distribution transformers
Parking garages, open or enclosed
Porcelain and pottery
Stoves
Talc and soapstones
Washers and dryers

Reason: I am proposing a change and an alternative, and I will try and explain both.

I am part owner in a small startup winery and we are hoping to relocate into part of an older existing downtown building. For us getting the code change would allow us to build a 2 hour fire wall, opposed to a 3 hour fire wall required by the F-1, moderate hazard class for liquids 12% alcohol and above.

The 12% was a relatively arbitrary number. I spoke with William Stuart the architect who submitted the change to allow up to 12% from the 0% that it was prior to 2000. He stated that not being a avid wine drinker he had simply reached in to the cupboard and pulled out a bottle of Gallo and it listed it's alcohol at 12% and that was what he used as his standard. If his intent was to allow the production and storage of wine in the F-2 class then for the most part he failed…

In my opinion there are two other logical choices for an alcohol % limit. Twenty percent alcohol would be the first choice with 16% being the alternate. I will try to explain both. I don't know how familiar the code council is with the making of wine so I will include a very brief description of the process. In a juice adding a yeast will turn the natural sugar into alcohol. It is a self limiting process, in that most common wine yeast will die off as the alcohol raises to between 12 and 16.% (depending mostly on the type of yeast). A good dry red wine will often finish at 14 to 15 %. (And it may be a little higher at some point during the process) To reach a higher alcohol % the wine needs to be fortified by adding alcohol. Such is the case of Port style wines where brandy is added to bring the alcohol up 18 -20% which is the usual upper limit of fortified wines. I hope that explains my justification for the two higher limit proposals.

From the chart included (Flash Points of Ethanol based Water Solutions) you can see if you extrapolate 15% would be about 120 degrees F. Now it is possible that during the fermentation process the must (the juice, skin and seed solution) might approach 95 to 100 degrees F. This would typically be near the mid point of the fermentation cycle when the alcohol would be in the 8-10% range. As the process continues and must (wine) reaches the 15 % level the fermentation slows down and the temp drops to room temp (65 to 70 degrees F). Were the wine then to be fortified it is here at this temp that alcohol would be added. I might also add here that another byproduct of the fermentation process is the production of CO_2 and being heaver than air it floats on top of the fermentation vats. CO_2 will not support combustion, in fact one method of checking to insure the fermentation process is still working is to hold a match over the vat, as soon as the match drops below the rim of the vat it goes out.

In conclusion I have added a couple of letters that give a little insight into how an alcohol/water solution is classified as a waste product. It doesn't appear that raising the limit to 16 or 20 % significantly raises the risks in the production of wine. The 16 or 20 % alcohol is still less than the ignitability of wine with the temperatures we see in the production of wine.

I think that raising the limit would not only open up some possibilities for other wineries but also for other downtown areas where a winery might well help in their revitalization.

Cost Impact: The code change proposal will actually decrease the cost of construction.

Public Hearing Results

Committee Action: **Disapproved**

Committee Reason: Other types of beverages beyond simply wine were not addressed in the reason and the flashpoint data was not provided as noted in the reason. The committee had concerns as to how other alcohol would relate to this new classification in terms of possible unnecessary hazards posed.

Assembly Action: **None**

Public Comments

Individual Consideration Agenda

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

Public Comment 1:

Gary L. Rencehausen, Lewiston, ID, representing himself requests Approval as Submitted.

Commenter's Reason: I'm not sure how to address "other types of beverages" I would say though that simple wine would include 99 + % of the production of beverages that fall into the category of the 12 to 16 % that I'm trying to change.

Flashpoint data of ethanol based water solutions from EngineeringToolBox.com are: 135 deg. for 10% solution and 105 deg. for 20% solution this gives approximately 129 deg and 117 deg for 12 and 16 % respectively. Given that the ideal storage temp for wines is below 60 deg. and in manufacturing it is unlikely to exceed 85 deg. this seems a safe margin. The term Flashpoint brings to mind images of exploding barrels of wine. This is unlikely to happen, and it does not mean that you can heat a container of wine to 140 degrees or more and toss in a match and it will burn. It is theoretically possible that if you had a closed container half full of wine and heated it up you could collect enough alcohol to flash if a flame was introduced, but it would not burn. Barrels and tanks ate kept full (air is not good to wine) so there is no room to collect vaporizing alcohol. Even in an open container the vaporizing alcohol is most likely to dissipate and dilute in the air before it would flash. This proposal is a reasonable and prudent change with a minimum risks to life and health safety issues.

Public Comment 2:

Maureen Traxler, City of Seattle Department of Planning and Development, requests Approval as Submitted.

Commenter's Reason: This is a modest proposal that would ease an unnecessarily restrictive provision. It changes the threshold at which beverages are classified as F-1 or S-1 from 12% to 16% alcohol content. There is very little fire hazard from beverages with alcohol content this low.

This change would only affect regular wines. The highest alcohol content in unfortified wines is found in premium red wines which have alcohol content under 15%. Fortified and port-style wines have a higher alcohol content because brandy or other distilled beverages have been added to them. Brandy is distilled wine with an alcohol content of 40% or more, similar to whiskey.

G27-07/08, which raises the alcohol content to 20%, would include fortified wines. We encourage disapproval of G27, not because of the wine, but because of the amount of higher-alcohol content liquids that are present during the production of fortified wines.

Final Hearing Results

G26-07/08 **AS**

Code Change No: G28-07/08

Original Proposal

Sections: [F] 307.1 (IFC 202)

Proponent: Robert J Davidson, Davidson Code Concepts, LLC, representing himself

THIS PROPOSAL IS ON THE AGENDA OF THE IFC CODE DEVELOPMENT COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THE IFC CODE DEVELOPMENT COMMITTEE.

Revise as follows:

[F] 307.1 (IFC 202) (Supp) High-hazard Group H. High-hazard Group H occupancy includes, among others the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those allowed in control areas complying with Section 414, based on the maximum allowable quantity limits for control areas set forth in Tables 307.1(1) and 307.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the *International Fire Code*.

Exceptions: The following shall not be classified as Group H, but shall be classified as the occupancy that they most nearly resemble.

1. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 and the *International Fire Code*.
2. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the *International Fire Code*.
3. Closed piping system containing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.
4. Cleaning establishments that utilize combustible liquid solvents having a flash point of 140°F (60°C) or higher In closed systems employing equipment listed by an approved testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour fire barriers or 1-hour horizontal assemblies or both.
5. Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).
6. Liquor stores and distributors without bulk storage.
7. Refrigeration systems.
8. The storage or utilization of materials for agricultural purposes on the premises.
9. Stationary batteries utilized for facility emergency power, uninterrupted power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and ventilation is provided in accordance with the *International Mechanical Code*.
10. Corrosives shall not include personal or household products in their original packaging used in retail display or commonly used building materials.
11. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of the *International Fire Code*.
12. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the maximum allowable quantity per control area in Group M or S occupancies complying with Section 414.2.5.
13. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the *International Fire Code*.
14. Canopies used to shelter dispensing operations where flammable compressed gases are located on the roof of the canopy, provided that such canopies comply with Section 406 and the *International Fire Code.*

Reason: Section 307.1 Applies to buildings or structures. A canopy at a motor fuel-dispensing facility is a structure. This proposed code change is intended to clarify that canopies that are used to shelter dispensing operations where flammable compressed gases are located on the roof of the canopy should not be classified in Group H.

The need for this clarification was identified during a “Hydrogen Fueling Station Permitting Workshop” held on July 10, 2007 that was co-sponsored by the United States Department of Energy and the National Association of State Fire Marshals. Building and fire code officials participating in the workshop believe the plain language of Section 307.1 would require classifying the canopy, (which is enclosed at the roof line on four sides), as an H Group structure, and that an exception should be added as clarification.

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

Public Hearing Results

This code change was heard by the IFC Code Development Committee.

Committee Action: **Approved as Modified**

Modify the proposal as follows:

[F] 307.1 (IFC 202) (Supp) High-hazard Group H. High-hazard Group H occupancy includes, among others the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those allowed in control areas complying with Section 414, based on the maximum allowable quantity limits for control areas set forth in Tables 307.1(1) and 307.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the *International Fire Code*.

Exceptions: The following shall not be classified as Group H, but shall be classified as the occupancy that they most nearly resemble:

1. through 13. (No change)
14. Canopies used to shelter dispensing operations where ~~flammable~~ compressed hydrogen gases are located on the roof of the canopy, provided that such canopies comply with Section 406 and the *International Fire Code.*

Committee Reason: The proposal was approved because the committee felt that it provides clarification that weather shelter canopies that store hydrogen gas on their roofs at gaseous motor-fuel dispensing facilities do not create a Group H occupancy. The modification further clarifies the intent of the exception that it applies only to hydrogen, a lighter-than-air flammable gas, and not to all flammable gases.

Assembly Action: **None**

Public Comments

Individual Consideration Agenda

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

Public Comment:

Jeffrey Shapiro, International Code Consultants and Robert J. Davidson, Davidson Code Concepts, LLC, representing themselves, request Approval as Modified by this public comment.

Further modify proposal as follows:

[F] 307.1 (IFC 202) (Supp) High-hazard Group H. High-hazard Group H occupancy includes, among others the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those allowed in control areas complying with Section 414, based on the maximum allowable quantity limits for control areas set forth in Tables 307.1(1) and 307.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the *International Fire Code*.

Hazardous materials stored or used on top of roofs or canopies shall be classified as outdoor storage or use and shall comply with the *International Fire Code.*

Exceptions: The following shall not be classified as Group H, but shall be classified as the occupancy that they most nearly resemble:

1. through 13. (No change)
~~14. Canopies used to shelter dispensing operations where compressed hydrogen gases are located on the roof of the canopy, provided that such canopies comply with Section 406 and the *International Fire Code.*~~

Commenter's Reason: It was never the intent of the code to assign a Group H occupancy classification to rooftop or canopy top storage, and by providing an exception to the Group H occupancy classification for hydrogen fuel in such conditions, the implication is that any other material in a similar situation would trigger Group H. To fix this problem, the exception text has been relocated to the main paragraph, and the text has been broadened to clarify the intent of the code for all such storage or use, not just hydrogen.

Final Hearing Results

G28-07/08 **AMPC**

Code Change No: G30-07/08

Original Proposal

Sections: 308.3 (IFC [B] 202), 308.3.1(IFC [B] 202)

Proponent: Roger Severson, RSA Consulting, representing the Oregon Department of Health Services

1. Revise as follows:

308.3 (IFC [B] 202) Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care ~~on a 24-hour basis~~ for ~~more than five~~ persons who are not capable of self-preservation. This group shall include, but not be limited to, the following:

Hospitals
Nursing homes ~~(both intermediate care facilities and skilled nursing facilities)~~
Mental hospitals
Detoxification facilities

~~A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code*.~~

2. Revise as follows:

308.3.1 (IFC [B] 202) Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

CHILD CARE ~~FACILITY~~ FACILITIES. ~~A~~ Child care ~~facility~~ facilities that provide~~s~~ care on a 24-hour basis to more than five children, $2^1/_2$ years of age or less, shall be classified as Group I-2.

DETOXIFICATION FACILITY. Detoxification facilities serve patients who are provided treatment for substance abuse on a 24-hour basis and who are incapable of self-preservation or who are harmful to others.

HOSPITALS AND MENTAL HOSPITALS. A building or portion thereof used on a 24-hour basis for the medical, psychiatric, obstetrical, or surgical treatment of inpatients who are incapable of self-preservation.

NURSING HOMES. Nursing homes are long-term care facilities on a 24-hour basis, including both intermediate care facilities and skilled nursing facilities, serving more than five persons and any of the persons are incapable of self-preservation.

Reason: (Note: Sections 308.1 and 308.2 are unchanged. Section 308.3 is amended for greater conformity of specific facility functions by moving the "hourly basis" and the number of persons into definitions specific to each topic.) A new facility title has been added which works in concert with an amendment to Section 304.1, clinic-outpatient. This new facility reference is for Ambulatory Health Care Facilities and completes the package for outpatient care where patients are not capable of self-preservation.

The only existing sub-section in 308.3 is for Child Care Facilities. Because it is written to look like a defined statement, it's section was changed to become a definitions section and the title and content for Child care facilities was added to the new list of definitions.
The reference to R-3 is deleted because I-2 health care facilities, such as these, are not legally capable of operating in R-3 occupancies, regardless of the number of patients.

Cost Impact For facilities abiding by the requirements for federal funding, or for those areas who are modifying the code in a similar respect, the code change proposal will not increase the cost of construction.

However, for areas where outpatient clinics are allowed to provide services that would render patients incapable of self-preservation and be classified as a B occupancy, there would be an increase to the cost of construction.

Additionally, when a facility is not built to the standards required to receive federal funding, and they would then choose to become certified, another additional cost could be imposed upon the facility.

Public Hearing Results

Committee Action: **Approved as Modified**

Modify the proposal as follows:

DETOXIFICATION FACILITY. Detoxification facilities serve patients who are provided treatment for substance abuse on a 24-hour basis and who are incapable of self-preservation or who are harmful to themselves or others.

(Portions of proposal not shown remain unchanged)

Committee Reason: This proposal will help to better determine the types of facilities during the plan review process. The modification further clarifies that detoxification facilities focus on not only the patients possibly harming others but also focuses on the fact that they may be a harm to themselves.

Assembly Action: **None**

Final Hearing Results

G30-07/08 **AM**

Code Change No: G36-07/08

Original Proposal

Sections: 310.1 (IFC [B] 202)

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing the Joint Fire Service Review Committee

Revise as follows:

310.1 (IFC [B] 202) (Supp) Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2. Residential occupancies shall include the following:

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

Boarding houses (transient)
Hotels (transient)
Motels (transient)

Congregate living facilities (transient) with 10 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

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

Apartment houses
Boarding houses (not transient)
Convents
Dormitories
Fraternities and sororities
Hotels (nontransient)
Live/work units
Monasteries
Motels (nontransient)
Vacation timeshare properties

Congregate living facilities with 16 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

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

Buildings that do not contain more than two dwelling units.
Adult care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.
Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.
Congregate living facilities with 16 or fewer persons.

Adult care and child care facilities that are within a single-family home are permitted to comply with the *International Residential Code*

.

R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code~~, or shall comply with the *International Residential Code*~~.

Exception: Facilities complying with the *International Residential Code* need not meet the construction requirements of a Group R-3 provided that the building is protected by an automatic extinguishing system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

Reason: R-4 occupancies can house residents who cannot evacuate within a reasonable amount of time. This change would restrict builders from using the less restrictive IRC unless the home is equipped with a fire sprinkler system. This proposal will require a fire sprinkler system in all R-4 occupancies. A fire sprinkler system is required by federal regulations for any of these facilities that may also be licensed.

Cost Impact: This proposal will increase the cost of construction, unless the facility is also desiring compliance with federal regulations.

Public Hearing Results

Committee Action: **Approved as Modified**

Modify the proposal as follows:

R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code or shall comply with the *International Residential Code* provided the building is protected by an automatic extinguishing system installed in accordance with Section 903.2.7

~~**Exception:** Facilities complying with the *International Residential Code* need not meet the construction requirements of a Group R-3 provided that the building is protected by an automatic extinguishing system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~

(Portions of proposal not shown remain unchanged)

Committee Reason: The proposal was approved based upon the proponent's reason which is concerned with the lifesafety of occupants in Group R-4 occupancies this relates to both their ability to evacuate quickly and the number of occupants. The modification is felt to be cleaner language than the currently proposed exception. The meaning of the language is the same. There were some concerns expressed by committee members that proper justification for requiring sprinklers was not provided by the proponent.

Assembly Action: **None**

Final Hearing Results

G36-07/08 **AM**

Code Change No: G46-07/08

Original Proposal

Sections: [F] 403.2.1 (New), 403.2.1.1 (New), [F] 403.2.1.1.1 (New), [F] 403.2.1.2 (New), [F] 403.2.2 (New) [IFC 914.3.1.1 (New), IFC 914.3.1.1.1 (New), IFC 914.3.1.1.1.1 (New), IFC 914.3.1.1.2 (New), IFC 914.3.1.2 (New); IFC 509.1 (IBC [F] 911.1)

Proponent: Gary Lewis, Chair, representing the ICC Ad Hoc Committee on Terrorism Resistant Buildings

1. Add new text as follows:

[F] 403.2.1 (IFC 914.3.1.1) Sprinkler riser redundancy and isolation. All buildings that are more than 420 feet (128 m) in height shall have all risers supplying automatic sprinkler systems interconnected to each other at the top and bottom most floor of each vertical riser zone. The interconnections shall be at least as large as the largest riser supplied.

[F] 403.2.1.1 (IFC 914.3.1.1.1) Number of risers and separation. A minimum of two sprinkler water supply risers shall be provided in each vertical riser zone of the building. Sprinkler water supply risers shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between the nearest portion of the sprinkler water supply risers.

[F] 403.2.1.1.1 (IFC 914.3.1.1.1.1) Hydraulic design evaluations. Independent hydraulic design evaluations shall be completed utilizing individual water supply risers for each vertical riser zone. System hydraulic design shall not be based upon redundancy of water supply risers for each vertical riser zone.

[F] 403.2.1.2 (914.3.1.1.2) Control valves. Manual and remote control valves shall be provided on all riser piping supplying automatic sprinkler systems at every third floor of the building served. This requirement is independent of sprinkler floor control valves required by Section 903.4.3

[F] 403.2.2 (IFC 914.3.1.2) Water supply to required fire pumps. Required fire pumps shall draw from a minimum of two independent street level water mains located in different streets.

> **Exception**: When the street level water main is a looped or gridded system, two taps may by drawn from the same main provided the main is valved such that an interruption on one side of the loop or grid can be isolated so that the water supply will continue without interruption through at least one of the taps. Each tap shall be sized to supply the required flow. The taps shall be located as remote from one another as is practicable given the site conditions.

2. Revise as follows:

IFC 509.1 (IBC [F] 911.1) (Supp) Features. Where required by other sections of this code and in all buildings classified as high-rise buildings by the *International Building Code*, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. The fire command center shall be separated from the remainder of the building by not less than a 1-hour fire barrier constructed in accordance with Section 706 of the *International Building Code* or horizontal assembly constructed in accordance with Section 711 of the *International Building Code*, or both. The room shall be a minimum of 96 square feet (9 m^2) with a minimum dimension of 8 feet (2438 mm). A layout of the fire command center and all features required by this section to be contained therein shall be submitted for approval prior to installation. The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system unit.
2. The fire department communications system.
3. Fire-detection and alarm system annunciator system.
4. Annunciator visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air-handling systems.
6. The fire-fighter=s control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire-fighting equipment and fire department access.
13. Work table.
14. Generator supervision devices, manual start and transfer features.
15. Public address system, where specifically required by other sections of this code.
16. Elevator fire recall switch in accordance with ASME A17.1.
17. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.
18. Controls and status indicators for remote control valves on vertical sprinkler/standpipe risers

Reason: The purpose of this proposed change is to increase the reliability of fire suppression systems in very tall buildings, those that exceed 420 feet in height, by requiring looping of sprinkler uses and independent street-level water feeds.

The difficulty of fighting fires in very tall buildings ranges from hard to virtually impossible. Accordingly, the reliable functioning of required sprinkler systems is critically important. The National Institute of Standards and Technology (NIST) World Trade Center (WTC) Report documented that the proximate cause of the collapse was a building contents fire that raged out of control, in part at least, because the building's fire sprinkler systems were non-functional due to the initial aircraft attack. Events far less dramatic could knock out or make a sprinkler riser inoperative, thereby leaving the structure very vulnerable to fire.

Recommendation 12 of the NIST WTC report calls for the redundancy of active fire suppression systems to be increased to accommodate the greater risks associated with increasing building height and population. This proposal seeks to do that by providing two water feeds to each floor designed such that the system will function as intended if one of those feeds is damaged or otherwise interrupted.

It is interesting to note that existing standards for water mains in residential subdivisions call for looping and valving to ensure that no more than 20 homes could be cut off by a water main break. Such a break would create a fire suppression risk for 4 people (the average occupancy of one home) or no more than 80 people (assuming all 20 homes catch fire). In contrast, we do not require looping and valving to isolate failure in buildings that might contain 10,000 occupants. This proposal seeks to correct that problem.

Proposed new Subsection 403.2.1 requires the interconnection (looping) of sprinkler risers in each vertical zone.

Proposed new Subsection 403.2.1.1 requires two risers for every zone and specifies a separation distance to reduce the possibility that one incident could incapacitate both risers.

Proposed new Subsection 403.2.1.1.1 ensures that the sprinkler system will be designed to function as intended and required from either riser. This is consistent with the goal of providing redundancy.

Proposed new Subsection 403.2.1.2 requires riser control valves at every third floor of the building. This provision supports the stated intent of this code change by ensuring that a riser break (or other problem eliminating the riser's functionality) will not leave more then two floors without the required sprinkler protection. Standpipe control valves are already required to be monitored and NFPA 14 requires redundancy. However, the control valves required by new section 403.2.1.2 are in addition to the control valves required by NFPA 14. Along with the redundant sprinkler riser that is required by section 403.2.1, the valves required by this new section will assure that any riser break will not leave more than two floors without the required sprinkler protection.

These new valves raise the possibility that someone will inadvertently close one or more. Accordingly, a proposed amendment to Section 911.1 of the Code requires that these automatic valves be able to be monitored from the fire command center by the use of status indicators. This will make it possible to monitor continuously all riser valves from one location and correct any problem from that location.

New Subsection 403.2.2 requires fire pumps to be fed from two independent water mains in separate streets. This will greatly reduce the possibility of the loss of water due to a main break, given the valving which is a feature of public water systems.

Bibliography:

National Institute of Standards and Technology. Final Report of the National Construction Safety Team on the Collapses of the World Trade Center Towers. United States Government Printing Office: Washington, D.C. September 2005.

Cost Impact: This proposal will increase the cost of construction for very tall buildings, but the additional cost is warranted by the additional risk inherent in such buildings.

Public Hearing Results

Committee Action: **Disapproved**

Committee Reason: Fire protection system design criteria and information belong in Chapter 9. The utility and effectiveness of top and bottom sprinkler riser interconnection is questionable. It is also questionable as to the availability of remotely controlled sprinkler riser valves. Proposed Section 403.2.2 needs correlation with Section 903.3.5.2. The ICC Code Technology Committee agrees with the need for redundancy but disagrees with the approach taken in this proposal. There is also a NIST task group working on this topic.

Assembly Action: **None**

Public Comments

Individual Consideration Agenda

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

Public Comment:

Paul K. Heilstedt, PE, FAIA, Chair, ICC Code Technology Committee (CTC), Gerry Jones/Herman Brice, Co-chairs, NIBS/MMC Committee for Translating the NIST World Trade Center Investigation Recommendations into Building Codes and Gary Lewis, Chair, representing the ICC Ad Hoc Committee on Terrorism Resistant Buildings request Approval as Modified by this public comment.

Modify proposal as follows:

[F] 403.2.1 (IFC 914.3.1.1) Number of sprinkler risers and system design ~~redundancy and isolation.~~ ~~All buildings that are more than 420 feet (128 m) in height shall have all risers supplying automatic sprinkler systems interconnected to each other at the top and bottom most floor of each vertical riser zone. The interconnections shall be at least as large as the largest riser supplied.~~ Each sprinkler system zone in buildings that are more than 420 feet (128 m) in height shall be supplied by a minimum of two risers. Each riser shall supply sprinklers on alternate floors. If more than two risers are provided for a zone, sprinklers on adjacent floors shall not be supplied from the same riser.

~~**[F] 403.2.1.1 (IFC 914.3.1.1.1) Number of risers and separation.** A minimum of two sprinkler water supply risers shall be provided in each vertical riser zone of the building. Sprinkler water supply risers shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between the nearest portion of the sprinkler water supply risers.~~

[F] 403.2.1.1 (IFC 914.3.1.1.1) Riser location. Sprinkler risers shall be placed in stair enclosures which are remotely located in accordance with Section 1015.2.

~~**[F] 403.2.1.1.1 (IFC 914.3.1.1.1.1) Hydraulic design evaluations.** Independent hydraulic design evaluations shall be completed utilizing individual water supply risers for each vertical riser zone. System hydraulic design shall not be based upon redundancy of water supply risers for each vertical riser zone.~~

~~**[F] 403.2.1.2 (914.3.1.1.2) Control valves.** Manual and remote control valves shall be provided on all riser piping supplying automatic sprinkler systems at every third floor of the building served. This requirement is independent of sprinkler floor control valves required by Section 903.4.3~~

[F] 403.2.2 (IFC 914.3.1.2) Water supply to required fire pumps. Required fire pumps shall be supplied by connections to ~~draw from~~ a minimum of two ~~independent street level~~ water mains located in different streets. Separate supply piping shall be provided between each connection to water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: ~~When the street level water main is a looped or gridded system, two taps may be drawn from~~ Two connections to the same main shall be permitted provided the main is valved such that an interruption ~~on one side of the loop or grid~~ can be isolated so that the water supply will continue without interruption through at least one of the connections ~~taps. Each tap shall be sized to supply the required flow. The taps shall be located as remote from one another as is practicable given the site conditions.~~

(Portions of proposal not shown remain unchanged)

Commenter's Reason: The purpose of this public comment is to increase the reliability of fire sprinkler systems in very tall buildings, those that exceed 420 feet in height, by requiring a minimum of two risers for each sprinkler zone and pumps to be supplied by a minimum of two connections to the municipal distribution system.

The difficulty of fighting fires in very tall buildings ranges from difficult to virtually impossible with the sprinkler system impaired. Accordingly, the reliable functioning of sprinkler systems is critical. Various Events could cause a sprinkler riser to be impaired, thereby leaving the structure highly vulnerable to fire.

Recommendation 12 of the NIST WTC report calls for the redundancy of active fire suppression systems to be increased to accommodate the greater risks associated with increasing building height and population. This proposal seeks to do that by requiring two risers designed such that, if one riser is taken out of service, the other will be able to supply sprinklers on the floors above and below. This will impede any fire spread and allow the fire department time to respond and extinguish the fire. At the Meridian Plaza fire in Philadelphia, the further spread of an out of control fire occurring on floors not protected by sprinklers was prevented by the operation of ten sprinklers when the fire reached a floor which had been retrofitted with sprinklers.

403.2.1 requires a minimum of two sprinkler risers in each sprinkler zone.

403.2.1.1 requires the risers to be located in protected stair enclosures and specifies a separation distance to reduce the possibility that one incident could incapacitate both risers which is consistent with the approach used in the code for stair enclosure separation.

403.2.2 is text similar to the original proposal which requires fire pumps to be fed from two water mains in separate streets. This will greatly reduce the possibility of the loss of water due to a main break, given the valving which is a feature of public water systems~~.~~ with the goal of providing redundancy. The exception is revised to provide performance language which is not specific to a specific configuration (looped or gridded in the original proposal) and eliminates the subjective connection remoteness criteria.

Code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception in Aprril/2005, the CTC has held fifteen meetings - all open to the public. This public comment is a result of the CTC's investigation of the area of study entitled "NIST World Trade Center Recommendations". The CTC web page for this area of study is: http://www.iccsafe.org/cs/cc/ctc/WTC.html

Final Hearing Results

G46-07/08 **AMPC**

Code Change No: G48-07/08

Original Proposal

Sections: 403.3.1, 403.3.2, 507.8, 3310.1 (IFC [B] 1411.1)

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

Revise as follows:

403.3.1 (Supp) Type of construction. The following reductions in the minimum fire resistance rating of the building elements in Table 601 shall be permitted as follows:

1. For buildings not greater than 420 feet (128 m) in building height, the fire resistance rating of the building elements in Type IA construction shall be permitted to be reduced to the minimum fire resistance ratings for the building elements in Type IB.

   Exception: The required fire-resistance rating of columns supporting floors shall not be permitted to be reduced.

2. In other than Groups F-1, M and S-1, the fire resistance rating of the building elements in Type IB construction shall be permitted to be reduced to the fire resistance ratings in Type IIA.
3. The height and area limitations of a building containing building elements with reduced fire resistance ratings shall be permitted to be the same as the building without such reductions.

403.3.2 Shaft enclosures. For buildings not greater than 420 feet (128 m) in building height, the required fire-resistance rating of the fire barriers enclosing vertical shafts, other than exit enclosures and elevator hoistway enclosures, shall be reduced to 1 hour where automatic sprinklers are installed within the shafts at the top and at alternate floor levels.

507.8 (Supp) Aircraft paint hangar. The area of a Group H-2 aircraft paint hangar no more than one-story above grade plane, shall not be limited where such aircraft paint hangar complies with the provisions of Section 412.4 and is entirely surrounded by public ways or yards not less in width than one and one-half times the ~~height of the~~ building height.

3310.1 (IFC [B] 1411.1) Stairways required. Where a building has been constructed to a building height ~~greater than~~ of 50 feet (15 240 mm) or four stories, or where an existing building exceeding 50 feet (15 240 mm) in building height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.

Reason: The changes are proposed for consistency with the actions taken by the membership on Proposal G81-06/07-AS. In IBC Section 3310.1 and IFC Section 1411.1, "greater than" is changed to "of" because "constructed to a building height of 50 feet" adequately specifies the threshold before a temporary lighted stairway is required. A related proposal adjusts the references to "height" and "building height" in Chapter 5.

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

Public Hearing Results

Committee Action: **Approved as Submitted**

Committee Reason: The change would coordinate with G81-06/07. The additional language clarifies the application of the definition for "building height."

Assembly Action: **None**

Final Hearing Results

G48-07/08 **AS**