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Copyright©2015 International Code Council, Inc. Meeting #32 September 14-15, 2015 CTC Group A Public Comments (Agenda Item 5.1)

This report includes codes changes, report of hearing and public comments for code changes that are included in the matrix of code changes that the Code Technologies Committee has proposed or has been monitoring as related issues.

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<u>Summary</u>

Code Technologies Committee has submitted 6 public comments: FS42-15, EB58-15, G9-15, G33-15, G200-15, P34-15

There are public comments from others on the following Code Technologies Committee proposals:

E32-15, E64-15, E68-15, G42-15, G118-15, G119-15, G123-15, G204-15,

Public comments from others on related code changes are: E31-15, E42-15, E76-15, E153-15, E155-15, EB21-15, EB42-15, EB43-15, EB44-15, EB59-15, EB65-15, EB66-15, FS43-15, FS121-15, G6-15, G7-15, G35-15, G105-15, G121-15, G195-15, G206-15, G210-15, M23-15

Code changes on the original list with public comments that do not appear to be related are:

EB86-15, M44-15, P31-15

E31-15

202(New), 1008.2.1.1(New), 1008.3, 1008.3.1, 1008.3.4, 1013.6.3, 1025.5; (IFC[BE] 1008.2.1.1(New), 1008.3, 1008.3.1, 1008.3.4, 1013.6.3, 1025.5)

Proposed Change as Submitted

Proponent : Charles Barlow (cvbarlow@everglow.us)

2015 International Building Code

Add new definitions as follows:

SECTION 202 DEFINITIONS

DAYLIGHT RESPONSIVE CONTROL. A device or system that provides automatic control of electric light levels based on the amount of daylight in a space.

GENERAL LIGHTING. Lighting that provides a substantially uniform level of illumination throughout an area. General lighting shall not include decorative lighting or lighting that provides a dissimilar level of illumination to serve a specialized application or feature within such area.

OCCUPANT SENSOR CONTROL. An automatic control device or system that detects the presence or absence of people within an area and causes lighting, equipment or appliances to be regulated accordingly.

TIME SWITCH CONTROL. An automatic control device or system that controls lighting or other loads, including switching off, based on time schedules.

Revise as follows:

SECTION 1008 MEANS OF EGRESS ILLUMINATION

1008.1 Means of egress illumination. Illumination shall be provided in the *means of egress* in accordance with Section 1008.2. Under emergency power, means of egress illumination shall comply with Section 1008.3.

1008.2 Illumination required. The *means of egress* serving a room or space shall be illuminated at all times that the room or space is occupied.

Exceptions:

- 1. Occupancies in Group U.
- 2. Aisle accessways in Group A.
- 3. *Dwelling units* and *sleeping units* in Groups R-1, R-2 and R-3.
- 4. *Sleeping units* of Group I occupancies.

1008.3 1008.2.1 Emergency Illumination power for illumination supply. The power supply for means of egress illumination shall normally be provided by the premises' electrical supply.

Add new text as follows:

1008.2.1.1 Lighting controls. General lighting in the means of egess shall be permitted to use daylight responsive controls, occupant sensor controls and time switch controls. In rooms and spaces where emergency lighting is required in Sections 1008.3, 1008.3.1 and 1008.3.2, the lighting controls for the general means of egress lighting shall comply with all of the following:

- 1. <u>The daylight responsive controls, occupant sensor controls and</u> <u>time switch controls are listed and evaluated to automatically</u> <u>energize the controlled lights upon device failure or loss of normal</u> <u>power.</u>
- For occupant sensor controls, the control is activated by any occupant movement in the area served by the controlled lights and illumination timers are set for a durations of 15 minutes minimum.
- 3. <u>A daylight responsive control or occupant sensor control does not</u> <u>control lights required as a charging source for photoluminescent</u> <u>egress path markings in accordance with Section 1025.</u>
- 4. <u>A daylight responsive controls, occupant sensor controls or time</u> <u>switch controls does not control electrical power to, or illumination</u> <u>for exit signs in accordance with Section 1013.</u>
- 5. <u>A daylight responsive controls, occupant sensor controls or time</u> <u>switch controls does not control emergency egress lighting</u> <u>required in Section 1008.3.</u>

Revise as follows:

1008.2.1 1008.2.2 Illumination level under normal power. The *means of egress* illumination level shall be not less than 1 footcandle (11 lux) at the walking surface.

Exception: For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the walking surface is permitted to be reduced during performances by one of the following methods provided that the required illumination is automatically restored upon activation of a premises' fire alarm system:

- 1. Externally illuminated walking surfaces shall be permitted to be illuminated to not less than 0.2 footcandle (2.15 lux).
- 2. Steps, landings and the sides of ramps shall be permitted to be marked with self-luminous materials in accordance with Sections 1025.2.1, 1025.2.2 and 1025.2.4 by systems listed in accordance with UL 1994.

1008.2.2 1008.2.3 Exit discharge. In Group I-2 occupancies where two or more exits are required, on the exterior landings required by Section 1010.6.1, means of egress illumination levels for the exit discharge shall be provided such that failure of any single lighting unit shall not reduce the illumination level on that landing to less than 1 footcandle (11 lux).

1008.3.1 <u>1008.3</u> <u>General Illumination of the means of egress</u> <u>under emergency power</u>. In the event of power supply failure in rooms and spaces that require two or more means of egress, an emergency electrical system shall automatically illuminate all of the following areas: Code Technology Committee Mrg #32 September 14-15, 2015, Chicago

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- 1. Aisles.
- 2. Corridors.
- 3. *Exit access stairways* and *ramps*.

1008.3.2 1008.3.1 Buildings. In the event of power supply failure in buildings that require two or more *means of egress*, an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Interior exit access stairways and ramps.
- 2. Interior and exterior exit stairways and ramps.
- 3. Exit passageways.
- 4. Vestibules and areas on the level of discharge used for *exit discharge* in accordance with Section 1028.1.
- 5. Exterior landings as required by Section 1010.1.6 for *exit doorways* that lead directly to the *exit discharge*.

1008.3.3 1008.3.2 Rooms and spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Electrical equipment rooms.
- 2. Fire command centers.
- 3. Fire pump rooms.
- 4. Generator rooms.
- 5. Public restrooms with an area greater than 300 square feet (27.87 m^2) .

1008.3.4 1008.3.3 Duration <u>and</u> <u>controls</u>. The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. Lights for the emergency illumination of the means of egress shall not be controlled by daylight responsive controls, occupant sensor controls or time switch controls.</u> The installation of the emergency power system shall be in accordance with Section 2702.

1008.3.5 1008.3.4 Illumination level under emergency

power. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded. In Group I-2 occupancies, failure of any single lighting unit shall not reduce the illumination level to less than 0.2 foot-candle (2.2 lux).

SECTION 1013 EXIT SIGNS

1013.6.3 Power source. Exit signs shall be illuminated at all times. Lights for the illumination of exit signs and the electrical power to the exit signs shall not be controlled by daylight responsive controls, occupant sensor controls or time switch controls. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27.

Exceptions:

- 1. *Approved* exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.
- 2. Group I-2 Condition 2 exit sign illumination shall not be provided by unit equipment battery only.

SECTION 1025 LUMINOUS EGRESS PATH MARKINGS

1025.5 Illumination. Where *photoluminescent* exit path markings are installed, they shall be provided with not less than 1 footcandle (11 lux) of illumination for not less than 60 minutes prior to periods when the building is occupied and continuously during occupancy. Lighting that is the charging source for photoluminescent egress path markings shall not be controlled by daylight responsive controls or occupant sensor controls.

Reason: The entire Section 1008 is being shown so that the reorganization for means of egress lighting sections and references are clear. The four definitions match those currently in the IECC for these types of controls.

The proper operation of (electrical) general lighting used to provide minimum illumination in the means of egress must not be

compromised when operated under normal electrical power. In areas where emergency lighting is installed – aisles, corridors, exit access stairways and ramps – the need for reliable (electrical) general lighting and electrical emergency lighting cannot be overestimated. This proposal seeks to impose minimum listing, testing and performance requirements on lighting controls if they are used in the means of egress in areas where electrical emergency lighting are required.

The overwhelming majority of emergency evacuations take place when the (electrical) general lighting is operating properly – providing a minimum of 1 ft-c of illumination when measured at floor level. In areas of the means of egress where (electrical) emergency lighting is required to be installed and maintained, these luminaires provide safe illumination during emergency evacuations. Proper illumination in exit stairs and exit access corridors has been shown to be so valuable to safe egress during emergency evacuations that code authorities now require (non-electrical) luminous egress path markings in the exit stairs of high rise buildings. Some local jurisdictions also require luminous egress path markings installed at the perimeter of exit passageways in public buildings, schools, healthcare facilities and hotels.

Lighting controls – daylight responsive controls, occupant sensor controls and time switch controls - currently installed in the areas of the means of egress of some buildings where electrical emergency lighting is required to be installed and maintained - are being used to reduce illumination levels below 1 footcandle at the walking surface when normal electrical power is available. If the egress capacity of a specific means of egress is required during periods of reduced or completely powered off illumination, the building owner is creating an unsafe condition. Worse, if the lighting controls fail to operate properly during an emergency evacuation, the remaining egress capacity may not be sufficient to safely and quickly evacuate the building.

To meet code requirements, the building owner should maintain minimum illumination levels where electrical emergency lighting is required to be installed and maintained at all times the specific means of egress is required, or he should use lighting control devices that meet the conditions above. The proper operation of emergency lighting must not be compromised when operated under normal power. Lighting controls and occupancy sensors currently installed in the means of egress of some buildings are causing the improper activation of emergency lighting when normal electrical power is still available. Although these lighting controls are likely improperly installed, there should be specific language in the building and fire codes that this is not allowed. In other facilities, lighting controls on luminaires used for emergency illumination in the means of egress control illumination levels during operation with normal power. In these buildings, there should be emergency luminaires in the means of egress without lighting controls or occupancy sensors to provide the minimum illumination levels required under emergency power.

The Commercial Energy Chapter of the IEC 2015 specifies the use of various lighting controls and interior lighting power allowances for commercial buildings. Paragraph C405.2 Lighting Controls (Mandatory) states that lighting controls are not required in areas required to be continuously illuminated, interior exit stairways, interior exit ramps and exit passageways. Yet, lighting controls are increasingly installed in these areas. Additionally, it is commonly thought that the requirement for these lighting controls is to power off the general lighting in these areas. The IEC allows for the dimming of lights. Minimum illumination levels required by the IBC 2015 and IFC 2015 in the means of egress can be easily accomplished with dimming controls.

There is NO specific code requirement that prohibits the use of lighting controls on electrical emergency lighting or electrical exit signs. There is NO specific code requirement the prohibits the use of lighting controls on (electrical) general lighting - where electrical emergency lighting is required to be installed and maintained - that might affect the normal operation of electrical emergency lighting or electrical exit signs. There is NO specific code requirement in Section 1008 Means of Egress Illumination that qualifies the use of lighting controls used to control general lighting in the means of egress – areas such as rooms and spaces where emergency lighting controls used to control (electrical) general lighting where photoluminescent egress path markings are installed.

Cost Impact: WII not increase the cost of construction

There should be no additional cost to the building owner. This proposal suggests that lighting controls – daylight responsive controls, occupant sensor controls and time switch controls - should not be used to save energy and money at the expense of life safety.

Traditionally, building and fire codes have required continuous and minimum illumination in the means of egress, for reasons of life safety. During periods when normal electrical power operates properly, this minimum illumination level is 1 ft-candle when measured at the walking surface. For periods when normal electrical power fails and emergency electrical power sources ONLY are available, the average illumination is 1 ft-c with a minimum of 0.6 ft-c along the path of egress where electrical emergency lighting is required to be installed and maintained. Power for electrically powered emergency lighting and exit signs is required to maintain required illumination levels for at least 90 minutes after the failure of (electrical) general lighting.

E31-15:1008.2.1.2 (New)-BARLOW4492

Disapproved

Public Hearing Results

Committee Action:

Committee Reason: The proposal removes the artificial lighting option currently permitted in the code. It is not know at this time if there are devices available that will meet the provisions proposed for daylight responsive and occupant sensor controls. The code already allows for lights to be turned off, so you don't need provisions for these controls.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Manny Muniz, representing Self (Mannymuniz.mm@gmail.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1013.6.3 Power source. Exit signs shall be illuminated at all times. Lights for the <u>illumination illuminatin</u> of exit signs <u>and</u>, the electrical power to the <u>exit signs and the charging light source for photoluminescent</u> exit signs shall not be controlled by daylight responsive controls, occupant sensor controls or time switch controls. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27._

Exceptions:

- 1. Approved exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.
- 2. Group I-2 Condition 2 exit sign illumination shall not be provided by unit equipment battery only.

Commenter's Reason: The modification will clarify and ensure that exit signs are not turned off or their visibility reduced by the use of a lighting control device intended to conserve energy. This is consistent with the NFPA 101 Life Safety Code, Section 7.8.1.2.2 (6) which prohibits the use of lighting control devices when used to turn off any lights relied upon for activation of photoluminescent exit signs, and Section 7.8.1.2.2 (7) which prohibits lighting control devices from turning off any exit signs.

Bibliography: NFPA 101 Life Safety Code, 2015, Section 7.8.1.2.2 (6) & 7.8.1.2.2 (7)

Public Comment 2:

Proponent : Manny Muniz, representing Self (Mannymuniz.mm@gmail.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1013.6.3 Power source. Exit signs shall be illuminated at all times. Lights for the <u>illumination</u> <u>illuminatin</u> of exit signs and the electrical power to the exit signs shall not be controlled by daylight responsive controls, occupant sensor controls or time switch controls. To ensure continued

Code Technology Committee Mtg #32 September 14-15, 2015, Chicago illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27. <u>Storage batteries and unit equipment shall be</u> <u>listed in accordance with UL 924.</u>

Exceptions:

- 1. *Approved* exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.
- 2. Group I-2 Condition 2 exit sign illumination shall not be provided by unit equipment battery only.

Commenter's Reason: While the intention of E31-15, as it pertains to 1013.6.3, is to ensure that the power source for exit signs is reliable and not compromised by the use of energy conserving lighting control devices, there is a discrepancy that of the three emergency power systems described in 1013.6.3, only an on-site generator is required to be listed in accordance with a standard. This minimum level of reliability and performance should also apply to storage batteries and unit equipment, which are both within the scope of UL 924. This is consistent with the NFPA 101 Life Safety Code, Section 7.9.2.5.

Lighting control devices used to control battery equipped emergency luminaires are also within the scope of UL 924 to ensure that they are designed and tested to override any "off" or "dim" settings on their controlled luminaires if there is a loss of normal power. This is consistent with NFPA 101, Section 7.8.1.2.2 (1). Using UL 924 listed equipment will reduce uncertainty as to the acceptability of the equipment as installed. It also validates that the battery recharge times are as claimed by the equipment manufacturer and establishes minimum levels for equipment performance under emergency conditions. It also ensures that the normal risks for fire and electric shock injury are appropriately mitigated.

Bibliography: UL 924, Emergency Lighting and Power Equipment, 9th Edition NFPA 101 Life Safety Code, 2015 Edition, Sec. 7.9.2.5.

Public Comment 3:

Proponent : Manny Muniz, representing Self (Mannymuniz.mm@gmail.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1008.3.3 Duration and controls. The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. Lights for the emergency illumination of the means of egress shall not be controlled by daylight responsive controls, occupant sensor controls or time switch controls. The installation of the emergency power system shall be in accordance with Section 2702. Storage batteries, unit equipment and lighting control devices used to control battery equipment emergency luminaires shall be listed in accordance with UL924.

Commenter's Reason: While the intent of E31-15, as it pertains to 1008.3.3, is to ensure that the lights for the lights for the illumination of the means of egress is reliable and not compromised by the use of energy conserving lighting control devices, there is a discrepancy that of the three emergency power systems described in 1008.3.3, only an on-site generator is required to be listed in accordance with a standard. This minimum level of reliability and performance should also apply to storage batteries and unit equipment, which are both within the scope of UL 924. This is consistent with the NFPA 101 Life Safety Code, Section 7.9.2.5.

Using UL 924 listed equipment will reduce uncertainty as to the acceptability of the equipment as installed. It also validates that the battery recharge times are as claimed by the equipment manufacturer and establishes minimum levels for equipment performance under emergency conditions. It also ensures that the normal risks for fire and electric shock injury are appropriately mitigated.

Bibliography: UL 924, 9th Edition, Emergency Lighting and Power Equipment NFPA 101 Life Safety Code, 2015 Edition, Sec. 7.9.2.5 and 7.8.1.2.2(1)

Public Comment 4:

Proponent : Manny Muniz, representing Self (Mannymuniz.mm@gmail.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1025.5 Illumination. Where *photoluminescent* exit path markings are installed, they shall be provided with not less than 1 footcandle (11 lux) of illumination for not less than 60 minutes prior to periods when the building is occupied and continuously during occupancy. Lighting that is the charging source for photoluminescent egress path markings shall not be controlled by daylight responsive controls or occupant sensor controls. <u>Time switch controls on a charging source shall be listed in accordance with UL924.</u>

Commenter's Reason: The intent of E31-15, as it pertains to 1025.5, is to ensure that the required minimum 1 footcandle of illumination for photoluminescent exit path markings is not turned off or reduced by the use of a lighting control device. The modification will allow the use of a UL 924 listed time switch control to turn on the charging lights for photoluminescent egress path markings as an appropriate method for complying with the requirement in the first sentence and will ensure performance and reliability. It will also reduce uncertainty as to the acceptability of these devices as installed.

Bibliography: UL 924 Emergency Lighting and Power Equipment, 9th Edition NFPA 101, 2015 Edition, Sec. 7.8.1.2.2(6)

Public Comment 5:

Proponent : Manny Muniz, representing Self (Mannymuniz.mm@gmail.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1013.6.3 Power source. Exit signs shall be illuminated at all times. Lights for the- illumination of exit signs and the electrical power to the exit signs shall not be controlled by daylight responsive controls, occupant sensor controls or time switch controls. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27.

Exceptions:

- 1. *Approved* exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.
- 2. Group I-2 Condition 2 exit sign illumination shall not be provided by unit equipment battery only.
- 3. <u>The charging light source for photoluminescent exit signs</u> <u>shall not be prohibited from utilizing a control switch where</u> <u>the charging source for the photoluminescent exit signs is</u> <u>illuminated at all times the room or space is occupied.</u>

Commenter's Reason: One of the intentions of E31-15 as it pertains to 1013.6.3 is to ensure that the lights used for the illumination of exit signs will be reliable. UL 924, Section SG5, which governs photoluminescent exit signs, requires that the exit signs be marked "Min 5 fc external light on sign face at all times of building occupancy." or " Min 5 fc fluorescent light on sign face at all times of building occupancy." as appropriate and that the instructions state that the external illumination source is to be energized at all times during building occupancy. This is also consistent with NFPA 101, Section 7.10.5.1 which requires that the exit signs be illuminated as required by the provisions of 7.8, Illumination of Means of Egress. The modification will prolong the life of the charging light source, require less frequent bulb replacement, and provide energy savings which is the intent of using non-electrical exit signs. Means of egress illumination and exit sign illumination should operate together so that a person can both see the egress path and then identify the exits.

In a typical office building where workers work from 9 AM to 6 PM Monday through Friday, and allowing for the building being opened at 8 AM and closed at 7 PM, the building is occupied less than one-third of the time. Two thirds of the time, the charging light source for a photoluminescent exit sign consumes electricity needlessly.

Bibliography: UL 924, Emergency Lighting and Power Equipment, 9th Edition NFPA 101 Life Safety Code, 2015 Edition, Sec. 7.10.5.1.

E31-15

E32-15 1008.2.2, 1008.3.5; (IFC[BE] 1008.2.2, 1008.3.5) Proposed Change as Submitted

Proponent : John Williams, CBO, CBO, Chair, Adhoc Healthcare Committee, representing Adhoc Health Care Committee (AHC@iccsafe.org); Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

1008.2.2 Exit discharge. In Group I-2 occupancies where two or more exits are required, on the exterior landings required by Section 1010.6.1, means of egress illumination levels for the exit discharge shall be provided such that failure of any single lighting unit <u>bulb or ballast</u> shall not reduce the illumination level on that landing to less than 1 footcandle (11 lux).

1008.3.5 Illumination level under emergency power. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded. In Group I-2 occupancies, failure of any single lighting unit bulb or ballast shall not reduce the illumination level to less than 0.2 foot-candle (2.2 lux).

Reason: The proposed language would better define what constitutes a failure of a lighting unit.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction This is a clarification of requirements; therefore there is no change in construction cost.

> E32-15 : 1008.2.2-WILLIAMS4242

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The individual lighting mode of failure is what is important. Terminology that is across all types of fixtures is needed. Perhaps the language in NEC for lighting units would be appropriate.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : John Williams, CBO, representing Adhoc Healthcare Committee (AHC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1008.2.2 Exit discharge. In Group I-2 occupancies where two or more exits are required, on the exterior landings required by Section 1010.6.1, means of egress illumination levels for the exit discharge shall be provided such that failure of any <u>a</u> single bulb or ballast <u>lamp in a luminaire</u> shall not reduce the illumination level on that landing to less than 1 footcandle (11 lux).

1008.3.5 Illumination level under emergency power. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded. In Group I-2 occupancies, failure of any a single bulb or ballast <u>lamp in a luminaire</u> shall not reduce the illumination level to less than 0.2 foot-candle (2.2 lux).

Commenter's Reason: This public comment is primarily focused upon correcting the terminology that applies to all types of fixtures and aligns with new technologies. This revision coordinates with terminology used by the industry and terminology defined in the National Electrical Code. Luminaire is defined as a complete lighting unit that is comprised of light sources such as lamp(s). In addition, it focuses upon individual lamps versus an entire unit.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts

in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: <u>Adhoc Healthcare</u>.

E42-15 1009.8; (IFC[BE] 1009.8) Proposed Change as Submitted

Proponent : Stephen DiGiovanni, Clark County Building Department, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountynv.gov)

2015 International Building Code

Revise as follows:

1009.8 Two-way communication. A

<u>Where elevators are provided as part of an accessible means of egress,</u> <u>a two-way communication system complying with Sections 1009.8.1 and</u> 1009.8.2 shall be provided at the landing serving each elevator or bank of elevators on each accessible floor that is one or more stories above or below the *level of exit discharge*.

Exceptions:

- 1. Two-way communication systems are not required at the landing serving each elevator or bank of elevators where the two-way communication system is provided within *areas of refuge* in accordance with Section 1009.6.5.
- 2. Two-way communication systems are not required on floors provided with *ramps* conforming to the provisions of Section 1012.
- 3. Two-way communication systems are not required at the landings serving only service elevators that are not designated as part of the accessible *means of egress* or serve as part of the required *accessible route* into a facility.
- 4. Two-way communication systems are not required at the landings serving only freight elevators.
- 5. Two-way communication systems are not required at the landing serving a private residence elevator.

Reason: Current code requires two-way communication for elevator landings in all buildings two stories or greater, regardless of the design for accessible means of egress. This proposal attempts to tie the requirement for two-way communication to only serve when elevators are provided as a part of the accessible egress. Section 1009.2.1 only requires elevators to be part of the accessible means of egress when the building has a required accessible floor that is four or more stories above or below the level of exit discharge. In buildings that are less than these limits, the accessible means of egress may be provided by other means, such as stairs, ramps, and other components permitted by Section 1009.2, such that any elevators in such a building are not required to be constructed in accordance with Section 1009.4. Due to the standby requirements in Section 1009.4, designers may choose to not provide accessible egress via the elevator, when permitted to by Section 1009.2.1, instead designing the accessible egress via other components. There is concern that placing the two-way communication in every elevator will lead occupants away from the actual means of egress.

This change is intended to associate the elevator two-way communication system from 1009.8 to elevators that are constructed in accordance with Section 1009.4 to be a part of the accessible route, where such accessible elevators are either **Cost Impact:** Will not increase the cost of construction This proposal will not increase the cost of construction as the proposal may lead to less installations of two-way communication systems.

> E42-15: 1009.8-DIGIOVANNI3845

Public Hearing Results

Committee Action:

Committee Reason: A two way communication system is needed for persons with mobility impairments to be able to communicate with emergency responders on all levels that are accessed by an elevator. Loosing this two-way communication in two, three and four story buildings is a reduction in life safety for persons with mobility impairments who have difficulty or cannot use stairways for evacuation. The location at the elevator lobby is the best location for persons to see the two-way communication system when they enter the building. While the proponents talked about high cost, no cost information was provided. This is consistent with the committee action on E43-15.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Stephen DiGiovanni, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountyny.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1009.8 Two-way communication. Where elevators are provided as part of an accessible means of egressin accordance with Section 1009.2.1, a two-way communication system complying with Sections 1009.8.1 and 1009.8.2 shall be provided at the landing serving each elevator or bank of elevators on each accessible floor that is one or more stories above or below the level of exit discharge.

Exceptions:

- Two-way communication systems are not required at the 1. landing serving each elevator or bank of elevators where the two-way communication system is provided within areas of refuge in accordance with Section 1009.6.5.
- 2. Two-way communication systems are not required on floors provided with ramps conforming to the provisions of Section 1012.
- 3. Two-way communication systems are not required at the landings serving only service elevators that are not designated as part of the accessible means of egress or $_{\rm Code\ Technology\ Committee\ Mtg\ #32}$ September 14-15, 2015, Chicago 15 of 176

Disapproved

None

serve as part of the required *accessible route* into a facility.

- 4. Two-way communication systems are not required at the landings serving only freight elevators.
- 5. Two-way communication systems are not required at the landing serving a private residence elevator.

Commenter's Reason: The purpose of this public comment is to clarify the proposed trigger of when a two-way communication system is required, by specifying the referenced code section that triggers elevators as part of the accessible route.

Current code requires two-way communication for elevator landings in all buildings two stories or greater, regardless of the design for accessible means of egress. This proposal attempts to tie the requirement for two-way communication to only serve when elevators are provided as a part of the accessible egress.

Section 1009.2.1 only requires elevators to be part of the accessible means of egress when the building has a required accessible floor that is four or more stories above or below the level of exit discharge. In buildings that are less than these limits, the accessible means of egress may be provided by other means, such as stairs, ramps, and other components permitted by Section 1009.2, such that any elevators in such a building are not required to be constructed in accordance with Section 1009.4. Due to the standby requirements in Section 1009.4, designers may choose to not provide accessible egress via the elevator, when permitted to by Section 1009.2.1, instead designing the accessible egress via other components. There is concern that placing the two-way communication in every elevator will lead occupants away from the actual means of egress.

This provision for two-way communication assumes that the floor area is not provided with land line telephones, or that the occupant does not carry a cell phone. The process to use the two-way communication system, as indicated in the code, requires that the call first go to a receiver within the building, and after timeout, the call is transferred to a central monitoring company or to 911. For smaller buildings, it may not be accurate to assume that the receiver will be manned. If the receiver is not manned, the call is then timed-out, and the caller is transferred. If the transfer occurs to a central station (which may be reasonable to assume) then that central station would have to place another call, in order to call the fire department. In other words, the two-way communication system could delay response to have three telephone connections, which is slower than if the occupant had been directed to use a land line or cell phone in the first place. In smaller buildings, such as addressed within this proposal, fire responders will likely be able to respond to all floor areas in such an expeditious manner that the benefit of this system would not be realized.

This change is intended to associate the elevator two-way communication system from 1009.8 to elevators that are constructed in accordance with Section 1009.4 to be a part of the accessible route, where such accessible elevators are either required by Section 1009.2.1, or optioned by the designer in accordance with Section 1009.2.

E42-15

E64-15 1010.1.9.5.1 (IFC[BE] 1010.1.9.5.1) Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, ICC Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Delete without substitution:

1010.1.9.5.1 (IFC[BE] 1010.1.9.5.1) Closet and bathroom doors in Group R-4 occupancies. In Group R 4 occupancies, closet doors that latch in the closed position shall be openable from inside the closet, and bathroom doors that latch in the closed position shall be capable of being unlocked from the ingress side.

Reason: This is proposed to be deleted because it is an inconsistent requirement. If there is a concern that a person receiving custodial care might lock themselves in a bathroom or closet, this should be required in Group I-1, not just Group R-4. Also, this should not be a overall minimum code requirement, but more an option for a facility to provide where needed. Literally this would applied to storage closets that are not used by residents and closets that you would not walk into at all. The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction This is eliminating a requirement for locks.

E64-15: 1010.1.9.5.1-BALDASSARRA4278

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: While this might be a valid concern in some facilities for safety, the current provisions should not be applicable to just Group R-4. Free egress from occupied spaces is already required by the code. The current language could be read to apply to all closets, including reach-in closets.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : John Woestman, Kellen, representing Builders Hardware Manufacturers Association

(jwoestman@kellencompany.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1010.1.9.5.1 Closet doors. Closet doors that latch in the closed position shall be openable from inside the closet.

Commenter's Reason: This public comment retains portions of the text proposed by the original proposal to be deleted. Closets with a door that latches are commonly large enough for a person to get inside, especially a child. To reduce the potential of a person getting trapped inside a closet, closet doors should be able to be unlatched from the inside.

This situation reminds me of the tragedies associated with (very) old refrigerators with doors equipped with mechanical latches – that's most household refrigerators manufactured prior to the Federal "Refrigerator Safety Act" of 1956 which required household refrigerators to be openable from the inside with a force of no more than 15 pounds. Too many children died when trapped inside these refrigerators. Before the use of magnetic sealing of refrigerator doors, refrigerator doors were held shut by mechanical latches. These mechanical latches usually did not have a means for unlatching the door from the inside of the refrigerator.

E64-15

E68-15 1010.1.9.7; (IFC[BE] 1010.1.9.7) Proposed Change as Submitted

Proponent: Edward Kulik, Chair, representing Building Code Action Committee (bcac@iccsafe.org)

Revise as follows:

1010.1.9.7 Delayed egress. Delayed egress locking systems shall be permitted to be installed on doors serving any occupancy except Group A, E and H <u>Groups B, E, F, I, M, R, S and U</u> occupancies in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approvedautomatic smoke* or *heat detection system* installed in accordance with Section 907.

1010.1.9.7.1 Delayed egress locking system. The <u>delayed egress</u> locking system shall be installed and operated in accordance with all of the following:

 The delay electronics of the delayed egress locking system shall deactivate upon actuation of the automatic sprinkler system or automatic fire detection system, allowing immediate, free egress.
The delay electronics of the delayed egress locking system shall deactivate upon loss of power controlling the lock or lock mechanism, allowing immediate free egress.

3. The delayed egress locking system shall have the capability of being deactivated at the fire command center and other approved locations. 4. An attempt to egress shall initiate an irreversible process that shall allow such egress in not more than 15 seconds when a physical effort to exit is applied to the egress side door hardware for not more than 3 seconds. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics have been deactivated, rearming the delay electronics shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

5. The egress path from any point shall not pass through more than one delayed egress locking system.

Exception: In Group I-2 or I-3 occupancies, the egress path from any point in the building shall pass through not more than two delayed egress locking systems provided the combined delay does not exceed 30 seconds.

6. A sign shall be provided on the door and shall be located above and Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 19 of 176 within 12 inches (305 mm) of the door exit hardware:

6.1 For doors that swing in the direction of egress, the sign shall read: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 1530] SECONDS.

6.2 For doors that swing in the opposite direction of egress, the sign shall read: PULL UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.

6.3 The sign shall comply with the visual character requirements in ICC A117.1.

Exception: Where approved, in Group I occupancies, the installation of a sign is not required where care recipients who because of clinical needs require restraint or containment as part of the function of the treatment area.

Emergency lighting shall be provided on the egress side of the door.
The delayed egress locking system units shall be listed in accordance with UL 294.

Reason: This proposal is in response to several requests to address the needs of small educational occupancies to help prevent wandering / elopement, especially for the very young, and for special needs students.

This public proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction No cost impact unless the building owner chooses to install a delayed egress locking system.

> E68-15 : 1010.1.9.7-KULIK3677

Public Hearing Results

Committee Action:

Approved as Modified

Modification:

1010.1.9.7 Delayed egress. Delayed egress locking systems shall be permitted to be installed on doors serving Group B, <u>E</u>, F, I, M, R, S and U occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907.

Exception: Delayed egress locking systems shall be

permitted to be installed on doors serving Group E occupancies that have an occupant load of 10 or fewer and are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907.

Committee Reason: There were two modification to this proposal. One modification was to delete the limit of 10 occupants. The proposed text was not clear as to if this was an entire facility or just one classroom. The requirements for sprinklers or smoke or heat detection is an improvement in the level of safety that should allow for a classroom with a higher occupant load to use this option for delayed egress locking systems.

The second modification was to delete the new proposed exception and include Group E in the allowances for where delayed egress locking systems can be used. The exception no longer has any additional limits for where delayed egress locking systems can be used. This could be considered editorial based on the approval of the first modification.

Splitting the section into two parts improves clarity. Changing the text to say where these types of locks are permitted is clearer than listing where it is not permitted. Allowing Group E facilities to use delayed egress locking systems helps address the security concerns associated with wandering or 'trigger events' for preschool classes or classrooms for students with special needs.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Jonathan Siu, City of Seattle Department of Planning & Development, representing Washington Association of Building Officials Technical Code Development Committee (jon.siu@seattle.gov) requests Approve as Modified by this Public Comment.

Further Modify as Follows:

2015 International Building Code

1010.1.9.7 Delayed egress. Delayed egress locking systems shall be permitted to be installed on doors serving Group B, E, F, I, M, R, S and U occupancies the following occupancies in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approvedautomatic smoke* or *heat detection system* installed in accordance with Section 907:

- 1. Groups B, F, I, M, R, S and U occupancies
- 2. Group E classrooms with an occupant load of less than 50.

Commenter's Reason: This public comment limits the use of delayed egress devices in E occupancies to classrooms with an occupant load less than 50, as opposed to assembly spaces in E occupancies.

The code says that assembly areas in schools get classified as E occupancies (Section 303.1.3). This means that multi-purpose rooms, auditoriums, gymnasiums, and similar spaces associated with a school are E occupancies.

This code change proposal, as modified by the committee, allows delayed egress hardware on every door in an E occupancy, which would include these assembly-type spaces. However, the committee reason statement only talks about classrooms, where there are fewer occupants. We agree it would be appropriate to allow delayed egress hardware on classroom doors, but we do not think it is appropriate to have delayed egress hardware in assembly areas. The proposed change (as modified) also conflicts with the requirements in Section 1010.1.10 for panic hardware.

The modification proposed in this public comment would take care of the both issues by limiting the delayed egress hardware to classroom doors (as appears to have been the intent of the proponents of the original code change), but adds an additional limitation that the classrooms with this hardware must also have an occupant load of less than 50, in order to eliminate the conflict with the panic hardware requirements.

The editorial modification to move the list of occupancies from the main paragraph to a bullet list was necessitated when the E occupancies were separated from the list, in order to eliminate any confusion over whether the sprinklers and alarm systems are required for all the listed occupancies.

E68-15

E76-15 1008.3.3, 1010.1.9.12 (New); (IFC[BE] 1008.3.3, 1010.1.9.12 (New))

Proposed Change as Submitted

Proponent : Lee Kranz, representing Washington Association of Building Officials Technical Code Development Committee

2015 International Building Code

Add new text as follows:

1010.1.9.12 Electronic locking devices on elevator lobby doors. In Group B occupancies, exit access doors within secured elevator lobbies are permitted to be locked with electronic locking devices that operate with items such as a card key, a security code or other security clearance locking devices in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The locking system shall be installed and operated in accordance with all the following:

- 1. Loss of power to the locking system automatically unlocks the door.
- The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of other electronics— and the doors shall remain unlocked for not less than 30 seconds.
 Exception: A manual unlocking device is not required in elevator lobbies provided with direct access to an exit doorway and a twoway communication system is installed in the elevator lobby in accordance with Section 1009.8.
- 3. Activation of the building alarm system, shall automatically unlock the doors and the doors shall remain unlocked until the fire alarm system has been reset.
- 4. <u>Activation of the building automatic sprinkler system or fire</u> <u>detection system shall automatically unlock the doors. The doors</u> <u>shall remain unlocked until the fire alarm system has been reset.</u>
- 5. <u>Emergency egress lighting shall be provided in the secured</u> <u>elevator lobby at the door.</u>
- 6. <u>The door locking system units shall be listed in accordance with</u> <u>UL 294.</u>
- 7. The use of electronic locking devices is revocable by the building official for due cause.

Revise as follows:

1008.3.3 Rooms and spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Electrical equipment rooms.
- 2. Fire command centers.
- 3. Fire pump rooms.
- 4. Generator rooms.
- 5. Public restrooms with an area greater than 300 square feet (27.87 m²).
- 6. Secured elevator lobbies where exit access doors are locked with an electronic device in accordance with Section 1010.1.9.12.

Reason: In order to maintain adequate security in office buildings, access to required exits may be limited by securing doors to some areas of the building. With the increasing need for office building security we are seeing the growing use of electronic locking devices on doors along the exit pathway. Many of these installations are being done without a permit and are later discovered by Fire Prevention Officers on their annual inspections. The use of electronic locking devices on elevator lobby exit access doors is a reality that must be addressed in the code for office and technology buildings. To maintain an unobstructed and undiminished path of exit travel, criteria for acceptance of these locking devices must be established to preserve the level of building safety intended by the International Building Code.

Cost Impact: WII not increase the cost of construction

Lobby doors locks are being installed without the benefit of a permit. This proposal will legitimize the use of security door locking systems thereby saving money by eliminating the need for retrofit after the original unpermitted installation.

> E76-15: 1010.1.9.12 (New)-KRANZ3765

Public Hearing Results

Committee Action:

Committee Reason: This special requirement for elevator lobbies is already addressed in other sections of the code, therefore, this new language is not needed. Section 3006.4 requires direct access to one stairway from the lobby, so this proposal is not needed for occupants in the lobby. If the lobby is a space that is part of the route to the exits, locking of doors is already addressed in Section 1010.1.9.9. There are some language inconsistencies in the proposed text. Item 7 allows for too much judgement on the part of the code official.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Lee Kranz, City of Bellevue, WA, representing The City of Bellevue, WA (lkranz@bellevuewa.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

1010.1.9.12 Electronic locking devices on elevator lobby doors. In Group B occupancies, exit access doors within secured elevator lobbies are permitted to be locked with electronic locking devices that operate with Code Technology Committee Mtg #32

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Disapproved

items such as a card key, a security code or other security clearance locking devices in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The locking system shall be installed and operated in accordance with all the following:

- 1. Loss of power to the locking system automatically unlocks the door.
- 2. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of other electronics— and the doors shall remain unlocked for not less than 30 seconds.

Exception: A manual unlocking device is not required in elevator lobbies provided with direct access to an exit doorway and a two-way communication system is installed in the elevator lobby in accordance with Section 1009.8.

- 3. Activation of the building alarm system, shall automatically unlock the doors and the doors shall remain unlocked until the fire alarm system has been reset.
- 4. Activation of the building automatic sprinkler system or fire detection system shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
- 5. Emergency egress lighting shall be provided in the secured elevator lobby at the door.
- 6. The door locking system units shall be listed in accordance with UL 294.
- 7. The use of electronic locking devices is revocable by the building official for due cause.

Commenter's Reason: This public comment is intended to address statements made by the Means of Egress Committee at the Committee Action Hearings (CAH) in Memphis. The Committee's assertion that the code already has special requirements for locking elevator lobby doors to maintain security is erronious. The only provision that comes close to meeting the goal of securing elevator lobby doors is Section 1010.1.9.7 for delayed egress. This provision is rarely if ever used for this purpose as it falls short of providing adequate security and does not provide for ease of use by staff who need to access secured areas. The reference provided by the Committee to Section 1010.1.9.9 does not allow elevator lobby doors to be locked from the lobby (egress) side which is the sole reason for this proposal. Reference was also made to Section 3006.4 along with a statement that this section "requires direct access to one stairway from the lobby.". I find no such language in Section 3006.4. The provision says that "Elevator lobbies shall be provided with at least one means of egress complying with Chapter 10 and other provisions in this code". This language essentially requires an exit or exit access, as is typical for any other room or space in the building; there is no requirement for "direct access to one stairway from the lobby" provided in this section as stipulated by the Committee.

Item 7 of the original proposal, which gave the building official the right to revoke the option to lock elevator lobby doors, has been deleted to maintain consistency in application of the provision.

Locking elevator lobby doors to maintain security in today's highly competitive office invironment is a reality that the code must address. The 2015 IBC does not currently provide for a solution for this issue which is why many fire prevention Code Technology Committee Mtg #32

officers are finding these doors locked after the final building inspection is completed and the C of O is issued. This code change provides a logical and safe method to maintain a secured office invironment while allowing for safe egress from the elevator lobby in the unlikely event that someone is locked in the lobby.

E153-15 1105.1, 1105.1.1 (New), TABLE 1105.1.1 (New) Proposed Change as Submitted

Proponent : Joseph Hetzel, representing DASMA (Jhetzel@thomasamc.com)

2015 International Building Code

Revise as follows:

1105.1 Public entrances. In addition to *accessible* entrances required by Sections $\frac{1105.1.1}{1105.1.2}$ through $\frac{1105.1.7}{1105.1.8}$, at least 60 percent of all *public entrances* shall be *accessible*.

Exceptions:

- 1. An *accessible* entrance is not required to areas not required to be *accessible*.
- 2. Loading and *service entrances* that are not the only entrance to a tenant space.

Add new text as follows:

1105.1.1 Automatic Doors. For buildings or facilities having occupant loads greater than or equal to that specified in Table 1105.1.1, at least one accessible public entrance shall be either a power-operated door or a lowenergy power-operated door.

TABLE <u>1105.1.1</u>		
PUBLIC ENTRANCE WITH POWER-OPERATED DOOR		

<u>OCCUPANCY</u>	MINIMUM OCCUPANT LOAD
<u>l-1, l-2</u>	<u>50</u>
<u>A-1, A-2, A-3, A-4</u>	<u>300</u>
<u>R-1</u>	<u>300</u>
<u>B, E, M, R-2</u>	<u>500</u>

Reason:

- The proposed language is conceptually based on code language currently in existence, and successfully used, in the province of Ontario, Canada.
- It is widely accepted that automatic doors in general enhance overall accessibility.
- The occupancies cited as requiring power-operated doors are associated with locations where either a high degree of public use would be anticipated, or a serious need exists among the population using a particular occupancy.
- The Table is needed in Section 1105, where accessible entrances are governed.

- Occupant loads have been determined as follows:
 - Groups A and I-2: From Table 1604.5, where these Groups are classified as Risk Category III described as "buildings and other structures that represent a substantial hazard to human life in the event of failure".
 - Other Groups in proposed Table 1105.1.8: From Table 1006.3.1, which states that three exits or exit access doorways shall be provided from any space with an occupant load of 501 to 1000, and four shall be provided with an occupant load greater than 1000.
- The thresholds have been chosen so as not to place a disproportional economic burden on smaller occupancies such as small assembly buildings or strip mall businesses.
- The thresholds also assume that a minimum of 0.4% of the population will be in need of accessibility at any given time for the specified occupancies. The anticipated accessibility need should exceed this estimate a large enough percentage of time to constitute a critical mass of facilities needing poweroperated doors when meeting the established thresholds.
- The population requiring accessibility commonly needs accommodations to enter assembly, business, mercantile, hotel/motel, and institutional facilities as part of their everyday life.

Cost Impact: WII increase the cost of construction

The code change proposal will increase the cost of construction, which will be offset by the significant enhancement of accessibility and the side benefit of increased public convenience.

> E153-15 : 1105.1-HETZEL3472

Public Hearing Results

Committee Action:

Committee Reason: The testimony was that power doors are already typically provided in these types of facilities, so why is there a need to require them? This is a best practice item, not a minimum code requirement. There was no technical justification for the occupant load numbers suggested.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Joseph Hetzel, representing American Association of Automatic Door Manufacturers (AAADM) (Jhetzel@thomasamc.com) requests Approve as Modified by this Public Comment.

Further Modify as Follows:

2015 International Building Code

1105.1.1 Automatic <u>Power Operated</u> Doors. For buildings or facilities having occupant loads greater than or equal to that specified in Table 1105.1.1, at least one accessible public entrance shall be either a power-operated door or a low-energy power-operated door.

Disapproved

None

TABLE 1105.1.1PUBLIC ENTRANCE WITH POWER-OPERATED DOOR

OCCUPANCY	MINIMUM OCCUPANT LOAD
I-1, I-2	50
A-1, A-2, A-3, A-4	300<u>301</u>
R-1	300
B, E, M, <u>R-1,R-2</u>	500 <u>501</u>

Commenter's Reason: In addition to the reasoning given with the original proposal, the following information addresses Committee comments.

- The requirement is a need, as opposed to a "best practice", because not only do automatic doors enhance accessibility but they have become a staple of access convenience in society and are known to be very highly reliable.
- Our justification of minimum occupant load uses Risk Category and minimum number of exits as starting points, since these are the only locations in the Code with occupancy thresholds to consider. Risk Category and minimum number of exits share a common concern with automatic doors because the threshold numbers represent a critical mass of people above which a unique set of code requirements need to apply. Following is an explanation of how the threshold numbers have been arrived at for each occupancy in the Table.
 - Group I: From Table 1604.5, Risk Category III which is described as "buildings and other structures that represent a substantial hazard to human life in the event of failure". I-2 is classified as "an occupant load of 50 or more resident care recipients but not having surgery or emergency treatment facilities". I-1 is comparable to I-2 from the standpoint that 50 or more occupants could be in a building or facility. I-3 is not needed in the Table for security purposes, and I-4 is not needed because the occupancy would not likely reach 50 or more.
 - Group A: Also from Table 1604.5, Risk Category III. The scope of public assemblies is an occupant load greater than 300.
 - Groups B, M and R-1: From Table 1006.3.1, minimum number of exits or access to exits per story. Table 1006.3.1 states that three exits or exit access doorways shall be provided from any space with an occupant load of 501 to 1000, and four shall be provided with an occupant load greater than 1000. The proposed Table would set a threshold of three exits or exit access doorways, in a given story with a public entrance, to require an automatic door at that public entrance. R-1 is the applicable Group R occupancy because hotels and motels should be encompassed by the Table where the threshold occupant load would be appropriate for those structures.

The modified Table directly addresses the anticipated need of the accessibility community, particularly involving the public to especially consider "transient" use. Occupancies E and R-2 have been removed from the original proposal since there may be security related aspects of entrance doors requiring special access related devices.

E155-15 1107.5.1, 1107.5.1.1, 1107.5.1.2, 1107.6.2.2, 1107.6.2.2.1, 1107.6.2.2, 1107.6.2.3, 1107.6.2.3.1, 1107.6.2.3.2

Proposed Change as Submitted

Proponent : Daniel Nichols, New York State Division of Building Standards and Codes, representing New York State Division of Building Standards and Codes (dnichols@dos.state.ny.us)

2015 International Building Code

Revise as follows:

1107.5.1 Group I-1. Accessible units and Type B units shall be provided in Group I-1 occupancies in accordance with Sections 1107.5.1.1 and 1107.5.1.2.

1107.5.1.1 Accessible units. In Group I-1 Condition 1, at least 4 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*. In Group I-1 Condition 2, at least 10 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

1107.5.1.2 Type B units. In structures with four or more *dwelling units* or sleeping units intended to be occupied as a residence, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*and shall meet the additional following requirements.

- 1. Doors intended for user passage required to comply with ICC A117.1 Section 1004.5.2 shall also comply with the clear width and maneuvering clearances required by Sections 404.2.2 and 404.2.3 of ICC A117.1.
- 2. <u>At least one toilet and bathing facility in the *dwelling* or *sleeping* <u>unit shall be constructed in accordance with the toilet and bathing</u> <u>facilities requirements of Section 1003.11 of ICC A117.1.</u></u>

Exception Exceptions:

- 1. The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.
- 2. <u>Maneuvering clearance is not required on the toilet room or</u> <u>bathroom side of the door in toilet rooms and bathrooms not</u> <u>required to comply with Section 1003.11 of ICC A117.1.</u>
- 3. <u>Where exterior space dimensions of balconies are less than the</u> required manuevering clearance, door manuevering clearance is not required on the exterior side of the door.
- 4. <u>Where closets or pantries are 48 inches (1220 mm) maximum in</u> <u>depth, the maneuvering clearance is not required on the closet</u> <u>side of the door.</u>

1107.6.2.2 Apartment houses, monasteries and convents. *Type A units* and *Type B units* shall be provided in apartment houses, monasteries and convents in accordance with Sections Section 1107.6.2.2.1 and 1107.6.2.2.2.

Delete without substitution:

1107.6.2.2.1 Type A units. In Group R-2 occupancies containing more than 20 *dwelling units* or *sleeping units*, at least 2 percent but not less than one of the units shall be a *Type A unit*.All Group R-2 units on a *site* shall be considered to determine the total number of units and the required number of *Type A units*.*Type A units* shall be dispersed among the various classes of units.Bedrooms in monasteries and convents shall be counted as *sleeping units* for the purpose of determining the number of units.Where the *sleeping units* are grouped into suites, only one *sleeping unit* in each suite shall count towards the number of *Type A units*.

Exceptions:

- **1.** The number of *Type A units* is permitted to be reduced in accordance with Section 1107.7.
- 2. *Existing structures* on a *site* shall not contribute to the total number of units on a *site*.

Revise as follows:

1107.6.2.2.2 1107.6.2.2.1 Type B units. Where there are four or more *dwelling units* or *sleeping units intended to be occupied as a residence* in a single structure, every *dwelling unit* and *sleeping unitintended to be occupied as a residence* shall be a *Type B unit_and shall meet the additional following requirements.*

- 1. Door intended for user passage required to comply with ICC A117.1 Section 1004.5.2 shall also comply with the clear width and maneuvering clearances required by Sections 404.2.2 and 404.2.3 of ICC A117.1.
- 2. <u>At least one toilet and bathing facility in the dwelling or sleeping</u> <u>unit shall be constructed in accordance with the toilet and bathing</u> <u>facilities requirements of Section 1003.11 of ICC A117.1.</u>

Exception Exceptions:

- 1. The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.
- 2. <u>Maneuvering clearances is not required on the toilet room or</u> <u>bathroom side of the door in toilet rooms and bathrooms not</u> <u>required to comply with Section 1003.11 of ICC A117.1.</u>
- 3. <u>Where exterior space dimensions of balconies are less than the</u> required manuevering clearance, door manuevering clearances is not required on the exterior side of the door.
- 4. <u>Where closets or pantries are 48 inches (1220 mm) maximum in</u> <u>depth, the maneuvering clearance is not required on the closet</u> <u>side of the door.</u>

1107.6.2.3 Group R-2 other than live/work units, apartment houses, monasteries and convents. In Group R-2 occupancies, other than *live/work units*, apartment houses, monasteries and convents falling Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 31 of 176 within the scope of Sections 1107.6.2.1 and 1107.6.2.2, *Accessibleunits* and *Type B units* shall be provided in accordance with Sections 1107.6.2.3.1 and 1107.6.2.3.2. Bedrooms within congregate living facilities shall be counted as *sleeping units* for the purpose of determining the number of units. Where the *sleeping units* are grouped into suites, only one *sleeping unit* in each suite shall be permitted to count towards the number of required *Accessibleunits*.

1107.6.2.3.1 Accessible units. *Accessibledwelling units* and *sleeping units* shall be provided in accordance with Table 1107.6.1.1.

1107.6.2.3.2 Type B units. Where there are four or more *dwelling units* or *sleeping units intended to be occupied as a residence* in a single structure, every *dwelling unit* and every *sleeping unitintended to be occupied as a residence* shall be a *Type B unit* and shall meet the additional following requirements.

- 1. <u>Door intended for user passage required to comply with ICC</u> A117.1 Section 1004.5.2 shall also comply with the clear width and maneuvering clearances required by Sections 404.2.2 and 404.2.3 of ICC A117.1.
- 2. <u>At least one toilet and bathing facility in the *dwelling* or *sleeping* <u>unit shall be constructed in accordance with the toilet and bathing</u> <u>facilities requirements of Section 1003.11 of ICC A117.1.</u></u>

Exception Exceptions:

- 1. The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.
- 2. <u>Maneuvering clearances is not required on the toilet room or</u> <u>bathroom side of the door in toilet rooms and bathrooms not</u> <u>required to comply with Section 1003.11 of ICC A117.1.</u>
- 3. <u>Where exterior space dimensions of balconies are less than the</u> required manuevering clearance, door manuevering clearances is not required on the exterior side of the door.
- 4. Where closets or pantries are 48 inches (1220 mm) maximum in depth, the maneuvering clearance is not required on the closet side of the door.

Reason: The purpose of this code change proposal is to modify the level of accessibility offered in Group I-1 and R-2. The collective use of these residential occupancies is generally for occupants that are planning a long-term residency in a dwelling or sleeping unit. With that, the availability of choice is important in selecting a residential unit compared to other residential occupancies.

The language of the proposal has been utilized in New York State for the past 12 years and was developed jointly by accessibility advocates and the building industry . For Group R-2 apartments, the baseline to the proposal is that the elimination of full Type A unit requirements is offset by the expansion of certain accessibility features in the remaining units that are being designed as Type B units. The reasoning for this proposal is to offer more choice in these residential buildings to those with different types of physical disabilities and their respective mobility needs. Further,

the proposal will offer more choice of residential housing to a greater number of those with physical disabilities since the requirements for doorway widths and an accessible bathroom will start at four units, instead of 20 units that count units throughout a complex.

The proposal requires the initial design of all apartments to have doorways the width as required for a Type A unit as well as one bathroom to be of Type A design. This provides the additional choice within apartments for either initial use or adaptable changes to other building features (like cabinetry or appliance access) due to change of occupant or change of occupant's abilities.

Cost Impact: Will increase the cost of construction

The code change will increase the cost of construction since the floor area that is required for the additional Type B units is generally not offset by the ellimination of the Type A units.

E155-15 : 1107.6.2.2-NICHOLS5453

Disapproved

Public Hearing Results

Committee Action:

Committee Reason: Technical justification for the need for the New York B+ units was not provided. This would over ride the ICC A117.1 technical provisions for Type A and Type B units. This would eliminated Type A units which do provide a higher level of accessbility. This would potentially cause a conflict with the Department of Housing and Urban Development (HUD) viewing the IBC and ICC A117.1 as safe harbor documents.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Nathan Roether, representing United Spinal (nroether@accessibility-services.com) requests Approve as Submitted.

Commenter's Reason: This has worked in New York State since 1984, New Jersey since the early 70's and in New York City since the 2008 edition of the building code. An aging population requires more accessibility. Our main goal is to increase accessibility.

E155-15

EB21-15

402.6 (New), 403.11 (New), 804.4.4 (New), 1105 (New), 1105.1 (New) *Proposed Change as Submitted*

Proponent : Adolf Zubia, representing IAFC Fire & Life Safety Section

2015 International Existing Building Code

Add new text as follows:

402.6 Carbon monoxide alarms in existing portions of a building. Where an addition is made to a building or structure of a Group I-1, I-2, I-4 or R occupancy, the existing building shall be provided with carbon monoxide alarms in accordance with Section 1103.9 of the International Fire Code or Section R315of the International Residential Code, as applicable.

403.11 Carbon monoxide alarms. Carbon monoxide alarms shall be provided to protect sleeping units and dwelling units in Group I-1, I-2, I-4 and R occupancies in accordance with Section 1103.9 of the International Fire Code.

804.4.4 Carbon monoxide alarms. Sleeping units and dwelling units in any work area in Group I-1, I-2, I-4 and R occupancies shall be equipped with carbon monoxide alarms in accordance with Section 1103.9 of the International Fire Code.

SECTION 1105 CARBON MONOXIDE ALARMS IN GROUPS I-1, I-2, I-4 AND R

1105.1 Carbon monoxide alarms in existing portions of a

building Where an addition is made to a building or structure of a Group I-1, I-2, I-4 or R occupancy, the existing building shall be equipped with carbon monoxide alarms in accordance with Section 1103.9 of the *International Fire Code* or Section R315 of the *International Residential Code*, as applicable.

Reason: This proposal is submitted by the Fire and Life Safety Section of the International Association of Fire Chiefs.

IFC Section 1103.8 contains requirements for installing smoke alarms in existing occupancies. Those requirements are reflected in the IEBC Sections 402.5. 403.10, 804.4.3 and 1104.1. IFC Section 1103.9 contains requirements for installing carbon monoxide alarms in existing occupancies; however, those requirements are currently not reflected in the IEBC.

This proposal corrects this oversight with the new proposed code sections.

This proposal will provide consistency between the IFC, IRC and the IEBC with regard to the installation and requirements of carbon monoxide alarms.

Cost Impact: WII not increase the cost of construction

The cost of construction will not increase since the existing buildings should already be in compliance with the requirements in IFC Section 1103.9. This proposal simply provides correlation between the I-Codes.

> EB21-15 : 402.6 (New)-ZUBIA4683

Public Hearing Results

Committee Action:

Committee Reason: The proposal was disapproved as it was not felt necessary to add these requirements to the IEBC already addressed by the IFC. In addition, there was concern that the cost impact was not addressed in enough detail and education is a better way to encourage the use of such detection.

Assembly Action :

None

Disapproved

Individual Consideration Agenda

Public Comment 1:

Proponent : Edward Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Existing Building Code

402.6 Carbon monoxide alarms in existing portions of a building. Where an addition is made to a building or structure of a Group I-1, I-2, I-4 or R occupancy, the existing building shall be provided with carbon monoxide alarms in accordance with Section 1103.9 of the *International Fire Code* or Section R315of the *International Residential Code*, as applicable.

Exceptions:

- 1. <u>Work involving the exterior surfaces of buildings, such as the</u> replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of porches or decks, is exempt from the requirements of this section.
- 2. <u>Installation, alteration or repairs of plumbing or mechanical</u> <u>systems, other than fuel-burning appliances, are exempt from</u> <u>the requirements of this section.</u>

403.11 Carbon monoxide alarms. Carbon monoxide alarms shall be provided to protect sleeping units and dwelling units in Group I-1, I-2, I-4 and R occupancies in accordance with Section 1103.9 of the *International Fire Code*.

Exceptions:

- 1. <u>Work involving the exterior surfaces of buildings, such as the</u> <u>replacement of roofing or siding, or the addition or replacement</u> <u>of windows or doors, or the addition of porches or decks, is</u> exempt from the requirements of this section.
- 2. <u>Installation, alteration or repairs of plumbing or mechanical</u> <u>systems, other than fuel-burning appliances, are exempt from</u> <u>the requirements of this section.</u>

SECTION 805 CARBON MONOXIDE DETECTION

804.4.4 <u>805.1</u> Carbon monoxide alarms. Sleeping units and dwelling units in any Any work area in Group I-1, I-2, I-4 and R occupancies shall be equipped with carbon monoxide alarms in accordance with Section 1103.9 of the International Fire Code.

Exceptions:

- 1. <u>Work involving the exterior surfaces of buildings, such as the</u> replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of porches or decks, is exempt from the requirements of this section.
- 2. <u>Installation, alteration or repairs of plumbing or mechanical</u> <u>systems, other than fuel-burning appliances, are exempt from</u> <u>the requirements of this section.</u>

Commenter's Reason: The proposal was disapproved as it was not felt necessary to add these requirements to the IEBC already addressed by the IFC. Response: The CO alarm requirements replicate smoke alarm requirements that were judged to be necessary.

This Public Comment (PC) will provide consistency between the IFC, IRC and the IEBC with regard to the installation requirements of carbon monoxide detection in existing buildings. Section 1103.9 of the IFC and Section R315 of the IRC contain requirements for installation of CO detection in existing occupancies. However there are no such requirements in the IEBC.

The ICC membership has already determined that CO poisoning as a distinct hazard and has placed specific provisions in the IFC and IRC for CO detection in existing occupancies. Since the determination of a hazard is already identified in the aforementioned Codes similar requirements need to be added to the IEBC. Also, in the absence of a model building code for the installation of CO detection in existing occupancies many jurisdictions are passing laws for CO detection in existing buildings with varying installation requirements.

EB21-15
EB42-15 410.8.6, 410.8.7, 410.8.8 *Proposed Change as Submitted*

Proponent: Edward Kulik, Chair, representing Building Code Action Committee (bcac@iccsafe.org)

2015 International Existing Building Code

Revise as follows:

410.8.6 Accessible dwelling or sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the *International Building Code* for Accessible units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of spaces being altered or added.

410.8.7 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the *International Building Code* for Type A units and <u>Chapter 9 of the *International Building Code* for visible alarms</u> apply only to the quantity of the spaces being altered or added.

410.8.8 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units apply only to the quantity of the spaces being added. Where Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered and where the work area is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

Reason: There is a series of proposals intended to coordinate the provisions in the first and second options in the IEBC. This phrase was deleted from Sections 410.8.7, 410.8.8 and 410.8.9 by code change G215-07/08. The reason given was that when visible alarms are required to be added or altered is addressed in IBC/IFC Chapter 9. However, in Chapter 9, if a system is touched, the whole building system needs to be upgraded. This would limit the change to just the units being altered. ALTERATIONS – LEVEL 1

705.1.8 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

ALTERATIONS - LEVEL 3

906.2 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

Exception: Group I-1, I-2, R-2, R-3 and R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March 15, 1991 are not

required to provide Type B dwelling or sleeping units.

ADDITION

1105.3 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

1105.4 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of spaces being added.

In July/2014 the ICC Board decided to sunset the activities of the Code Technology Committee (CTC). This is being accomplished by re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). This proposal falls under the CTC Area of Study entitled IBC Coordination with the New ADAAG. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website.

This public proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction The proposal limits the revisions to the fire alarm system. Therefore, there will be no additional costs to construction.

> EB42-15 : 410.8.6-KULIK3350

Public Hearing Results

Committee Action:

Committee Reason: There was concern with how this proposal would work with the exception to Section 907.5.2.3 of the IBC and IFC. More specifically, the concern was that visible alarms would potentially be required by this proposal where not required by the IBC or IFC.

Assembly Motion: Online Vote Results: Support: 35.03% (55) Oppose: 64.97% (102) Assembly Action :

Disapproved

As Submitted Failed

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Edward Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests Approve as Modified by this Public Comment.

Replace Proposal as Follows:

2015 International Existing Building Code

705.1.8 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

906.2 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms _apply only to the quantity of the spaces being altered.

Exception: Group I-1, I-2, R-2, R-3 and R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March 15, 1991 are not required to provide Type B dwelling or sleeping units.

1105.3 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

1105.4 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of spaces being added.

Commenter's Reason: The ICC Building Code Action Committee is requesting approval of this public comment. The IEBC Development Committee felt that inserting this language would override the alarm requirements in the IFC. This was not the intent. The proposal was for coordination between the prescriptive and work area methods in the IEBC. This modification is to strike the same language from the work area method.

EB42-15

EB43-15 410.8.8, 410.8.9 (New) Proposed Change as Submitted

Proponent: Edward Kulik, Chair, representing Building Code Action Committee (bcac@iccsafe.org)

2015 International Existing Building Code

Revise as follows:

410.8.8 Additions with Type B dwelling or sleeping units.

Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units apply only to the quantity of the spaces being added.

410.8.9 Alterations with Type B dwelling and sleeping units. Where

<u>four or more</u> Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered and where the work area is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 of the International Building Code for Type B units apply only to the quantity of the spaces being altered.

Reason: There is a series of proposals intended to coordinate the provisions in the first and second options in the IEBC. Section 410.8.8 is being split to separate additions and alterations. This is a clarification that is consistent with Sections 906.2, 1012.8 and 1105.4.

In July/2014 the ICC Board decided to sunset the activities of the Code Technology Committee (CTC). This is being accomplished by re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). This proposal falls under the CTC Area of Study entitled IBC Coordination with the New ADAAG. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website.

This public proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction The proposal is a clarification and coordination of current requirements; therefore, there is no impact on the cost.

> EB43-15 : 410.8.8-KULIK3358



Committee Action:

Committee Reason: This proposal was disapproved based primarily on the preference to code change proposal EB44-15 and concern with the change to "four or more" where it had simply been based upon any number of units being altered. EB44-15 was also disapproved.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Edward Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests Approve as Submitted.

Commenter's Reason: The ICC Building Code Action Committee requests approval of this proposal as submitted. The IEBC Development committee stated they preferred EB44, but then disapproved EB44. The issue between EB 44 and EB65 was regarding the difference in the exception between the prescriptive and work area methods. This issue was resolved by AS for EB65. The purpose of this proposal is just to split the requirements for Type B units in the prescriptive method to match the text as shown in the work area method (Section 906.2, 1012.8 and 1105.4). This is editorial only.

EB43-15

EB44-15 410.8.8

Proposed Change as Submitted

Proponent : Dan Buuck, National Association of Home Builders, representing National Association of Home Builders (dbuuck@nahb.org)

2015 International Existing Building Code

Revise as follows:

410.8.8 <u>Additions with</u> Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units apply only to the quantity of the spaces being added.

410.8.9 Alterations with Type B dwelling and sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered and where the work area is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 of the International Building Code for Type B units apply only to the quantity of the spaces being altered.

Exception: Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March 15, 1991 are not required to provide Type B dwelling or sleeping units.

Reason: Section 410.8.8 is being split to separate additions and alterations (similar to Section 906.2 and 1105.4). The addition of the exception to Section 410.8.9 is to coordinate with Section 906.2. The intent is to coordinate the requirements for Type B dwelling units within the options available in the IEBC.

This same exception was added to Section 906.2 during the last code cycle to bring it in line with the provisions of FHA. It was approved by the committee and had no public comments. This proposal fixes the unintended omission of the same language in Section 410.8.9. These provisions need to include similar language, because they are parallel sections.

Having this language in the IEBC allows buildings that were previously occupied to be revitalized without triggering requirements that would exceed the federal legislation. Too often existing building owners who submit plans to alter an existing residential building which was built before the FHA guidelines went into effect are told that they must comply with the accessible requirements for new buildings. This exception brings the IEBC in line with the federal guidelines.

For reference, FHA regulations state "The design requirements apply to buildings built for first occupancy after March 13, 1991, which fall under the definition of "covered multifamily dwellings."

Sections 906.2 and 1105.4 are shown below for comparison:

906.2 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered, the requirements of Section 1107 of the International Building Code for Type B units and Chapter 9 of the International Building Code for visible alarms apply only to the quantity of the spaces being altered.

Exception: Group I-1, I-2, R-2, R-3 and R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March 15, 1991 are not required to provide Type B dwelling or sleeping units.

1105.4 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Code Technology Committee Mtg #32

Section 1107 of the International Building Code for Type B units and Chapter 9 of the International Building Code for visible alarms apply only to the quantity of spaces being added.

Cost Impact: WII not increase the cost of construction

This proposal limits the Type B units requirements to only buildings that should have complied with the Fair Housing Act at the time of initial construction. Therefore, older institutional and residential buildings would not have the additional costs of upgrading for accessibility.

> EB44-15 : 410.8.8-BUUCK4900

Public Hearing Results

Committee Action:

Committee Reason: The concern with this proposal is allowing the same exception in the prescriptive method as work area method. The change was seen as too significant. There was also concern with determining the dates when a change of occupancy was issued.

Assembly Action :

Disapproved

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Dan Buuck, representing National Association of Home Builders (dbuuck@nahb.org) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Existing Building Code

410.8.8 Additions with Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units apply only to the quantity of the spaces being added.

410.8.9 Alterations with Type B dwelling and sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered and where the work area is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 of the International Building Code for Type B units apply only to the quantity of the spaces being altered.

Exception: Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March $\frac{15}{14}$, 1991 are not required to provide Type B dwelling or sleeping units.

Commenter's Reason: The purpose of the proposed exception is to align the code with the Fair Housing Act. For reference, FHA regulations state "The design requirements apply to buildings built for first occupancy after March 13, 1991, which fall under the definition of "covered multifamily dwellings."

The committee reason states a concern that this exception would be included in the prescriptive method AND the work area method, as if that was problematic. Actually this exception should apply to both instances, because that would allign both methods with the FHA and avoid confusion.

The second reason which the committee discussed was that determining when the certificate of occupancy was issued. This is not as big of a challenge as some made it out to be. The vast majority of counties have this information available if the Department of Building Safety doesn't. Most areas of a town or city fall into certain decades of construction anyway, making it clear that a house was occupied long before (or after) the cut-off date.

Note the only modification made to the original proposal was a minor adjustment to the date in order to bring it fully in line with the FHA provision. See the similar public comment for EB 65-15.

EB44-15

EB58-15 804.2.2

Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Existing Building Code

Revise as follows:

804.2.2 Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2. In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where all of the following conditions occur:

- 1. The *work area* is required to be provided with automatic sprinkler protection in accordance with the *International Building Code* as applicable to new construction; and
- 2. The *work area* exceeds 50 percent of the floor area.
 - **Exception:** If the building does not have sufficient municipal water supply for design of a fire sprinkler system available to the floor without installation of a new fire pump, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the *International Building Code*.

Reason: This is a single exit building, and given the limit on the number of residents in Group R-4, will not ever have more than 30, therefore, Group R-4 should not be included since the requirement would never be applicable.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction This eliminates a requirement that is never applicable.

EB58-15 : 804.2.2-BALDASSARRA4284

Public Hearing Results

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Committee Action:

Disapproved

Committee Reason: There were two main concerns with this proposal. First, mixed use buildings may contain Group R-4 occupancies and the total occupant load can easily surpass 30. Secondly, the reason statement refers to residents but the requirements refer to occupants. Though the residents may never exceed 30 the number of occupants may.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Carl Baldassarra, P.E., FSFPA, representing Code Technologies Committee (CTC@iccsafe.org) requests Approve as Submitted.

Commenter's Reason: The CTC did a review of the codes regarding where there were differences between Group R-3 and R-4 requirements. Where there was a difference, there was a review of the requirement to see if there was technical justification for the requirement. If there is no technical justification, this could be considered a violation of the Fair Housing Act since the code is asking for something more than asked for in a single family home.

Group R-4 is determined by the number of residents (not counting staff), not the occupant load, so this requirement could result in a requirement that was more restrictive in the IEBC than for new construction.

The IEBC development committee disapproved this proposal based on the possibility that a Group R-4 could have 30 occupants. Based on the occupant load table, that would be a group home with an area of large than 6,000 sq.ft. or larger all discharging through the same corridor or exit (per the base requirement in this section). In addition, the reference for occupant notification systems in the exception to Item 2 are to sections not applicable for Group R-4 facilities.

EB58-15

EB59-15 804.2.2 Proposed Change as Submitted

Proponent : Adolf Zubia, IAFC Fire & Life Safety Section, representing IAFC Fire & Life Safety Section

2015 International Existing Building Code

Revise as follows:

804.2.2 Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2. In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where all of the following conditions occur:

- 1. The *work area* is required to be provided with automatic sprinkler protection in accordance with the *International Building Code* as applicable to new construction; and
- 2. The work area exceeds 50 percent of the floor area.
 Exception: If the building does not have sufficient municipal water supply for design <u>and installation of a fire an automatic</u> sprinkler system available to <u>at</u> the floor without installation of a new fire pump site, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the International Building Code.

Reason: This proposal is submitted by Fire and Life Safety Section of the International Association of Fire Chiefs.

The intent of this code change is to address the concern that the municipal water supply must be available at the floor level where the work area is located without the installation of a fire pump. The determining factor for an automatic fire sprinkler system should be whether there is adequate water, not whether a fire pump may be required when achieving an acceptable level of public safety.

This code change revises the text so that the adequacy of a municipal water supply at the building site is the determining factor. When the work area exceeds 50% of the floor area and a fire sprinkler system would be required. The possible installation of a fire pump to supplement the water flow and pressure is not the deciding factor when providing fire safety to the work area.

The revision to this exception will allow existing buildings to comply with this section by installing a smoke detection system in lieu of the fire sprinkler system where the volume and quantity of water at the site is not adequate to fulfill the fire sprinkler system requirements.

Cost Impact: WII increase the cost of construction

This code change will increase the cost of construction. The cost of fire pump will most likely exceed the cost of a smoke detection system. However, the same fire pump should be adequate for future fire sprinkler system installations in the building. Therefore, the fire pump will be a one-time cost for the building whereas Code Technology Committee Mtg #32

future alterations would require the installation of additional smoke detection systems.

EB59-15 : 804.2.2-ZUBIA4330

Public Hearing Results

Committee Action:

Committee Reason: This proposal was viewed as excessive for a level 2 alteration. In addition, it works against the intent of the IEBC to encourage the reuse of buildings. A particular example of this concern was a building with a large site that technically has access to a municipal water supply but would require extensive site work to gain access to the water.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Adolf Zubia, representing Fire and Life Safety Section of the International Association of Fire Chiefs requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Existing Building Code

804.2.2 Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2. In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where all of the following conditions occur:

- 1. The *work area* is required to be provided with automatic sprinkler protection in accordance with the *International Building Code* as applicable to new construction; and
- 2. The work area exceeds 50 percent of the floor area.

Exception:If the building does not have sufficient municipal water supply for design and installation of an automatic sprinkler system available at to the site floor without installation of a new fire pump, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the *International Building Code*.

904.1.2 Groups A, B, E, F-1, H, I, M, R-1, R-2, S-1 and S-2. In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas shall be provided with automatic sprinkler protection where the work area is required to be provided with automatic sprinkler

Disapproved

None

protection in accordance with the International Building Code as applicable to new construction.

Exception: If the building does not have sufficient municipal water supply for design and installation of an automatic sprinkler system available at the site, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the International Building Code.

Commenter's Reason: This proposal is one of a group of three. During the Committee Action Hearing in Memphis, this proposal was Disapproved because it was felt to be too restrictive for Level 2 Alterations. At the same time, the Code Development Committee relocated a companion code change, EB61, from Chapter 8 to Chapter 9 agreeing that it is appropriate for Level 3 Alterations.

This Public Comment reinserts the current text into Section 804.2.2, so no change is made for Level 2 Alterations. The Public Comment also adds a new Section 904.1.2 to Chapter 9, which applies to Level 3 Alterations. The result is that for Level 3 Alterations, the fire sprinkler system is required as long as adequate water is available, whether or not a fire pump is needed, which is consistent with the action taken on EB61.

Section 804.2.2 Item 2 is not carried forward into the new Section 904.1.2. By definition, all Level 3 Alterations consist of a work area exceeding 50% of the building area, so Item 2 becomes unnecessary. Since only Item 1 is remaining, it is moved into the main requirement rather than being a numbered item.

The exception still applies which provides an alternate in situations where the water supply is inadequate for fire sprinkler design.

EB59-15

EB65-15 906.2 *Proposed Change as Submitted*

Proponent: Dominic Marinelli, representing United Spinal Association (dmarinelli@accessibility-services.com)

2015 International Existing Building Code

Revise as follows:

906.2 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

Exception: Group I 1, I 2, R 2, R 3 and R 4 dwelling or sleeping units where the first certificate of occupancy was issued before March 15, 1991 are not required to provide Type B dwelling or sleeping units.

Reason: The purpose of this code change proposal is to eliminate a conflict in the IEBC between the requirements in the Prescriptive and Work Area methods. The deletion of the exception to Section 906.2 would coordinate with Section 410.8.8. The intent is to coordinate the requirements for Type B dwelling units within the options available in the IEBC.

In the prescriptive method, Section 906.2 requirement is found in the 2nd sentence of Section 410.8.8. (The first sentence matches IEBC Section 1105.4).

410.8.8 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the International Building Code for Type B units apply only to the quantity of the spaces being added.

Where Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered and where the work area is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 of the International Building Code for Type B units apply only to the quantity of the spaces being altered.

United Spinal does not support the exception to Section 906.2, and believes it should be deleted for several reasons.

The current exception to Section 906.2 includes a March 15, 1991 as a trigger date. This was inserted as a coordination item with Fair Housing Act (FHA) requirements. However, this is not quite correct. It will be extremely difficult for code officials to determine as the first certificate of occupancy date is different than the date of First Occupancy as defined by the Fair Housing Accessibility Guidelines (i.e., the date that tenants first occupied their apartments). Adding a trigger date would require additional research by the architect or code official to determine if these code requirements were applicable or not. While the jurisdiction does hold records of certificate of occupancy, they do not information on actual occupancy of a space.

In addition, even if this was a match, including the trigger date of the FHA could significantly reduce the number of buildings where these basic adaptability features are required. Remember that these are already major alterations, not minor fixes. In instances where existing structure would prevent compliance with Type B features, permit applicants can take advantage of the technical infeasibility exception offered in the IEBC. It should be noted that Section 410.7 Exception 5 and 705.2 Exception 5 already exempts the building from improving the accessible route, so this

Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 50 of 176 requirement is only for the element being altered.

The intent of the original requirement was to require adaptable Type B features in Level III alterations. This requirement will allow for basic adaptations to be made in the Type B unit in the future (but will not require accessible turning spaces, removable base cabinets, maneuvering clearance at bedroom and bathroom doors, or the installation of grab bars).

Cost Impact: WII not increase the cost of construction This proposal as it will match current language in Section 410.8.8.

> EB65-15 : 906.2-ROETHER5445

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The committee approved the proposal for consistency on the action on EB44-15. In addition, determining the certificate of occupancy for existing buildings can be problematic in smaller jurisdictions.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Dan Buuck, representing National Association of Home Builders (dbuuck@nahb.org) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Existing Building Code

906.2 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

Exception: Group I-1, I-2, R-2, R-3 and R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March 14, 1991 are not required to provide Type B dwelling or sleeping units.

Commenter's Reason: The purpose of the proposed exception is to align the code with the Fair Housing Act. For reference, FHA regulations state "The design requirements apply to buildings built for first occupancy after March 13, 1991, which fall under the definition of "covered multifamily dwellings."

The committee reason states a concern that this exception would be included in the prescriptive method AND the work area method, as if that was problematic. Actually this exception should apply to both instances, because that would allign both methods with the FHA and avoid confusion.

The second reason which the committee discussed was that determining when the certificate of occupancy was issued. This is not as big of a challenge as some made

it out to be. The vast majority of counties have this information available if the Department of Building Safety doesn't. Most areas of a town or city fall into certain decades of construction anyway, making it clear that a house was occupied long before (or after) the cut-off date.

Note the only modification made to the original code text was a minor adjustment to the date in order to bring it fully in line with the FHA provision. See the similar public comment for EB 44-15.

EB66-15 906.3 (New)

Proposed Change as Submitted

Proponent : Gene Boecker, representing Code Consultants, Inc. (geneb@codeconsultants.com)

2015 International Existing Building Code

Add new text as follows:

906.3 Accessible means of egress At least one accessible means of egress shall be provided from each story of each work area to the exit discharge in accordance with the requirements of Section 1009 of the *International Building Code* unless technically infeasible.

Exceptions:

- 1. <u>Historic Buildings.</u>
- 2. <u>Buildings three stories or less in height where the building does</u> <u>not require an automatic sprinkler system throughout in</u> <u>accordance with Section 903 of the International Building Code.</u>

Reason: The proposal seeks to add a requirement for an accessible means of egress (AMOE) in existing buildings. Changes are being proposed only for buildings with a Level 3 alteration. This means that at least 50 percent of the building is involved in an alteration, based on the descriptions in Chapter 5. The proposal also includes langauge to exempt full compliance for the AMOE where it is technically infeasible. This might be the case where the elevator would normally be required as a part of the AMOE and the hoistway shaft would need to be modified on floors beyond the work area or where such an alteration could possibly leave the building structurally unsound. Section 906.1, within the same main Section where this new code language would be located, requires the alteration to comply with Section 705. Section 705.1 already addresses the concept of technically infeasible and how it works within existing buildings.

Two exceptions are offered to this new section. The first exempts historic buildings. The complexity with which these buildings must be addressed means that it is not practical to provide an AMOE in addition to the general requirements for acessibility in an historic building. The second exception recognizes the potential costs associated with trying to create an AMOE in smaller existing buildings. If the building is small enough that automatic fire sprinklers are not required, then the creation of fire rated areas of refuge could be a considerable cost imposition. However, if the smaller building is requried to be protected throughout with an automatic fire sprinkler system, then areas of refuge are not required and the existing and/or new stairways can be used as part of the AMOE.

The ICC is responsible for establishing what the minimum level of safety is for new and existing buildings. The codes contain requirements for "access" for everyone, including the disabled, for both new and existing buildings. However, for existing buildings, the codes seem lacking in concern for the safety of those in the disabled community with regard to building "egress." With over 25 years of the ADA and many more years of accessibility provisions in the legacy codes, it is now time that the ICC recognize this need and include language regarding accessible means of egress for existing buildings. To do otherwise is to ignore the life safety of an entire group of the public, as well as employees, in existing buildings undergoing substantial renovation. The degree of cost increase is variable. For some Level 3 alterations, the cost would be neglible if not nonexistent since a larger building will be protected throughout with an automatic fire sprinkler system, the elevator will be required to be on standby power and tactile exit signs would be required. In some instances the cost could be greater, depending on where the alteration work areas are located within the building. Therefore, it is not possible to offer a specific range of what the possible cost increase could be. The exceptions included in the proposal and the concept of "technically infeasible" are also options which will temper any substantial costs. Additionally, the question must be asked what the apprpriate cost for the lives that can be saved if an accessible means of egress is provided.

EB66-15 : 906.3 (New)-BOECKER5665

Public Hearing Results

Committee Action:

Committee Reason: This proposal was seen as excessive and would be costly even though it was located with the level 3 alteration provisions. There was concern that the cost limits typically used for accessible route would not be applicable to accessible means of egress as written. Finally, there was concern with the reference to Section 1009 of the IBC. Section 1009 has an exception for existing buildings. Note that E34-15 addresses that particular exception.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Gene Boecker, representing Code Consultants, Inc. (geneb@codeconsultants.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Existing Building Code

906.3 Accessible means of egress At least one accessible means of egress shall be provided from each story of each work area to the exit discharge in accordance with the requirements of Section 1009 of the *International Building Code* unless technically infeasible.

Alterations to provide an accessible means of egress shall provide access to the maximum extent technically feasible.

Exceptions:

- 1. Historic Buildings.
- 2. Buildings three stories or less in height where the building does not require an automatic sprinkler system throughout in accordance with Section 903 of the *International Building Code*.
- 3. <u>The cost of providing the accessible means of egress through the existing building shall not be required to exceed five percent (5%) of the costs of the addition.</u>

Commenter's Reason: The opposition to the effort to provide an accessible means

Disapproved

None

of egress in an existing building seems to rest upon expense. To address this, additional language has been proposed in this public comment to include a small percentage as the cut-off. This would have the effect of requiring something but not mandating a huge expense, even for Level 3 Alterations.

Comments during the committee hearing also included a possible conflict with Section 1009.1. However, E34-15 was approved with a modification by the committee. The original E34 proposal was to refer the reader to the IEBC. The committee chose instead to delete the exception altogether since it must be understood that existing buildings are subject to the IEBC. Therefore, there is no conflict with any text in the IBC. The IEBC is the proper place to address this issue.

If we cannot commit wholly to the concept of retrofitting one accessible means of egress, then at least let us commit to taking baby steps in this direction.

EB86-15 1401.6.17, Table 1401.6.17, 1401.6.17.1 *Proposed Change as Submitted*

Proponent : Jeff Hugo, representing National Fire Sprinkler Association (hugo@nfsa.org)

2015 International Existing Building Code

Revise as follows:

1401.6.17 Automatic sprinklers. Evaluate the ability to suppress <u>or</u> <u>control</u> a fire based on the installation of an automatic sprinkler system in accordance with Section 903.3.1.1 <u>903.3.1</u> of the *International Building Code*. "Required sprinklers" shall be based on the requirements of this code. <u>the *International Building Code*.</u> Under the categories and occupancies in Table 1401.6.17, determine the appropriate value and enter that value into Table 1401.7 under Safety Parameter 1401.6.17, Automatic Sprinklers, for fire safety, means of egress divided by 2, and general safety. High-rise buildings defined in Chapter 2 of the *International Building Code* that undergo a *change of occupancy* to Group R shall be equipped throughout with an automatic sprinkler system in accordance with Section 403 of the *International Building Code* and Chapter 9 of the *International Building Code*. Facilities in Group I-2 occupancies meeting Category a, b, c or f shall be considered to fail the evaluation.

OCCUPANCY	CATEGORIES							
	a a	a b	с	d	е	f		
A-1, A-3, F, M, R, S-1	-6	-3	0	2 3	4 <u>6</u>	6		
A-2	-4	-2	0	<u> 12</u>	2 4	4		
A-4, B, E, S-2	-12	-6	0	3 6	6 12	12		
I-2	NP	NP	NP	8	10	NP		

TABLE 1401.6.17SPRINKLER SYSTEM VALUES

NP = not permitted.

a. These options cannot be taken if Category a in Section 1401.6.18 is used.

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1401.6.17.1 Categories. The categories for automatic sprinkler system protection are:

- Category a—Sprinklers are required throughout<u>the building</u>; sprinkler protection is not provided. or the sprinkler system desing is not adequate for the hazard protected in accordance with Section 903 of the International Building Code.
- Category b—Sprinklers are required in <u>fire areas or</u> <u>compartments a portion of the building</u>; sprinkler protection is not provided in <u>fire areas or compartments</u>, or the sprinkler system design is not adequate for the hazard protected in accordance with Section 903 of the *International Building Code*.
- 3. Category c—Sprinklers are not required; none are provided.
- Category d—Sprinklers are required in a portion of the building <u>fire areas or compartments</u>; sprinklers are provided in <u>fire areas or compartments</u>such portion; the system is one that complied with the code at the time of installation and is maintained and supervised in accordance with Section 903 of the *International Building Code*.

- 5. Category e—Sprinklers are required throughout; sprinklers are provided throughout in accordance with Chapter 9 of the *International Building Code*.
- 6. Category f—Sprinklers are not required throughout; sprinklers are provided throughout in accordance with Chapter 9 of the *International Building Code*.

Reason: History and Summary

Fire sprinkler values was added to the BOCA version of Fire Safety Evaluation System (FSES) in the 1990 edition by code change number B270-89 (attached). This proposal created a table with two categories with the occupancy rows arranged the same as in the current IEBC. The first category (a) gave no credit for buildings without a sprinkler system and no credit for partial systems. The second category (b) provided values for fully sprinklered buildings according to the BOCA fire protection chapter (Article 10) which referenced NFPA 13 and NFPA 13R. Fully sprinklered buildings were given 4 points (A-2), 6 points (A-1, A-3, F, M, R, S-1) or 12 points (A-4, E, B, S-2). The values in the second category were established by other FSES processes (NFPA and NYC). These values were justified by the proponent as being equal to automatic alarm values.

In the 1996 BOCA, code change number B213-95 (attached), increased the two category value table to the current IEBC six category value table. The values in each of the six categories have been unchanged since this edition, with the exception of adding values for I-2 occupancies for the 2015 edition. The higher category values appear similar as the above version in 1990, with lower values in lower categories, however, this proposal discusses that the arrangement of the values do not do a fully sprinklered building justice as originally intended in the 1990 version.

Each proposed change is explained in detail below, however, to summarize, there was a significant and fundamental change on how these values were applied in the 1996 BOCA code. The 1990 values were for fully sprinklered buildings, but the 1996 values demoted these values for fully sprinklered buildings required to be sprinklered by the code (Category e). The full values, as intended by the 1990 text, was only given to buildings that were fully sprinklered voluntarily (Category f). The practice of constructing buildings as unsprinklered, (without any trade-offs) then adding a sprinkler system is virtually non-existent. The values in Category e and f of the 1996 BOCA to the 2015 IEBC are unjust and are not equal to the 1990 proponents' intent. This proposal adjusts the table accordingly.

Proposed Changes in Text

"...<u>or control</u>..."

This change correctly addresses automatic fire sprinkler systems for the majority of installations. Fire sprinkler systems designed according to NFPA 13, NFPA 13R and NFPA 13D are designed to control fires. There are a few instances in the NFPA 13 standard where the fire sprinkler is designed to suppress fires, such as in storage occupancies. It is appropriate to have "control" more than suppression in the code text, but this proposal leaves suppression in to accommodate the suppression in storage occupancies.

" ...<u>Section 903.3.1.1...</u>"

This change removes the limitation of the values to be used just on a NFPA 13 system. The values cannot be limited to just NFPA 13 systems. The intent of the proposal that expanded the values for 1996 BOCA did not prohibit NFPA 13R systems (B213-95), likewise, the values table has occupancies that are permitted to use NFPA 13R (R-1, R-2) and NFPA 13D (R-3, R-4) systems. When a building is sprinklered according to any of the sprinkler standards, they are considered fully sprinklered.

" ...<u>the International Building Code</u>this code..."

When this section was located in the IBC it also stated "this code". This section wasn't revised when it moved from the IBC to the IEBC. Every other section in Chapter 14 of the IEBC that has similar language refers to the IBC. For example, IEBC Section 1401.6.18 refers the requirements back to the IBC.

" Category a - Sprinklers are required throughout <u>the building</u>; sprinkler protection is not provided<u>or the sprinkler system design is not adequate</u> for the hazard protected in accordance with Section 903 of the International Building Code.".

This change updates and clarifies where sprinklers are throughout to make the user aware of the extent of sprinklers protection. The latter portion of the text is removed. The value assigned to this is extreme and is redundant with Category b. Having no sprinklers and an under-designed system is not equal. Both are detrimental, but one has no protection, the other has some form of protection. The penalty for an underdesigned system should a Category b and keep the unsprinklered building as the highest penalty.

"Category b - Sprinklers are required in *fire areas or compartments a portion* of the building; sprinkler protection is not provided in *fire areas or* <u>compartments</u>..."

This change provides a negative value when a fire area or compartment that is required to have sprinklers, but doesn't. Fire areas are defined in the IBC and "compartments" are used and qualified in Section 1401.6.3. These terms are concrete and have definite passive fire protection boundaries than the subjective term "portion". By using fire area and compartments, the code official and the user can be clear where sprinklers are supposed to be installed.

"Category d - Sprinklers are required in <u>fire areas or compartments a portion</u> of the building; sprinklers are provided in <u>fire areas or compartments.such</u> porton; the system is one that complied with the code at the time of installation and is maintained and supervised in accordance with Section 903 of the International Building Code."

This change assigns the partial system for a fire area with a value. It also removes the undefined term "portion". Fire areas are defined in the IBC and "compartments" are used and qualified in Section 1401.6.3. These terms are concrete and have definite passive fire protection boundaries than the subjective term "portion" which will have differing boundaries by every user for every building that is evaluated. By using fire area and compartments, the code official and the user can be clear where sprinklers are supposed to be installed.

There are some occupancies, such as A-1, A-2, A-3 and A-4, that are only required to have sprinklers in the fire area. Other fire areas may not need fire sprinklers. This change would provide buildings with sprinklered fire areas some credit. The value would not apply to a partial systems for incidental uses or other partial or limited-area system installation. The value would only be applied when the fire areas that are supposed to have sprinklers are installed according to the appropriate standard, or when the compartment is sprinklered.

This proposal also removes the value that is assigned for the maintenance of the

system according to the edition of the standard when it was installed. The IBC and IFC along with NFPA 13 require the sprinkler system to be maintained according to NFPA 25. This may not have been clear when the proposal was drafted for the 1996 BOCA. NFPA 25 was a new standard in 1992 and while it was referenced by the BOCA Fire Prevention Code, the scope may not have been fully understood and enforcement was difficult if the BOCA Fire Prevention Code was not specifically adopted. Furthermore, a system that is currently maintained according to the NFPA 25 (as referenced by current IFC) should receive points in a higher category.

Changes to the Table

Values in Category d

The changes to Category d provide one half of the value for a (proposed) fully sprinklered building. These values would be applied when the required fire areas are sprinklered. As explained above, the term fire area is defined and have definite fire rated boundaries within the building.

Values in Category e

The changes to the values in Category e show a fully sprinklered building with the maximum value as it is in Category f. It should make no difference that a sprinkler system was required or voluntarily installed. A fully sprinklered building is installed with the same installation standards whether it was a required system or a non-required system. There are other values in Chapter 14 of the IEBC that gives "bonus" points when the code was exceeded. However, a fully sprinklered building can be "upgraded" beyond the minimum standard, but that is hard to quantify and justify when additional points are awarded. When a fire rating is increased it is easier to identify and view the upgrade.

When the sprinkler values were introduced in the 1990 BOCA they were for fully sprinklered buildings. There was no "bonus" points. The reduced values in the current IEBC Category e penalizes buildings that have required sprinkler systems.

Cost Impact: WII not increase the cost of construction Updating values may descrease the need to upgrade other construction features to meet the FSES.

> EB86-15 : 1401.6.17-HUGO4760

Public Hearing Results

Committee Action:

Committee Reason: The proposal was disapproved with concern regarding the broadening of the application of these criteria to both NFPA 13R and 13D. In addition, the committee felt it was inappropriate for the scores for category e and f to be the same. One is for required systems (e) and the other if for non required systems (f). Generally, there was concern as to how these revisions will affect the mandatory safety scores.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Jeff Hugo, National Fire Sprinkler Association, representing National Fire Sprinkler Association (hugo@nfsa.org) Code Technology Committee Mtg #32

Disapproved

None

requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Existing Building Code

OCCUPANCY	CATEGORIES							
	a a	a b	с	d	е	f		
A-1, A-3, F, M, R, S-1	-6	-3	0	<u>2</u> -4	<u>4</u> 6	6		
A-2	-4	-2	0	<u>1</u> 2	<u>2</u> -4	4		
A-4, B, E, S-2	-12	-6	0	<u>3</u> 6	<u>6</u> 12	12		
I-2	NP	NP	NP	8	10	NP		

TABLE 1401.6.17SPRINKLER SYSTEM VALUES

NP = not permitted.

a. These options cannot be taken if Category a in Section 1401.6.18 is used.

Commenter's Reason: This PC changes the table back to the original values. The remainder of the proposal is as originally proposed.

The committee vote was close on this proposal (7-6). One of their concerns was that this proposal opens up to NFPA 13R and NFPA 13D. NFPA 13R and NFPA 13D are systems that permitted to be used by the IBC for new and existing construction. NFPA 13R is specifically referenced by the IEBC and is permitted for residential occupancies up to four stories and sixty feet in height. NFPA 13D is permitted by the IBC for R-3, R-4 Condition 1, and care facilities. Section 1401.1 of the IEBC states that Sections 1401.2.1 through 1401.2.5 applies to all R occupancies. If this is the case, then the sprinkler systems that are permitted for new and existing construction should be included.

This public comment removes the increases and modifications to the values in the table. The entire set of values, throughout Chapter 14, need to be updated and all of the values need to be adjusted across the board. As stated in the original reason statement, many of the values are 20-plus years old and do not consider many aspects and building practices that have evolved over the past 30 years.

The committee vote was 7-6 and the discussion on the changes to the text to current text was unopposed by the committee and those in attendance.

FS42-15

708.1, 708.4, 708.4 (New), 708.4.1 (New), 708.4.2 (New), 718.3, 718.3.2, 718.3.3, 718.4, 718.4.2, 718.4.3

Proposed Change as Submitted

Proponent : Jeffrey Shapiro, National Multifamily Housing Council, representing National Multifamily Housing Council (jeff.shapiro@intlcodeconsultants.com)

2015 International Building Code

Revise as follows:

708.1 General. The following wall assemblies shall comply with this section.

- Separation walls as required by Section 420.2 for Groups Group I-1, R 1, R 2 and R 3 Group R occupancies.
- 2. Walls separating tenant spaces in *covered and open mall buildings* as required by Section 402.4.2.1.
- 3. Corridor walls as required by Section 1020.1.
- 4. Elevator lobby separation as required by Section 3006.2.
- 5. Egress balconies as required by Section 1019.2

Delete and substitute as follows:

708.4 Continuity. Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire resistance rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. In combustible construction where the *fire partitions* are not required to be continuous to the sheathing, deck or slab, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 718.2 and 718.3 at the partition line. The supporting construction shall be protected to afford the required *fire-resistance rating* of the wall supported, except for walls separating *dwellingunits*, walls separating *sleeping units* and *corridor* walls, in buildings of Type IIB, IIIB and VB construction.

Exceptions:

- 1. The wall need not be extended into the crawl space below where the floor above the crawl space has a minimum 1-hour fire-resistance rating.
- 2. Where the room side fire resistance rated membrane of the *corridor* is carried through to the underside of the floor or roof sheathing, deck or slab of a fire resistance rated floor or roof above, the ceiling of the *corridor* shall be permitted to be protected by the use of ceiling materials as required for a 1 hour fire resistance rated floor or roof system.
- 3. Where the <u>corridor ceiling is constructed as required for the</u> Code Technology Committee Mtg #32 September 14-15, 2015, Chicago

corridor walls, the walls shall be permitted to terminate at the upper membrane of such ceiling assembly.

- 4. The fire partitions separating tenant spaces in a covered or open mall building, complying with Section 402.4.2.1, are not required to extend beyond the underside of a ceiling that is not part of a fire resistance rated assembly. A wall is not required in attic or ceiling spaces above tenant separation walls.
- Attic fireblocking or draftstopping is not required at the partition line in Group R-2 buildings that do not exceed four storiesabovegrade plane, provided the attic space is subdivided by draftstopping into areas not exceeding 3,000 square feet (279 m²) or above every two dwellingunits, whichever is smaller.
- 2. Fireblocking or draftstopping is not required at the partition line in buildings equipped with an *automatic sprinkler system* installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, provided that automatic sprinklers are installed in combustible floor/ceiling and roof/ceiling spaces.

708.4 Continuity Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to:

- 1. <u>The underside of the floor or roof sheathing, deck or</u> <u>slab above, or</u>
- 2. <u>The underside of a floor/ceiling or roof/ceiling assembly</u> <u>having a fire-resistance rating that is not less than the</u> <u>fire-resistance rating of the fire partition.</u>

Fire partitions shall be securely attached to 1 or 2 above.

Exceptions:

1. Fire partitions shall not be required to extend into a crawl space below where the floor above the crawl space has a minimum 1hour fire-resistance rating.

2. Fire partitions serving as a corridor wall shall not be required to extend above the lower membrane of a corridor ceiling provided the corridor ceiling membrane is equivalent to corridor wall membrane, and either:

2.1. The room-side membrane of the corridor wall extends to the underside of the floor or roof sheathing, deck or slab of a fire-resistance-rated floor or roof above, or

2.2. The building is equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, including automatic sprinklers installed in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above.

3. Fire partitions serving as a corridor wall shall be permitted to terminate at the upper membrane of the corridor ceiling assembly where the corridor ceiling is constructed as required for the corridor wall.

4. Fire partitions separating tenant spaces in a covered or open mall

building complying with Section 402.4.2.1 shall not be required to extend above the underside of a ceiling. Such ceiling shall not be required to be part of a fire-resistance-rated assembly, and the attic or space above the ceiling at tenant separation walls shall not be required to be subdivided by fire partitions.

Add new text as follows:

708.4.1 Supporting construction. The supporting construction for a fire partition shall have a fire-resistance rating that is equal to or greater than the required fire-resistance rating of the supported fire partition.

Exception. In buildings of Type IIB, IIIB and VB construction, the supporting construction requirement shall not apply to fire partitions separating tenant spaces in covered and open mall buildings, fire partitions separating dwelling units, fire partitions separating sleeping units, and fire partitions serving as corridor walls.

708.4.2 Fireblocks and draftstops in combustible construction In

<u>combustible construction where fire partitions do not extend to the</u> <u>underside of the floor or roof sheathing, deck or slab above, the space</u> <u>above and along the line of the fire partition shall be provided with one of the</u> <u>following:</u>

 Fire-blocking up to the underside of the floor or roof sheathing, deck or slab above using materials complying with 718.2.1, or
 Draftstopping up to the underside of the floor or roof sheathing, deck or slab above using materials complying with Section 718.3.1 for floors or 718.4.1 for attics.

Exceptions:

 Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that protection is provided in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1.
 Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
 In Group R-2 occupancies with less than 4 dwelling units, fire-blocking and draftstopping shall not be required.

4. In Group R-2 occupancies that do not exceed four stories above grade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m2) or above every two dwelling units, whichever is smaller.

5. In Group R-3 occupancies with less than 3 dwelling units, fire-blocking and draftstopping shall not be required in floor assemblies. This exception shall not apply to Group R-4.

Revise as follows:

718.3 Draftstopping in floors. In combustible construction,

draftstopping

<u>Draftstopping</u> shall be installed to subdivide floor/ceiling assemblies in the locations prescribed where required by Section 708.4.2. In other than Group R occupancies, draftstopping shall also be installed to subdivide

combustible floor/ceiling assemblies so that horizontal floor areas do not exceed 1,000 square feet (93 m2).

Exception: Buildings equipped throughout with an automatic sprinkler system in Sections 718.3.2 through 718.3.3. accordance with Section 903.3.1.1.

Delete without substitution:

718.3.2 Groups R-1, R-2, R-3 and R-4. Draftstopping shall be provided in floor/ceiling spaces in Group R 1 buildings, in Group R 2 buildings with three or more *dwellingunits*, in Group R 3 buildings with two *dwellingunits* and in Group R 4 buildings. Draftstopping shall be located above and in line with the *dwellingunit* and *sleeping unit* separations.

Exceptions:

- 1. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 2. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed spaces where the draftstopping is being omitted.

718.3.3 Other groups. In other groups, draftstopping shall be installed so that horizontal floor areas do not exceed 1,000 square feet (93 m²).

Exception: Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

Revise as follows:

718.4 Draftstopping in attics. In combustible construction, draftstopping

<u>Draftstopping</u> shall be installed to subdivide *attic_spaces where required by* <u>Section 708.4.2. In other than Group R, draftstopping shall also be installed</u> <u>to subdivide combustible attic</u> spaces and <u>combustible</u> concealed roof spaces in the locations prescribed in Sections 718.4.2 and 718.4.3 such that any horizontal area does not exceed 3,000 square feet (279 m2). Ventilation of concealed roof spaces shall be maintained in accordance with Section 1203.2.

Exceptions. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Delete without substitution:

718.4.2 Groups R-1 and R-2. Draftstopping shall be provided in *attics*, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more *dwellingunits* and in all Group R-1 buildings. Draftstopping shall be installed above, and in line with, *sleeping unit* and *dwellingunit* separation walls that do not extend to the underside of the roof sheathing above.

Exceptions:

- Where corridor walls provide a sleeping unit or dwellingunit 1. separation, draftstopping shall only be required above one of the corridor walls.
- 2. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 2. In occupancies in Group R-2 that do not exceed four storiesabovegrade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m²) or above every two dwellingunits, whichever is smaller.
- 3. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed space where the draftstopping is being omitted.

718.4.3 Other groups. Draftstopping shall be installed in attics and concealed roof spaces, such that any horizontal area does not exceed 3,000 square feet (279 m²).

Exception: Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Reason: 708.1 Editorial correlation with 2015 IBC Section 420.1, which added the requirement for separation walls in R-4 occupancies to be fire partitions. It is understood that Section 310.6 requires Group R-4 to meet requirements of Group R-3 unless otherwise specified by the IBC (that's also the reason that Section 708.4.2, Exception 5 for Group R-3 has to exclude R-4 to keep the exception consistent with current requirements). However, changing 708.1 to include all Group R occupancies will eliminate the appearance that R-4 has been omitted from the requirements of this section, particularly considering that R-4 is specifically listed in Section 420.1, which triggers provisions in Section 708.1.

708.4 The proposed rewrite results from an initial intent of adding another exception to this section (which I've now done in a separate proposal). I hadn't read the text of this section in guite some time because I knew what it was supposed to say. However, when I actually read the text, I found it unintelligible. The base paragraph has several different things going on...basic continuity, draftstopping/fire-blocking above, and supporting construction requirements. Then the 6 exceptions that follow aren't clear with respect to which parts of the main paragraph they apply to. Making matters worse, there is overlap and conflict between 708.4 and 718.3.2 and 718.4.2. I decided to undertake rewriting all of the provisions in an attempt to fix these issues while maintaining the current technical requirements. Although there has been no deliberate intent to change how the code applies, there were cases where interpretations were necessary to clarify conflicting provisions.

Deciphering the apparent intent of the code, pulling the sections and exceptions into pieces and reassembling them into comprehensible requirements took many hours, and I invite all "code groupies" and industry experts to closely compare the current and proposed provisions and notify me if any unintentional technical changes have occurred.

718.3.2 and 718.4.2. The existing draftstopping thresholds in 718.3.2 and 718.4.2 are specific to certain occupancies. These conflict with the draftstopping requirements in Section 708.4.2, which relate to continuity of fire partitions (recognizing that all dwelling and sleeping unit separations are fire partitions, as required by Sections 420.1 and 420.2). Based on the "specific over general" rule in Section 102.1 and the fact that there would be no reason for the current code to Code Technology Committee Mtg #32 September 14-15, 2015, Chicago

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include the thresholds in 718.3.2 and 718.4.2 if they weren't intended to override Section 708.4.2, the existing special thresholds in 718.3.2 and 718.4.2 were moved to Section 708.4 to eliminate the conflict and consolidate all of the draftstopping requirements for Group R in a single location.

The current text related to mansards and overhangs is irrelevant because the following sentence in the current Section 718.4.2 ties this text only to continuity of fire partitions that form separations for sleeping units and dwelling units. By referencing the revised 708.4 in this proposal, any space above a fire partition (mansard, overhang, or whatever) requires the same level of protection based on the "continuity of fire partitions" requirement.

One additional change that should be considered by the Code Development Committee, but was skipped in this proposal because it is a technical change, is extending the Group R exception in Section 718.4 of this proposal (for attics) to include all Group R occupancies, as is the case for floor assemblies under 718.3.2 of the 2015 IBC. There is no apparent reason for 718.3 and 718.4 to have handled Group R occupancies differently for floors vs. attic spaces, and it makes more sense for all Group R attics to follow Section 708.4.2. Without fixing this, R-3 and R-4 will continue to have conflicting requirements in 708.4.2 and 718.4.

Cost Impact: Will not increase the cost of construction

There will be no impact on the cost of construction other than the cost savings associated with countless hours of design time that was saved by people who no longer had to study these sections for hours to figure out what the actually required.

FS42-15 : 708.1-SHAPIRO5284

Public Hearing Results

Committee Action:

Approved as Modified

Modification:

718.4 Draftstopping in attics. Draftstopping shall be installed to subdivide attic spaces where required by Section 708.4.2. In other than Group R-1 and R-2 R occupancies, draftstopping shall also be installed to subdivide combustible attic spaces and combustible concealed roof spaces such that any horizontal area does not exceed 3,000 square feet (279 m2). Ventilation of concealed roof spaces shall be maintained in accordance with Section 1203.2.

Exceptions. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Committee Reason: The committee agreed that the proposal was an editorial clarification that resulted in better application and enforcement of the provisions. The modification correctly makes Section 718.4 applicable to all Group R occupancies.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Carl Baldassarra, P.E., FSFPA, representing Code Technologies Committee (CTC@iccsafe.org) requests Approve as Modified by this Public Comment.

Further Modify as Follows:

2015 International Building Code

708.4.2 Fireblocks and draftstops in combustible construction In combustible construction where fire partitions do not extend to the underside of the floor or roof sheathing, deck or slab above, the space above and along the line of the fire partition shall be provided with one of the following:

- 1. Fire-blocking up to the underside of the floor or roof sheathing, deck or slab above using materials complying with 718.2.1, or
- Draftstopping up to the underside of the floor or roof sheathing, deck or slab above using materials complying with Section 718.3.1 for floors or 718.4.1 for attics.

Exceptions:

- 1. Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that protection is provided in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1.
- 2. Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
- 3. In Group R-2 occupancies with less than 4 dwelling units, fireblocking and draftstopping shall not be required.
- 4. In Group R-2 occupancies that do not exceed four stories above grade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m2) or above every two dwelling units, whichever is smaller.
- 5. In Group R-3 occupancies with less than 3 dwelling units, fireblocking and draftstopping shall not be required in floor assemblies. This exception shall not apply to Group R 4.

Commenter's Reason: This proposed modification is to delete the R-4 phrase in 708.4.2, Exception 5. FS122-15 deleted the requirement in 718.3.2 for Group R-4 and was approved. The reason from the proponent stated "There is no apparent reason for 718.3 and 718.4 to have handled Group R occupancies differently for floors vs. attic spaces, and it makes more sense for all Group R attics to follow Section 708.4.2. Without fixing this, R-3 and R-4 will continue to have conflicting requirements in 708.4.2 and 718.4". The phrase in Section 708.4.2, Exception should be deleted for consistency with the decision. Group R-4 and R-3 will be treated the same.

Proponent : Tony Crimi, representing International Firestop Council requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

708.4 Continuity Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to:

- 1. The underside of the floor or roof sheathing, deck or slab above, or
- 2. The underside of a floor/ceiling or roof/ceiling assembly having a fire-resistance rating that is not less than the fire-resistance rating of the fire partition.

Fire partitions shall be securely attached to 1 or 2 above.

Exceptions:

- 1. Fire partitions shall not be required to extend into a crawl space below where the floor above the crawl space has a minimum 1-hour fire-resistance rating.
- Fire partitions serving as a corridor wall shall not be required to extend above the lower membrane of a corridor ceiling provided the corridor ceiling membrane is has an equivalent fire resistance rating to the corridor wall membrane, and either:
 - 2.1. The room-side membrane of the corridor wall extends to the underside of the floor or roof sheathing, deck or slab of a fire-resistance-rated floor or roof above, or
 - 2.2. The building is equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, including automatic sprinklers installed in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above.
- 3. Fire partitions serving as a corridor wall shall be permitted to terminate at the upper membrane of the corridor ceiling assembly where the corridor ceiling is constructed as required for the corridor wall.
- 4. Fire partitions separating tenant spaces in a covered or open mall building complying with Section 402.4.2.1 shall not be required to extend above the underside of a ceiling. Such ceiling shall not be required to be part of a fire-resistancerated assembly, and the attic or space above the ceiling at tenant separation walls shall not be required to be subdivided by fire partitions.

membrane is equivalent to corridor wall membrane ..." in section 708.4 is ambiguous and will lead to confusion in enforcement. Based on the submittor's supporting statement, we believe that this was intended to be "equivalent" in terms of the fire resistance rating of the membrane in an assembly. Otherwise, this language could be used to install an equivalent thickness, or type of membrane material (e.g. Type X versus regular gypsum board), irrespective of its equivalency, or lack thereof, in terms of fire performance.

This is particulalry important because 708.4 has been revised to include all Group R occupancies. Table 1020.1 requires corridors in Group R occupancies having greater than 10 occupants to have a 0.5 hour fire resistance rating in conjunction with the sprinkler system.

Public Comment 3:

Proponent : Gregory Keith, representing The Boeing Company (grkeith@mac.com) requests Approve as Modified by this Public Comment.

Replace Proposal as Follows:

2015 International Building Code

708.1 General. The following wall assemblies shall comply with this section.

- 1. Separation walls as required by Section 420.2 for Groups Group I-1, R-1, R-2 _and R-3 Group R ocupancies.
- 2. Walls separating tenant spaces in *covered and open mall buildings* as required by Section 402.4.2.1.
- 3. Corridor walls as required by Section 1020.1.
- 4. Elevator lobby separation as required by Section 3006.2.
- 5. Egress balconies as required by Section 1019.2

708.4 Continuity. Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire resistance rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. In combustible construction where the *fire partitions* are not required to be continuous to the sheathing, deck or slab, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 718.2 and 718.3 at the partition line. The supporting construction shall be protected to afford the required *fire-resistance rating* of the wall supported, except for walls separating tenant spaces in *covered and open mall buildings*, walls separating *dwellingunits*, walls separating *sleeping units* and *corridor* walls, in buildings of Type IIB, IIIB and VB construction.

Exceptions:

- 1. The wall need not be extended into the crawl space below where the floor above the crawl space has a minimum 1-hour fire-resistance rating.
- 2. Where the room-side fire-resistance-rated membrane of the *corridor* is carried through to the underside of the floor or roof sheathing, deck or slab of a fire-resistance-rated

floor or roof above, the ceiling of the *corridor* shall be permitted to be protected by the use of ceiling materials as required for a 1 hour fire resistance rated floor or roof system.

- 3. Where the *corridor* ceiling is constructed as required for the *corridor* walls, the walls shall be permitted to terminate at the upper membrane of such ceiling assembly.
- 4. The fire partitions separating tenant spaces in a *covered or open mall building*, complying with Section 402.4.2.1, are not required to extend beyond the underside of a ceiling that is not part of a fire-resistance-rated assembly. A wall is not required in *attic* or ceiling spaces above tenant separation walls.
- Attic fireblocking or draftstopping is not required at the partition line in Group R-2 buildings that do not exceed four storiesabovegrade plane, provided the attic space is subdivided by draftstopping into areas not exceeding 3,000 square feet (279 m²) or above every two dwellingunits, whichever is smaller.
- 2. Fireblocking or draftstopping is not required at the partition line in buildings equipped with an *automatic sprinkler system* installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, provided that automatic sprinklers are installed in combustible floor/ceiling and roof/ceiling spaces.

708.4 Support of fire partitions Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below and shall be securely attached thereto.

Exception: Fire partitions shall not be required to extend into a crawl space below where the floor above the crawl space has a minimum 1 hour-fire-resistance rating.

The supporting construction for a fire partition shall have a fire-resistance rating that is equal to or greater than the required fire-resistance rating of the supported fire partition.

Exception: In buildings of Type IIB, IIIB and VB construction, the supporting construction requirement shall not apply to fire partitions separating tenant spaces in covered and open mall buildings, fire partitions separating dwelling units, fire partitions separating sleeping units, and fire partitions serving as a corridor wall.

708.5 Continuity. Fire partitions shall extend vertically to a floor or roof above in accordance with one of the following and shall be securely attached thereto:

1. The underside of a floor/ceiling or roof/ceiling assembly having a fireresistance rating that is not less than the fire-resistance rating of the fire partition, or

2. The underside of the floor or roof sheathing, deck or slab above of floor or roof consturction not having a fire-resistance rating.

Exceptions:

<u>1. Corridor ceiling construction shall be permitted to be in accordance with one of the following:</u>

1.1 The room-side membrane of the corridor wall shall terminate at the underside of a floor or roof constructed of materials approved for a 1-hour fire-resistance rated floor/ceiling or roof/ceiling assembly. The corridor side membrane of the corridor wall shall terminate at the corridor ceiling membrane constructed of materials approved for a 1-hour fire-resistance rated floor-ceiling assembly to include suspended ceilings, dropped ceilings and lay-in roof/ceiling panels, which are a portion of a fire-resistance rated assembly, or

1.2. A corridor ceiling constructed as required for a fire partition wall. When this method is utilized, the corridor-side membrane of the corridor wall shall terminate at the lower ceiling membrane and the room-side membrane of the corridor wall shall terminate at the upper ceiling membrane.

2. Fire partitions separating tenant spaces in a covered or open mall building complying with Section 402.4.2.1 shall not be required to extend above the underside of a ceiling. Such ceiling shall not be required to be part of a fireresistance rated assembly, and the attic or space above the ceiling at tenant separation walls shall not be required to be subdivided by fire partitions.

708.5.1 Fireblocking and draftstopping in combustible

construction. In combustible construction where fire partitions do not extend to the underside of the floor or roof sheathing, deck or slab above, the space above and along the line of the fire partition shall be provided with one of the following:

 Fireblocking up to the underside of the floor or roof sheathing, deck or slab above using materials complying with 718.2.1, or
 Draftstopping up to the underside of the floor or roof sheathing, deck or slab above using materials complying with Section 718.3.1 for floors or 718.4.1 for attics.

Exceptions:

 Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that protection is provided in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1.
 Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
 In Group R-2 occupancies with less than 4 dwelling units, fireblocking and draftstopping shall not be required.

<u>4. In Group R-2 occupancies that do not exceed four stories above grade</u> plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m2) or above every two dwelling units, whichever is smaller.

<u>5. In Group R-3 occupancies with less than 3 dwelling units, fire-blocking and draftstopping shall not be required in floor assemblies. This exception shall</u>

718.3 Draftstopping in floors. In combustible construction, draftstopping

<u>Draftstopping</u> shall be installed to subdivide floor/ceiling assemblies in the locations prescribed where required by Section 708.5.1. In other than Group R occupancies, draftstopiping shall also be installed to subdivide combustible floor/ceiling assemblies do that horizontal floor areas do not exceed 1000 square feet (93 m²).

Exception: Buildings equipped throughout with an automatic sprinkler system in Sections 718.3.2 through 718.3.3. accordance with Section 903.3.1.1.

718.3.2 Groups R-1, R-2, R-3 and R-4. Draftstopping shall be provided in floor/ceiling spaces in Group R 1 buildings, in Group R 2 buildings with three or more *dwellingunits*, in Group R 3 buildings with two *dwellingunits* and in Group R 4 buildings. Draftstopping shall be located above and in line with the *dwellingunit* and *sleeping unit* separations.

Exceptions:

- 1. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 2. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed spaces where the draftstopping is being omitted.

718.3.3 Other groups. In other groups, draftstopping shall be installed so that horizontal floor areas do not exceed 1,000 square feet (93 m²).

Exception: Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

718.4 Draftstopping in attics. In combustible construction, draftstopping

<u>Draftstopping</u> shall be installed to subdivide *attic* spaces <u>where required by</u> <u>Section 708.5.1. In other than Group R occupancies, draftstopping shall also</u> <u>be installed to subdivide combustible attic spaces and combustible</u> concealed roof spaces in the locations prescribed in Sections 718.4.2 and 718.4.3 such that any horizontal area does not exceed 3,000 square feet (279 m2). Ventilation of concealed roof spaces shall be maintained in accordance with Section 1203.2.

Exception: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

718.4.2 Groups R-1 and R-2. Draftstopping shall be provided in *attics*, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more *dwellingunits* and in all Group R-1 buildings. Draftstopping shall be installed above, and in line with, *sleeping unit* and *dwellingunit* separation walls that do not extend to the underside of the roof sheathing
above.

Exceptions:

- 1. Where *corridor* walls provide a *sleeping unit* or *dwellingunit* separation, draftstopping shall only be required above one of the *corridor* walls.
- 2. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 2. In occupancies in Group R-2 that do not exceed four storiesabovegrade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m²) or above every two dwellingunits, whichever is smaller.
- 3. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed space where the draftstopping is being omitted.

718.4.3 Other groups. Draftstopping shall be installed in *attics* and concealed roof spaces, such that any horizontal area does not exceed 3,000 square feet (279 m²).

Exception: Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

1020.1 Construction. *Corridors* shall be fire-resistance rated in accordance with Table 1020.1. The *corridor* walls<u>, floors and ceilings</u> required to be fire-resistance rated shall comply with Section 708 for *fire partitions*.

Exceptions:

- 1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has not less than one door opening directly to the exterior and rooms for assembly purposes have not less than one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
- 2. A fire-resistance rating is not required for corridors contained within a *dwelling unit* or *sleeping unit* in an occupancy in Groups I-1 and R.
- 3. A fire-resistance rating is not required for corridors in open parking garages.
- 4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B that is a space requiring only a single *means of egress* complying with Section 1006.2.
- 5. Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on unrated exterior walls where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.

current fire partition related technical provisions. The proponent captured the importance of this effort in his cost impact statement. "There will be no impact on the cost of construction other than the cost savings associated with the countless hours of design time that was saved by people who no longer had to study these sections for hours to figure out what was actually required." With their approval as modified, the Fire Safety Code Committee agreed in their reason statement "that the proposal was an editiorial clarification that resulted in better application and enforcement of the provisions."

Section 708.4 is one of the most confusing and misunderstood provisions in the International Building Code. This is primarily owed to the fact that the section is one run-on paragraph that addresses several different technical issues and contains six out of context exceptions. Although FS 42 was a step in the right direction, it was only a partial fix. This public comment is a comprehensive approach towards creating logical and functional fire partition continuity provisions.

It should be noted that this public comment is entirely editiorial in that it makes no technical changes although charging verbiage has been restated to provide necessary clarification. Formerly, Section 708.4 addressed three different tecnical issues in one paragraph. Those were structural support of fire partitions, vertical continuity of fire partitions and fire-blocking and draft-stopping in combustible construction. This public comment segregates those issues through a reorganization of the applicable technical provisions. Additionally, the assorted exceptions have been placed in context with the actual provision that they are intended to modify.

This public comment further improves the initiative taken by FS 42-15 and will considerably improve the functionality of the 2018 Edition of the International Building Code resulting in more consistent interpretation and application of fire partition provisions.

FS42-15

FS43-15 Part I 708.6 Proposed Change as Submitted

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

2015 International Building Code

Revise as follows:

708.6 Openings. Openings in a *fire partition* shall be protected in accordance with Section 716. The total area of the fire-protection-rated glazing in fire door side lights and transoms and in fire window assemblies shall not exceed 25 percent of the area of a common wall with any room.

Reason: The intent of this proposal is to address an anomaly in the current code language. For fire barriers there is a limitation on the total amount of openings permited of any type:

"707.6 Openings. Openings in a fire barrier shall be protected in accordance with Section 716. Openings shall be limited to a maximum aggregate width of 25 percent of the length of the wall, and the maximum area of any single opening shall not exceed 156 square feet (15 m2). Openings in enclosures for exit access stairways and ramps, interior exit stairways and ramps and exit passageways shall also comply with Sections 1019, 1023.4 and 1024.5, respectively."

In addition to that restriction the code also limits fire-protection-rated glazing to 1 hour or less fire-resistance-rated assemblies. And the amount of fire-protection-rated fire windows in a wall section is further restricted:

"716.6.7 Interior fire window assemblies. Fire-protection-rated glazing used in fire window assemblies located in fire partitions and fire barriers shall be limited to use in assemblies with a maximum fire-resistance rating of 1 hour in accordance with this section."

" 716.6.7.2 Area limitations. The total area of the glazing in fire-protectionrated window assemblies shall not exceed 25 percent of the area of a common wall with any room."

The combination of the overall opening limitation in Section 707.6 for fire barriers, and the fire window fire-protection-rated glazing protection requirements in Section 716.6.7 limit the total amount of fire-protection-rated glazing that can be utilized for the purpose of limiting the use of a product that allows radiant heat to go through the protected opening.

However, when you get to the Fire Partition portion of the code there is no overall limitation in openings. The fire-protected-rated fire windows still must comply with the limitations of Section 716.6.7 but what is lost is control of the amount of fire-protection-rated glazing used in fire door sidelights and transoms because there is no overall restriction on the amount of openings which would include the entire fire door assembly. This allows for additional fire-protection-rated glazing and radiant heat transfer beyond the amount restricted by Section 716.6.7.2 for fire windows.

The proposed language is intended to capture fire-protection-rated glazing in fire door sidelites and transoms for appllication of the restriction found at Section 716.6.7.2.

NFPA 80, "Standard for Fire Doors and Other Opening Protectives" includes background on radiant heat concerns in Annex I; the following is an extract of that information:

NFPA 80-2013

"I.1 Background. Fire windows were originally designed for protecting openings in exterior walls. In such applications, radiant heat transfer was not a significant consideration, since the main function of fire windows was to contain the flames within the building. However, where fire windows are used in interior partitions, users of this standard might need to consider radiant heat transfer during fire. Exiting through corridors and past fire windows could be compromised, and combustible materials on the unexposed side of fire windows could be ignited. The information that follows is a guide to the evaluation of radiant heat transfer through fire windows.

Recent revisions to this standard have permitted very large areas of fire protectionrated glazing materials to be used in interior partitions, limited only by the size of the test furnace. Also, recent technological advances in the glazing industry have compounded the problem of radiant heat transfer by making it possible to provide glazing materials with fire protection ratings of 60 minutes and 90 minutes. Historically, fire windows, including glass block, have been limited to a 45-minute rating by the standard fire test, NFPA257, Standard on Fire Test for Window and Glass Block Assemblies. This time limit was predicated on the failure of wired glass at approximately 1600°F (870°C). [1] Some manufacturers also have developed fire resistance-rated glazing assemblies that meet the requirements of a fire resistance-rated wall assembly (currently up to 2 hours). These glazing materials, however, do not transmit excessive radiant heat, since they are re-quired to limit the temperature rise on the unexposed face to 250°F (121°C). "

Cost Impact: WII increase the cost of construction

This proposal could create a minimal increase in the cost of construction by limiting the amount of fire-protection rated glazing in a given common wall in a room.

> FS43-15 Part I : 708.6-DAVIDSON5293

> > Disapproved

Public Hearing Results

Part I

Committee Action:

Committee Reason: The committee felt that the proposed language was redundant and already covered in Section 716.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Robert Davidson, Davidson Code concepts, LLC, representing SaftiFirst, Inc. (rjd@davidsoncodeconcepts.com) requests Approve as Submitted.

Commenter's Reason: This public comment is for approved as submitted. The committee's reason for disapproval does not address the issues raised in the original reason statement and floor testimony, i.e., why does the code treat fire barriers, fire partitions and smoke barriers differently concerning the total amount of openings permitted. All three types of barriers are intended to stop the passage of heat and smoke, how effective they are at doing that includes the permitted amount of openings. This is most important when utilizing glazed openings incorporating fire

protection-rated glazing materials which allow passage of radiant heat. NFPA 80 guides the user to consider radiant heat when using fire protection-rated glazing. The requirements of Section 716 address the total amount of fire windows permitted, however, glazing in sidelights and transoms associated with a fire door assembly are not covered by the limitation for fire window provisions because they are defined as part of the door assembly. This does not make technical sense because the code treats them as fire windows for testing purposes in Section 716.5.3.2 by requiring 20-minute door assemblies in smoke barriers and fire partition corridors to have the sidelight and transom tested to NFPA 257, the window test standard.

The total amount of fire protection-rated glazing permitted, including in fire door assemblies, is addressed in fire barriers by the total amount of openings being limited to a maximum aggregate width of 25 percent of the length of the wall. This includes fire door assemblies and fire windows.

The proposed changes target the fire protection-rated glazing in the sidelights and transoms only, adding language to limit of the total amount of glazed openings to the 25% of the area of a common wall with any room. The new language does not affect or create limits for the doors themselves. The proposed changes will correlate the amount of permitted fire protection-rated glazing in the three types of fire rated assemblies since the passage of radiant heat through the barriers presents the same level of hazard in all three cases and the glazing is being tested as fire window fire protection-rated glazing.

FS43-15 Part I

FS43-15 Part II 709.5, 716.6.7 Proposed Change as Submitted

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

2015 International Building Code

Revise as follows:

709.5 Openings. Openings in a *smoke barrier* shall be protected in accordance with Section 716. The total area of the fire-protection-rated glazing in fire door side lights and transoms and in fire window assemblies shall not exceed 25 percent of the area of a common wall with any room.

Exceptions:

 In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, where a pair of opposite-swinging doors are installed across a corridor in accordance with Section 709.5.1, the doors shall not be required to be protected in accordance with Section 716. The doors shall be close fitting within operational tolerances, and shall not have a center mullion or undercuts in excess of ³ /₄ inch (19.1

mm), louvers or grilles. The doors shall have head and jamb stops, and astragals or rabbets at meeting edges. Where permitted by the door manufacturer's listing, positive-latching devices are not required.

2. In Group I-1 Condition 2, Group I-2 and *ambulatory care facilities*, horizontal sliding doors installed in accordance with Section 1010.1.4.3 and protected in accordance with Section 716.

716.6.7 Interior fire window assemblies. Fire-protection-rated glazing used in *fire window assemblies* located in *fire partitions<u>, smoke barriers</u>* _and *fire barriers* shall be limited to use in assemblies with a maximum *fire-resistance rating* of 1 hour in accordance with this section.

Reason: The intent of this proposal is to address an anomaly in the current code language. For fire barriers there is a limitation on the total amount of openings permited of any type:

"707.6 Openings. Openings in a fire barrier shall be protected in accordance with Section 716. Openings shall be limited to a maximum aggregate width of 25 percent of the length of the wall, and the maximum area of any single opening shall not exceed 156 square feet (15 m2). Openings in enclosures for exit access stairways and ramps, interior exit stairways and ramps and exit passageways shall also comply with Sections 1019, 1023.4 and 1024.5, respectively."

In addition to that restriction the code also limits fire-protection-rated glazing to 1 hour or less fire-resistance-rated assemblies. And the amount of fire-protection-rated fire windows in a wall section is further restricted:

"716.6.7 Interior fire window assemblies. Fire-protection-rated glazing used in fire window assemblies located in fire partitions and fire barriers shall be limited to use in assemblies with a maximum fire-resistance rating of 1 hour in

accordance with this section."

" 716.6.7.2 Area limitations. The total area of the glazing in fireprotection-rated window assemblies shall not exceed 25 percent of the area of a common wall with any room."

The combination of the overall opening limitation in Section 707.6 for fire barriers, and the fire window fire-protection-rated glazing protection requirements in Section 716.6.7 limit the total amount of fire-protection-rated glazing that can be utilized for the purpose of limiting the use of a product that allows radiant heat to go through the protected opening.

However, when you get to the Smoke Barrier portion of the code there is no overall limitation in openings. The fire-protected-rated fire windows still must comply with the limitations of Section 716.6.7 but what is lost is control of the amount of fire-protection-rated glazing used in fire door sidelights and transoms because there is no overall restriction on the amount of openings which would include the entire fire door assembly. This allows for additional fire-protection-rated glazing and radiant heat transfer beyond the amount restricted by Section 716.6.7.2 for fire windows.

The proposed language at 709.5 and 716.6.7 is intended to capture fire-protectionrated glazing in fire door sidelites and transoms for appllication of the restriction found at Section 716.6.7.2 and clarify the fire window application to smoke barriers.

NFPA 80, "Standard for Fire Doors and Other Opening Protectives" includes background on radiant heat concerns in Annex I; the following is an extract of that information:

NFPA 80-2013

"I.1 Background. Fire windows were originally designed for protecting openings in exterior walls. In such applications, radiant heat transfer was not a significant consideration, since the main function of fire windows was to contain the flames within the building. However, where fire windows are used in interior partitions, users of this standard might need to consider radiant heat transfer during fire. Exiting through corridors and past fire windows could be compromised, and combustible materials on the unexposed side of fire windows could be ignited. The information that follows is a guide to the evaluation of radiant heat transfer through fire windows.

Recent revisions to this standard have permitted very large areas of fire protectionrated glazing materials to be used in interior partitions, limited only by the size of the test furnace. Also, recent technological advances in the glazing industry have compounded the problem of radiant heat transfer by making it possible to provide glazing materials with fire protection ratings of 60 minutes and 90 minutes. Historically, fire windows, including glass block, have been limited to a 45-minute rating by the standard fire test, NFPA257, Standard on Fire Test for Window and Glass Block Assemblies. This time limit was predicated on the failure of wired glass at approximately 1600°F (870°C). [1] Some manufacturers also have developed fire resistance-rated glazing assemblies that meet the requirements of a fire resistance-rated wall assembly (currently up to 2 hours). These glazing materials, however, do not transmit excessive radiant heat, since they are re-quired to limit the temperature rise on the unexposed face to 250°F (121°C). "

Cost Impact: Will increase the cost of construction

This proposal could create a minimal increase in the cost of construction by limiting the amount of fire-protection rated glazing in a given common wall in a room.

> FS43-15 Part II : 709.5-DAVIDSON5296



Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 79 of 176

Committee Action:

Committee Reason: The committee felt that the protection provisions provided in Section 716 adequately covered the concerns brought up by the proponent.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Robert Davidson, Davidson Code Concepts, LLC, representing SaftiFirst, Inc. (rjd@davidsoncodeconcepts.com) requests Approve as Submitted.

Commenter's Reason: This public comment is for approved as submitted. The committee's reason for disapproval does not address the issues raised in the original reason statement and floor testimony, i.e., why does the code treat fire barriers, fire partitions and smoke barriers differently concerning the total amount of openings permitted. All three types of barriers are intended to stop the passage of heat and smoke, how effective they are at doing that includes the permitted amount of openings. This is most important when utilizing glazed openings incorporating fire protection-rated glazing materials which allow passage of radiant heat. NFPA 80 guides the user to consider radiant heat when using fire protection-rated glazing. The requirements of Section 716 address the total amount of fire windows permitted, however, glazing in sidelights and transoms associated with a fire door assembly are not covered by the limitation for fire window provisions because they are defined as part of the door assembly. This does not make technical sense because the code treats them as fire windows for testing purposes in Section 716.5.3.2 by requiring 20-minute door assemblies in smoke barriers and fire partition corridors to have the sidelight and transom tested to NFPA 257, the window test standard.

The total amount of fire protection-rated glazing permitted, including in fire door assemblies, is addressed in fire barriers by the total amount of openings being limited to a maximum aggregate width of 25 percent of the length of the wall. This includes fire door assemblies and fire windows.

The proposed changes target the fire protection-rated glazing in the sidelights and transoms only, adding language to limit of the total amount of glazed openings to the 25% of the area of a common wall with any room. The new language does not affect or create limits for the doors themselves. The proposed changes will correlate the amount of permitted fire protection-rated glazing in the three types of fire rated assemblies since the passage of radiant heat through the barriers presents the same level of hazard in all three cases and the glazing is being tested as fire window fire protection-rated glazing.

FS43-15 Part II

FS121-15 Part I 718.3.2 Proposed Change as Submitted

Proponent : Stephen DiGiovanni, Clark County Building Department, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountynv.gov)

2015 International Building Code

Revise as follows:

718.3.2 Groups R-1, R-2, R-3 and R-4. Draftstopping shall be provided in floor/ceiling spaces in Group R-1 buildings, in Group R-2 buildings with three or more *dwellingunits*, in Group R-3 buildings with two *dwellingunits* and in Group R-4 buildings. Draftstopping shall be located above and in line with the *dwellingunit* and *sleeping unit* separations.

Exceptions:

- 1. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.2, provided that automatic sprinklers <u>in accordance with Section 903.3.1.1</u> are installed in the combustible concealed spaces where the draftstopping is being omitted.

Reason: The requirement to have an NFPA 13R sprinkler system protect combustible concealed spaces contradicts the intent of a 13R system. The NFPA 13R code specifically excludes the installation of sprinklers in combustible concealed spaces. Section 6.6.6 of NFPA 13R, 2010 edition (the edition referenced by the 2012 IBC), reads as follows:

"6.6.6 Sprinklers shall not be required in attics, penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to and containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, *Safety Code for Elevators and Escalators*, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel-fired equipment."

Because NFPA 13R specifically does not include within its scope the installation of sprinklers in concealed spaces, there are no criteria within NFPA 13R that are suitable for the protection of concealed spaces. NFPA 13, on the other hand, sets forth requirements for protecting concealed combustible spaces. As such, NFPA 13 has suitable design criteria for protection of concealed combustible spaces. Specifically, NFPA 13 provides "Section 8.16.1 Concealed Spaces" (too lengthy to retype). This section sets forth the concealed spaces where sprinklers are required, methods to mitigate sprinklers in concealed spaces, the density criteria for the sprinklers, provisions for localized protection of combustibles, and sprinkler head listing requirements for protection of spaces that of shallower heights.

Because NFPA 13R does not have design criteria for the protection of combustible concealed spaces, it is not appropriate to refer to that standard for protection of concealed combustible spaces. This amendment seeks to require that protection of concealed combustible spaces be provided in an appropriate manner, using the only recognized reference sprinkler code that provides criteria for protection of concealed combustible spaces.

Cost Impact: WII not increase the cost of construction This proposal does not increase the cost of construction, as the requirements for sprinklers currently exist, and are being clarified only.

> FS121-15 Part I : 718.3.2-DIGIOVANNI3829

Public Hearing Results

Part I

Committee Action:

Committee Reason: The committee preferred their action on FS42 and that these revisions were unnecessary.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Stephen DiGiovanni, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountynv.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

718.3.2 Groups R-1, R-2, R-3 and R-4. Draftstopping shall be provided in floor/ceiling spaces in Group R-1 buildings, in Group R-2 buildings with three or more *dwellingunits*, in Group R-3 buildings with two *dwellingunits* and in Group R-4 buildings. Draftstopping shall be located above and in line with the *dwellingunit* and *sleeping unit* separations.

Exceptions Exception:

- 1. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 2. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.2, provided that automatic sprinklers in accordance with Section 903.3.1.1 are installed in the combustible concealed spaces where the draftstopping is being omitted.

Disapproved

None

Commenter's Reason: This proposal was rejected at the request of the submitter, in order to favor FS-42. Should FS-42 survive the Final Hearings, this public comment will be withdrawn.

This public comment moves to entirely remove the exception (rather than modify the exception) to no longer allow draft curtains to be exempted due to the installation of NFPA 13R systems.

The requirement to have an NFPA 13R sprinkler system protect combustible concealed spaces contradicts the intent of a 13R system. The NFPA 13R code specifically excludes the installation of sprinklers in combustible concealed spaces. Section 6.6.6 of NFPA 13R, 2010 edition (the edition referenced by the 2012 IBC), reads as follows:

"**6.6.6** Sprinklers shall not be required in attics, penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to and containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, *Safety Code for Elevators and Escalators*, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel-fired equipment."

Because NFPA 13R specifically does not include within its scope the installation of sprinklers in concealed spaces, there are no criteria within NFPA 13R that are suitable for the protection of concealed spaces. NFPA 13, on the other hand, sets forth requirements for protecting concealed combustible spaces. As such, NFPA 13 has suitable design criteria for protection of concealed combustible spaces. Specifically, NFPA 13 provides "Section 8.16.1 Concealed Spaces" (too lengthy to retype). This section sets forth the concealed spaces where sprinklers are required, methods to mitigate sprinklers in concealed spaces, the density criteria for the sprinklers, provisions for localized protection of combustibles, and sprinkler head listing requirements for protection of spaces that of shallower heights.

Because NFPA 13R does not have design criteria for the protection of combustible concealed spaces, it is not appropriate to refer to that standard for protection of concealed combustible spaces. This amendment seeks to require that protection of concealed combustible spaces be provided in an appropriate manner, using the only recognized reference sprinkler code that provides criteria for protection of concealed combustible spaces.

FS121-15 Part I

FS121-15 Part II 718.4.2

Proposed Change as Submitted

Proponent : Stephen DiGiovanni, Clark County Building Department, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountynv.gov)

2015 International Building Code

Revise as follows:

718.4.2 Groups R-1 and R-2. Draftstopping shall be provided in *attics*, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more *dwellingunits* and in all Group R-1 buildings. Draftstopping shall be installed above, and in line with, *sleeping unit* and *dwellingunit* separation walls that do not extend to the underside of the roof sheathing above.

Exceptions:

- 1. Where *corridor* walls provide a *sleeping unit* or *dwellingunit* separation, draftstopping shall only be required above one of the *corridor* walls.
- 2. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- In occupancies in Group R-2 that do not exceed four storiesabovegrade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m²) or above every two dwellingunits, whichever is smaller.
- Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.2, provided that automatic sprinklers in accordance with Section 903.3.1.1 are installed in the combustible concealed space where the draftstopping is being omitted.

Reason: The requirement to have an NFPA 13R sprinkler system protect combustible concealed spaces contradicts the intent of a 13R system. The NFPA 13R code specifically excludes the installation of sprinklers in combustible concealed spaces. Section 6.6.6 of NFPA 13R, 2010 edition (the edition referenced by the 2012 IBC), reads as follows:

"**6.6.6** Sprinklers shall not be required in attics, penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to and containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, *Safety Code for Elevators and Escalators*, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel-fired equipment."

Because NFPA 13R specifically does not include within its scope the installation of sprinklers in concealed spaces, there are no criteria within NFPA 13R that are Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 84 of 176 suitable for the protection of concealed spaces. NFPA 13, on the other hand, sets forth requirements for protecting concealed combustible spaces. As such, NFPA 13 has suitable design criteria for protection of concealed combustible spaces. Specifically, NFPA 13 provides "Section 8.16.1 Concealed Spaces" (too lengthy to retype). This section sets forth the concealed spaces where sprinklers are required, methods to mitigate sprinklers in concealed spaces, the density criteria for the sprinklers, provisions for localized protection of combustibles, and sprinkler head listing requirements for protection of spaces that of shallower heights.

Because NFPA 13R does not have design criteria for the protection of combustible concealed spaces, it is not appropriate to refer to that standard for protection of concealed combustible spaces. This amendment seeks to require that protection of concealed combustible spaces be provided in an appropriate manner, using the only recognized reference sprinkler code that provides criteria for protection of concealed combustible spaces.

Cost Impact: WII not increase the cost of construction This proposal will not increase the cost of construction as the requirements currently exist, and are just being clarified by this proposal.

> FS121-15 Part II : 718.4.2-DIGIOVANNI3830

> > Disapproved

Public Hearing Results

Part II

Committee Action:

Committee Reason: The committee preferred their action on FS42 and that these revisions were unnecessary.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Stephen DiGiovanni, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountynv.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

718.4.2 Groups R-1 and R-2. Draftstopping shall be provided in *attics*, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more *dwellingunits* and in all Group R-1 buildings. Draftstopping shall be installed above, and in line with, *sleeping unit* and *dwellingunit* separation walls that do not extend to the underside of the roof sheathing above.

Exceptions:

1. Where corridor walls provide a sleeping unit or dwellingunit Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 85 of 176 separation, draftstopping shall only be required above one of the *corridor* walls.

- 2. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- In occupancies in Group R-2 that do not exceed four storiesabovegrade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m²) or above every two dwellingunits, whichever is smaller.
- 4. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.2, provided that automatic sprinklers in accordance with Section 903.3.1.1 are installed in the combustible concealed space where the draftstopping is being omitted.

Commenter's Reason: This proposal was rejected at the request of the submitter, in order to favor FS-42. Should FS-42 survive the Final Hearings, this public comment will be withdrawn.

This public comment moves to entirely remove the exception (rather than modify the exception) to no longer allow draft curtains to be exempted due to the installation of NFPA 13R systems.

The requirement to have an NFPA 13R sprinkler system protect combustible concealed spaces contradicts the intent of a 13R system. The NFPA 13R code specifically excludes the installation of sprinklers in combustible concealed spaces. Section 6.6.6 of NFPA 13R, 2010 edition (the edition referenced by the 2012 IBC), reads as follows:

"**6.6.6** Sprinklers shall not be required in attics, penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to and containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, *Safety Code for Elevators and Escalators*, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel-fired equipment."

Because NFPA 13R specifically does not include within its scope the installation of sprinklers in concealed spaces, there are no criteria within NFPA 13R that are suitable for the protection of concealed spaces. NFPA 13, on the other hand, sets forth requirements for protecting concealed combustible spaces. As such, NFPA 13 has suitable design criteria for protection of concealed combustible spaces. Specifically, NFPA 13 provides "Section 8.16.1 Concealed Spaces" (too lengthy to retype). This section sets forth the concealed spaces where sprinklers are required, methods to mitigate sprinklers in concealed spaces, the density criteria for the sprinklers, provisions for localized protection of combustibles, and sprinkler head listing requirements for protection of spaces that of shallower heights.

Because NFPA 13R does not have design criteria for the protection of combustible concealed spaces, it is not appropriate to refer to that standard for protection of concealed combustible spaces. This amendment seeks to require that protection of concealed combustible spaces be provided in an appropriate manner, using the only recognized reference sprinkler code that provides criteria for protection of concealed combustible spaces.

Proposed Change as Submitted

Proponent : Gerald Anderson, City of Overland Park, kansas, representing self (Jerry.Anderson@opkansas.org)

2015 International Building Code

Revise as follows:

SECTION 202 DEFINITIONS

CUSTODIAL CARE. Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities and other tasks of daily living. Custodial care includes persons receiving care who have the ability to respond to emergency situations and evacuate at a slower rate and/or who have __mental and psychiatric complications.

Reason: With this definition we are trying to define or expand upon what exactly "Custodial Care" entails. A persons ability to respond to emergency situations has no connection with the type of care that is provided. It lends nothing to the goal of defining a type of care one receives.

In addition, having a definition that speaks to a persons ability to evacuate in emergency situations, leads to confusion when applying IBC sections 308.3.1 and 308.3.2 as well as sections 310.6.1 and 310.6.2. In applying those sections for I-1 and R-4 occupancies we have two different conditions that specifically address one's capacity to respond to an emergency situation in occupancies that provide for "custodial care". Having a definition, that speaks to a person's ability to respond to an emergency leads to confusion when applying the code.

Cost Impact: WII not increase the cost of construction changing a definition will have no cost impace

G6-15 : 202-CUSTODIAL CARE-ANDERSON5694

Public Hearing Results

Committee Action:

Committee Reason: The phrasing is essential because it identifies one fo the characteristics of the persons being served and therefore the level of care being provided. During the 2015 edition development the CTC worked to provide clear distinction between the occupancy categories based on the type of care being provided. Taking the text out of the definition without replacing it elsewhere in the code, would leave a gap in methods to establish the distinct care occupancies.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : William Hall, Portland Cement Association,

Disapproved

None

representing Portland Cement Association (jhall@cement.org) requests Approve as Submitted.

Commenter's Reason: The existing definition is vague and unenforceable. How are inspectors or plan reviewers expected to know when people suffering from mental or psychiatric illness can or cannot exit on their own? What are slower evacuation times? Removing this language reduces the ambiguity of whether residents can or cannot exit on their own at any given time.

G7-15 202

Proposed Change as Submitted

Proponent : Michael Anthony, University of Michigan, representing University of Michigan (maanthon@umich.edu)

2015 International Building Code

Revise as follows:

SECTION 202 DEFINITIONS

DORMITORY. <u>(STUDENT RESIDENCE FACILITY)</u> A space in a building where group sleeping and cooking accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories (student residence facilities) or fraternity houses.

Reason: This proposal is intended to correlate with related proposals: a) Section 310.2 for Residential Group - R, where the word dormitory appears

b) A proposal submitted separately, but coordinated with Brian Fitzgerald, Associate Director of Housing at the University of Michigan and an active member of ACUHO-1, the trade association for campus housing and student residence life professionals.

The term DORMITORY is used in both NFPA 101 and IBC. The common understanding of the term should not only be harmonized between both documents, but the term "dormitory" should be dropped from the vocabulary of the IBC entirely as it applies to the education facilities industry. This proposal is written with parenthetic clarification with the hope that after 2 or 3 revisions of the IBC, the term dormitory will be used in the context of prison, detention or military facilities.

1. The term "dormitory" is used less frequently as the reference material from ACUHO-i indicates. This pattern -- away from the word dormitory (which carries with it the association of detention, correctional, and military facilities) is likely to be seen in the plan review of building departments where the IBC is use. At the time the word "dormitory" came into use the education industry was smaller, did not have the requirement for in-residence instruction, and the financing of (frequently lavish) student living centers by student housing property trusts.

2. The word "dormitory" is used also in NFPA 101 in connection with detention and correctional facilities

3. Part of the year, these facilities are used by permanent residences to live and learn without having to leave student living center to another building on campus; thus the cooking facilities.

4. During the summer months these student living centers are used by transient "campers" -- frequently below 12-grade.

Another term -- STUDENT HOUSING -- may be acceptable to the commitee. A correlating proposal will be submitted to NFPA 101. A task group should be set up to develop a crosswalk between the IBC and NFPA 101. There can be significant out of step conditions between NFPA 101 and the IBC because many states will not adopt the latest version. For the convenience of the committee, selected passages from the 2015 NFPA are shown below. Admittedly, some consideration should be informed by loss history as to whether modification of the definition to reflect a new epoch in the education facilities industry would change the egress, sprinkler, fire separation, hazard classification, and other life safety canons.

Getting two standards to reflect a common understanding of the occupancy and use

classification and terminology is no small feat. It may take 3 - 6 years to harmonized them. We have to start somewhere. We prefer not to have to continue struggling with these definitions 6 years from now.

2015 NFPA 101 Reference Material - <u>Selected</u> Passages to provide the committee insight into the current status of the <u>Life Safety Code</u>

3.3.64* Dormitory. A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room, or a series of closely associated rooms, under joint occupancy and single management, with or without meals, but without individual cooking facilities. (SAF-RES)

A.3.3.64 Dormitory. Rooms within dormitories intended for the use of individuals for combined living and sleeping purposes are guest rooms or guest suites. Examples of dormitories are college dormitories, fraternity and sorority houses, and military barracks.

6.1.8.1.4* Definition — Dormitory. A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room, or a series of closely associated rooms, under joint occupancy and single management, with or without meals, but without individual cooking facilities.

Chapter 14 New Educational Occupancies

14.1.3.4 Dormitory and Classrooms.

14.1.3.4.1 Any building used for both classroom and dormitory purposes shall comply with the applicable provisions of Chapter 28 in addition to complying with Chapter 14.

14.1.3.4.2 Where classroom and dormitory sections are not subject to simultaneous occupancy, the same egress capacity shall be permitted to serve both sections

15.1.3.4 Dormitory and Classrooms.

15.1.3.4.1 Any building used for both classroom and dormitory purposes shall comply with the applicable provisions of Chapter 29 in addition to complying with Chapter 15.

15.1.3.4.2 Where classroom and dormitory sections are not subject to simultaneous occupancy, the same egress capacity shall be permitted to serve both sections.

Chapter 22 New Detention and Correctional Occupancies

22.3.4.4.3* Smoke detectors shall not be required in Use Condition II open dormitories where staff is present within the dormitory whenever the dormitory is occupied.

A.22.3.4.4.3 An open dormitory is a dormitory that is arranged to allow staff to observe the entire dormitory area at one time

22.2.6.7 The maximum travel distance limitation of 22.2.6.6 shall be permitted to be increased to 100 ft (30 m) in open dormitories, provided that both of the following criteria are met:

(1) The enclosing walls of the dormitory space shall be of smoke-tight construction.

(2) Not less than two exit access doors remotely located from each other shall be provided where travel distance to the exit access door from any point within the dormitory exceeds 50 ft (15 m).

Chapter 28 New Hotels and Dormitories

28.1 General Requirements.

28.1.1 Application.

28.1.1.1 The requirements of this chapter shall apply to new buildings or portions thereof used as hotel or dormitory occupancies. (See 1.3.1.)

28.1.1.2 Administration. The provisions of Chapter 1, Administration, shall Code Technology Committee Mtg #32

apply.

28.1.1.3 General. The provisions of Chapter 4, General, shall apply.

28.1.1.4 Any dormitory divided into suites of rooms, with one or more bedrooms opening into a living room or study that has a door opening into a common corridor serving a number

of suites, shall be classified as an apartment building.

28.1.1.5 The term hotel, wherever used in this Code, shall include a hotel, an inn, a club, a motel, a bed and breakfast, or any other structure meeting the definition of hotel

28.1.4.2 Special Definitions. A list of special terms used in this chapter follows:

- (1) Dormitory. See 3.3.64.
- (2) Guest Room. See 3.3.132.
- (3) Guest Suite. See 3.3.273.1.
- (4) Hotel. See 3.3.145.

28.2.11.2 Lockups. Lockups in hotel and dormitory occupancies shall comply with the requirements of 22.4.5

28.3.7 Subdivision of Building Spaces. Buildings shall be subdivided in accordance with 28.3.7.1 or 28.3.7.2.

28.3.7.1 In buildings not protected throughout by an approved, supervised automatic sprinkler system, each hotel guest room, including guest suites, and dormitory room shall be separated from other guest rooms or dormitory rooms by

walls and floors constructed as fire barriers having a minimum 1-hour fire resistance rating.

Bibliography: FROM THE ASSOCIATION OF COLLEGE AND UNIVERSITY HOUSING OFFICERS INTERNATIONAL WEB SITE:

http://www.acuho-i.org/blog/articleid/3976/you-were-asking-residence-halls-vsdormitories

A member recently asked this guestion. I thought it was interesting, and that the answer is too. Hopefully you feel the same. Does anyone know of any articles or studies as to when/why the lingo changed from dorm to res hall (to living center, etc)? As far as I know, there aren't any articles specifically on this (please post in the comments if you know otherwise). However, this is the answer I sent. Below I pasted the definitions from the online etymology dictionary, to which I'm referring here. (I love the Online Etymology Dictionary, by the way. It is fabulous.) Basically, "dormitory" comes from the word dormir which means to sleep or to become dormant. I've included some related definitions as well; cubicle (derived from a word that meant "to lie down, to bend oneself"), was the space in which someone slept in the dormitory. The word "cemetery" was derived from words related to dormitory, as it is a "sleeping place." The references to folding oneself into cubicles and death are likely the reason "dormitory" fell out of favor. Further below, there's the historical meanings for the words "residence" and "hall" which have much grander and more home-like pedigrees than that of "dormitory." These connotations are what universities and colleges refer to when explaining why those buildings are residence halls, not dormitories. (A number of examples can be found at the link.) I think the terms "living-learning" and similar, to specifically denote the educational aspects of residence halls, were used more commonly following the publishing of the Residential Nexus, which argued for a strong educational presence in the residence halls. As this is also a way to show the benefits of housing to students, parents and the administration, housing pros emphasize the home-like and educational aspects of housing, rather than the sleeping, dormant aspect.EDIT: Kevin Guidry's comment about an article in the Talking Stick sent me on a hunt through late-80s copies of the magazine. After flipping through many pages of--it must be said--ill-advised editorial, advertisement and fashion decisions, I found the article to which he was likely referring. Here it is: TalkingStick87 ResHallsDorms From the Online Etymology Dictionary: Dormitory: mid-15c., from L. dormitorium, from dormire "to sleep" (see dormant). Dorm: 1900, colloquial shortening of dormitory. Cubicle: late 15c., from L. cubiculum "bedroom," from cubare "to lie down," originally "bend oneself," from PIE

base *keu(b)- "to bend, turn." Obsolete from 16c., but revived 19c. for "dormitory sleeping compartment," sense of "any partitioned space" (such as a library carrel) is first recorded 1926. Cemetery:late 14c., from O.Fr. cimetiere "graveyard" (12c.), from L.L. coemeterium, from Gk. koimeterion "sleeping place, dormitory," from koimao "to put to sleep," keimai "I lie down," from PIE base *kei- "to lie, rest" (cf. Goth haims "village," O.E. ham "home, house, dwelling"); see home. Early Christian writers were the first to use it for "burial ground," though the Greek word also were anciently used of the sleep of death. Hall: O.E. heall "place covered by a roof, spacious roofed residence, temple," from P.Gmc. *khallo "to cover, hide" (cf. O.H.G. halla, Ger. halle, Du. hal, O.N. höll "hall;" O.E. hell, Goth. halja "hell"), from PIE base *kel- "to hide, conceal" (see cell). Sense of "entry, vestibule" evolved 17c., at a time when the doors opened onto the main room of a house. Older sense preserved in town hall, music hall, etc., and in university dormitory names. Hall of Fame first attested 1901, in ref. to Columbia College. Residence: c.1380, from M.L. residential, from L. residentem (nom. residens) "residing, dwelling," prp. of residere "reside" (see reside). Residential is attested from 1654, "serving as a residence;" meaning "having to do with housing" is from 1856.

For related information: <u>http://standards.plantops.umich.edu/acuho-i/</u>

Cost Impact: Will not increase the cost of construction Greater granularity in the definition will likely reduce enforcement mis-match and mis-understanding and thereby reduce cost but it is difficult to count something that does not happen. It is safer to suggest that this change is likely to add to cost.

> G7-15 : 202-DORMITORY -ANTHONY5279

Public Hearing Results

Committee Action:

Committee Reason: The proposed wording would result in a requirement that to be a dormitory you would have to have cooking facilities. Without cooking, a building wouldn't be a dormitory. This issue and trying to limit dormitories to being student housing leaves all other dormitories as undefined.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Maureen Traxler, Seattle Dept of Planning & Development, representing Seattle Dept of Planning & Development (maureen.traxler@seattle.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code SECTION 202 DEFINITIONS

Disapproved

None

DORMITORY (STUDENT RESIDENCE FACILITY) A space in a building where group sleeping and cooking accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories (student residence facilities) or fraternity houses. _ Kitchen facilities can be included.

Commenter's Reason: As written, the original proposal includes cooking facilities as a required feature of dormitories. We are proposing that dormitories be allowed to have cooking facilities but not to require them. None of the citations from NFPA 101 included in the documentation for the proposal require cooking facilities, and some of them prohibit individual cooking facilities. For instance, Section 3.3.64 says that meals may be provided but individual cooking facilities are not allowed.

G7-15

G9-15 202

Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

SECTION 202 DEFINITIONS

DWELLING UNIT. A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

SLEEPING UNIT. A room single unit providing rooms or space in which people sleep, which spaces for one or more persons, which can also include permanent provisions for living, eating, sleeping, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a *dwelling unit* are not sleeping units.

Reason: Some hotel rooms, assisted living and dormitories are designed as suites. In a hotel or assisted living space, common designs are one or two bedrooms a living space and private bath. In a dorm, common designs are two rooms with a private bath between; or three or four bedrooms with a living space and private bath could be interpreted to an apartment. Currently the definition for sleeping unit could be interpreted to be just a bedroom. When these bedrooms are combined into suites, they should be considered as one sleeping unit.

Figures for CTC Care proposal to to Section 420 (6B)



This is part of a group of proposals to address this style of design and group homes within single family residences. Changes are proposed for the definition for sleeping units, the Group classifications in Section 310.4 and 310.5, separation requirements in Section 420, and coordination with accessibility requirements in Section 1107. Proposals will be put forward as part of Group B for fire and smoke alarm systems. The proposals could work separately.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at:

http://www.iccsafe.org/cs/CTC/Pages/default.aspx

This ICC committee was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken=

The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction This will increase design options and is a clarification.

G9-15 : 202-DWELLING UNIT-BALDASSARRA4294

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The change provides clarity that sleepiong units are just a single room but can be a collection of rooms. The revision increases design options for sleeping rooms. There was concern that the revision could be read to not ever require a sleeping area in a sleeping room. Such is not the intent of the proposal.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Carl Baldassarra, P.E., FSFPE, representing Code Technologies Committee (<u>CTC@iccsafe.org</u>) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code SECTION 202 DEFINITIONS

SLEEPING UNIT. A single unit providing rooms or spaces for one or more persons, which persons in which people sleep. Additional rooms and spaces within the unit can also include permanent provisions for living, eating, sleeping, and either sanitation or kitchen facilities but not both. <u>Required egress from the unit is limited to access to a single exit or exit access doorway.</u> Such rooms and spaces that are also part of a *dwelling unit* are not sleeping units.

Commenter's Reason: This revision is part of a package of changes that were all approved. However, this public comment is in response to floor comments heard during the committee hearing. This public comment accomplishes the following:

- 1. It now states the obvious option that a sleeping unit can be one room or multiple rooms.
- 2. It reinserts the original location of the term "sleeping" so that this cannot be any space, but more consistent with bedroom suites or two bedrooms with a shared bathroom.
- 3. It limits a sleeping unit to one exit. Requirements for single exit spaces are in Section 1006.3.2. This will stop the definition from being applicable to large areas on a single floor.

Public Comment 2:

Proponent : Maureen Traxler, representing Seattle Dept of Planning & Development (maureen.traxler@seattle.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code SECTION 202 DEFINITIONS

SLEEPING UNIT. A single unit providing rooms or spaces for one or more persons, which persons, that includes permanent provisions for sleeping, and can also include permanent provisions for living, eating, sleeping, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a *dwelling unit* are not sleeping units.

Commenter's Reason: The essence of a sleeping unit is that it's a place where people sleep. In the original proposal, provisions for sleeping are optional--this comment makes sleeping accommodations a mandatory feature of a sleeping unit.

Public Comment 3:

Proponent : Tony Crimi, representing International Firestop Council requests Disapprove.

Commenter's Reason: While this proposed change provides some clarity that sleeping units are not always just a single room, but can be a

collection of rooms, this proposal also introduces some unintended consequences and requires further study.

Firstly, as the Committee identified, the proposed language could be interpreted to not ever require a sleeping area in a sleeping room.

The Committee reason clarified that such is not the intent of the proposal, however, that clarification of the intent is not in the IBC. The figures provided within the G9-15 proposal clearly represent the proponents intent of providing several rooms combined as a suite with a shared common space. However the unintended consequence of the proposed language would allow entire floor areas to be considered as a sleeping units, with no limitation on occupant load. This was clearly not the intent of this proposal.

Second, by adding the language "rooms" and not defining a "single unit" it is not hard to envision design professionals interpreting this language to include entire floor areas for hotel or motel floors, or dormitory floors. If so, this would create an unsafe condition by eliminating requirements for separation walls between these rooms, which was not intended by the proponents. While it could be interpreted that occupant loads could trigger the need for a rated corridor, this is not even implied within this definition.

Since occupant load limitations cannot be in a definition (since it is a requirement), this proposal should be Disapproved and brought back with a companion proposal to link these two critical elements.

Public Comment 4:

Proponent : William Hall, Portland Cement Association, representing Portland Cement Association (jhall@cement.org) requests Disapprove.

Commenter's Reason: This proposal will provide confusion. Many dormitories do not provide for cooking accommodations. Are these rooms now something different? Based on the proposed definition, cooking must be provided to be a dormitory. In addition, fraternity houses is already in the R-2 category. While this may be an area of the code that needs work, we feel this approach will only add confusion.

G33-15 308.3.4, 308.4.2, 310.5.1, [F] 903.2.8.4 (IFC 903.2.8.4) <u>Proposed Change as Submitted</u>

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

308.3.4 Five or fewer persons receiving custodial care. A facility with five or fewer persons receiving custodial care shall be classified as Group R-3-or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

308.4.2 Five or fewer persons receiving medical care. A facility with five or fewer persons receiving medical care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

310.5.1 Care facilities within a dwelling. Care facilities for <u>A dwelling with</u> five or fewer persons receiving <u>custodial or medical</u> care that are within a single family dwelling are <u>, shall be</u> permitted to comply <u>be</u> <u>constructed in accordance</u> with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

2015 International Fire Code

Revise as follows:

903.2.8.4 Care facilities. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in care facilities <u>a</u> <u>dwelling</u> with five or fewer individuals in a single family dwelling. providing custodial or medical care.

Reason: The intent of this proposal is to coordinate the language between sections and to let the IRC requirements determine the sprinkler regulations. The provisions for 5 or fewer persons receiving care under Group I-1 and I-2 (308.3.4, 308.4.2) is strictly a reference to the requirements in Group R-3 (310.5.1). If a care facility is not within a dwelling, it is a Group R-3. If care is provided for individuals within a home, they can follow the IRC for construction requirements.

The dwelling with 5 or fewer persons receiving care can literally be single family homes or small group home. The Group R-4 facilities were developed to be consistent with the Fair Housing Act. Over time, changes have been made to the codes that have resulted in jurisdictions being subject to discrimination lawsuits under the Fair Housing Act.

The IRC has a sprinkler requirement, so these homes should be permitted to be constructed in accordance with the IRC. Forcing a facility to drag a sprinkler system with them, just in case a jurisdiction may decide to not require single family home to sprinkler, is not good code practice.

NFPA 13D sprinkler systems are required for care facilities with 5 or fewer Code Technology Committee Mtg #32

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residents (Section 903.2.8.4) that decide to construct in the IBC. The proposed wording is for consistency in the language in Chapter 3.

The change to IFC 903.2.8.4 is strictly consistency in terminology and is not a technical change.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction

Sprinklers requirements for homes are addressed in the IRC. Working within the family of codes, this is not a change in requirements.

G33-15 : 308.3.4-BALDASSARRA4268

Public Hearing Results

Committee Action:

Committee Reason: The provisions assure that if these occupancies are built under the auspices of the *International Residential Code* that they are protected with an automatic sprinkler system. If the text is removed, that assurance is lost. With many states and localities removing sprinkler requirements when the IRC is adopted, this language in the IBC assures sprinkler protection.

Assembly Motion: Online Vote Results: Support: 23.27% (104) Oppose: 76.73% (343) Assembly Action :

As Submitted Failed

Disapproved

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Carl Baldassarra, P.E., FSFPE, representing Code Technologies Committee (<u>CTC@iccsafe.org</u>)

requests Approve as Submitted.

Commenter's Reason: Much of the testimony against this proposal was regarding licensed facilities or businesses that take care of the elderly. This change is only dealing with facilities with 5 or fewer residents. They are allowed to use the IRC because this could literally be a single family home with someone who needed care. States do not require facilities with 5 or fewer to be licensed facilities. Also, the current text does not require this to be a business.

The committee stated that these facilities should be sprinklered. The IRC requires sprinklers. Requirements should not be buried in the IBC that is only to specifically over ride a jurisdiction possibly modifying the IRC. If the membership does not want to allow for anyone who needs custodial care to live in a single family home they

should change the requirement to keep these facilities within the IBC and not allow them to use the IRC as an option for construction.

Public Comment 2:

Proponent : Stephen Thomas, Colorado Code Consulting, LLC, representing International Association of Building Officials (IABO) (sthomas@coloradocode.net) requests Approve as Submitted.

Commenter's Reason: Several local building officials have been sued for enforcing the current language in the code as it is now written. The lawsuits and threats of legal action are being filed under the Americans with Disabilities Act (ADA). The argument is that this creates an unequal requirement on buildings just because the occupants have a disability. If you require sprinklers in a home that has people with disabilities, but not a home where people without disabilities, you are violating the ADA. If you require fire sprinklers in homes whether they have people with disabilities or not, you are not in violation. You are providing equal enforcement. We should not have a provision in the code where we place the building official and local authority in a position of being sued under a federal law.

We do not need language in the IBC to provide fire sprinklers if the building is constructed under the IRC. The IRC already requires the fire sprinklers. One of the arguments against this proposal is that jurisdictions delete the fire sprinklers as part of their adoption of the code. Past actions of the code committees and the membership have confirmed that we cannot base a decision on a code change that is dependent on what amendments are made at the local level. We need to consider the code change based on the current language in the codes.

In addition, NFPA 101 does not require fire sprinklers in these types of facilities is they are converted facilities; they serve eight or less residents and the occupants are able to move to a point of safety within 3 minutes. The majority of the facilities that are covered by the code are converted units. The residents are generally able to evacuate on their own.

There is also no clarification on who is providing the medical or custodial care in these facilities. It could be read that if a family member has a disability and the family uses a visiting nurse service to provide the medical or custodial care, the code would require that the dwelling unit be provided with fire sprinklers. We do not believe that this is the intent of this section, but that is what it says. If I have one person receiving custodial or medical care, that is less than 5 and would require me to comply with these sections. If that is the case, the IRC requirements would be met.



G35-15 202 (New), 308.2, 308.5, 308.5.6 (New) <u>Proposed Change as Submitted</u>

Proponent : Edward Kulik, representing Building Code Action Committee (bcac@iccsafe.org)

2015 International Building Code

Add new definition as follows:

SECTION 202 DEFINITIONS

LOCKUP FACILITY Buildings containing holding cells, rooms or areas where occupants are restrained or detained.

Revise as follows:

308.2 Definitions. The following terms are defined in Chapter 2: 24-HOUR BASIS. CUSTODIAL CARE. DETOXIFICATION FACILITIES. FOSTER CARE FACILITIES. HOSPITALS AND PSYCHIATRIC HOSPITALS. LOCKUP FACILITY INCAPABLE OF SELF-PRESERVATION. MEDICAL CARE. NURSING HOMES.

308.5 Institutional Group I-3. Institutional Group I-3 occupancy shall include <u>all</u> buildings and structures <u>or portions thereof</u> that are inhabited by more than five persons- people who are under restraint or security. A Group I-3 facility is occupied by persons who are generally *incapable of selfpreservation* due to security measures not under the occupants' control. This group shall include, but not be limited to, the following: Correctional centers Detention centers Jails <u>Lockup facility</u> Prerelease centers Prisons Reformatories Buildings of Group I-3 shall be classified as one of the occupancy

Buildings of Group I-3 shall be classified as one of the occupancy conditions specified in Sections 308.5.1 through 308.5.5 (see Section 408.1).

Add new text as follows:

308.5.6 Lockup facilities. A lockup facility for five or fewer persons shall be classified as a Group B occupancy or as part of the primary occupancy of the building. Such facilities shall comply with all of the following:

 The area containing a lockup facility shall be separated from other rooms, spaces or areas by smoke barrier complying with Section 709.
The building containing a lockup facility shall be protected with an automatic fire sprinkler system complying with Section 903. <u>3. The area containing a lockup facility shall be provided with an</u> <u>automatic smoke detection system installed in accordance with Section</u> <u>907.</u>

<u>4. There shall be not more than one lock-up facility within a building.</u> <u>5. The restraint of individuals within the lock-up facility shall be for less</u> <u>than 24 hours.</u>

Reason: This public proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

This code proposal adds a definition for lockup facilities that is needed in the Code that clarifies the use occupancies for buildings/spaces that contain five or less occupants under restraint or detained.

This code proposal includes the revision of Section 308.5 and the addition of Section 308.5.6. The revision removes more than five persons, and adds buildings and structures containing a room, holding cell or cellblock used to place persons under restraint or security. The new section adds lockup facilities and also clarifies that an approved smoke barrier complying with Section 709 be provided, and also fire sprinkler and smoke detectors be installed. There would be no more than one lockup facility within a building and the restraint of individuals is for less than 24 hours.

Cost Impact: WII increase the cost of construction This proposal will increase the cost of construction of rooms or spaces used to restrain or detain occupants.

> G35-15 : 308.5.6 (New)-KULIK4893

Public Hearing Results

Committee Action:

Committee Reason: The committee found that the proposal, while a good attempt to address the issue, left too many unanswered concerns. There was concern that the requirements would be too onorous when applied to a smaller building, or perhaps for a temporary holding room located in a mall or a school. On the other hand a large court building might have a small lock up next to each of 12 court rooms. Such would be prohibited by the limitation of one such lockup per building. In addition, the change in Section 308.5 would leave unanswered what was an I-3 with 5 or fewer occupants which was not a lockup facility.

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Edward Kulik, Chair, representing ICC Building Code Action Committee and Adolf Zubai, Chair, representing International Association of Fire Chiefs, Fire & Life Safety Section Code Technology Committee Mtg #32

Disapproved

None

requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code SECTION 202 DEFINITIONS

LOCKUP <u>**TEMPORARY DETENTION</u> FACILITY** Buildings containing holding Holding cells, rooms or areas where occupants are restrained or detained for a duration of less than 24 hours.</u>

308.2 Definitions. The following terms are defined in Chapter 2: 24-HOUR BASIS. CUSTODIAL CARE. DETOXIFICATION FACILITIES. FOSTER CARE FACILITIES. HOSPITALS AND PSYCHIATRIC HOSPITALS. LOCKUP FACILITY INCAPABLE OF SELF-PRESERVATION. MEDICAL CARE. NURSING HOMES. <u>TEMPORARY DETENTION FACILITY</u>

308.5 Institutional Group I-3. Institutional Group I-3 occupancy shall include all buildings and structures or portions thereof that are inhabited by people who are under restraint or security. A Group I-3 facility is occupied by persons who are generally *incapable of self-preservation* due to security measures not under the occupants' control. This group shall include, but not be limited to, the following: Correctional centers Detention centers Jails Lockup facility Prerelease centers Prisons Reformatories Temporary Detention Facilities

Buildings of Group I-3 shall be classified as one of the occupancy conditions specified in Sections 308.5.1 through <u>308.5.5</u> <u>308.5.6</u> (see Section 408.1).

308.5.6 Lockup Condition 6 temporary detentionfacilities. A lockup facility for five or fewer persons This occupancy shall be classified as a Group B occupancy or as part of the primary occupancy of the building. Such facilities shall comply include temporary detention facilities complying with all of the following:

1. Condition 6 temporary detention facilities shall be permitted in other than Group I-1 or I-2 occupancies

1.2. The area containing a lockup <u>Condition 6 temporary detention</u> facility shall be separated from other rooms, spaces or areas by smoke barrier <u>barriers</u> complying with Section 709.

2.3. The building containing a lockup Condition 6 temporary detention facility shall be protected with an automatic fire sprinkler system Code Technology Committee Mtg #32 September 14-15, 2015, Chicago complying with Section 903.

3.4. The area containing a lockup Condition 6 temporary detention facility shall be provided with an automatic smoke detection system installed in accordance with Section 907.

4. There shall be not more than one lock-up facility within a building. _ 5 5. The restraint of individuals within the lock-up Condition 6 temporary detention facility shall be for less than 24 hours.

<u>6. Not more than five persons shall be detained in the Condition 6 temporary detention facility at any one time.</u>

7. The Condition 6 temporary detention facility shall be under constant supervision by a responsible person with the ability to release any persons confined within the facility.

8. The Condition 6 temporary detention facility shall be permitted to be classified as part of the primary occupancy of the building.

Commenter's Reason: Kulik: This Public Comment is designed to clarify this proposal for temporary detention facilities.

To address committee concerns and testimony from the floor the proposal has been modified to eliminate the Group B classification. This change coupled with identifying the Temporary Detention parameters as an I-3 Condition 6 occupancy eliminates the question on what a small facility, 5 or less restrained individuals, would be. It would be an I-3 unless the temporary detention facility option was taken as permitted and the requirements of proposed Section 308.5.6 are complied with. The limitation on one temporary detention facility within a building has been eliminated to address situations such as court houses where each courtroom may have a temporary detention facility. The name of the use has been modified to more clearly reflect the temporary nature of the restraint.

Zubia: This Public Comment is designed to clarify this proposal for temporary detention facilities.

The original proposal contained internal conflicts. First it stated that a temporary detention facility was a Group I-3, then it stated they were Group B. This public comment continues with philosophy that anywhere a person's liberties are restricted should be considered a Group I-3. Therefore, this proposal adds Condition 6 as another level of detention under Group I-3.

Initially, the title of this use is revised to temporary detention facility. This title more accurately describes the use of these areas. These areas must be considered temporary since stay longer than 24 hours is not permitted.

Also, the use has been included as another Condition under Group I-3. Group I-3 currently offers 5 conditions for various levels of application and restraint. The temporary detention facility becomes Condition 6.

Requirements for Condition 6 temporary detention facilities include that the facility must be located in a sprinklered building, protected with a smoke detection system, separated from other portions of the building, contain no more than 5 persons, and have constant supervision.

These facilities can be found in a typical mall building, where security staff will detain someone until the police department arrives to take custody and transport. These provisions allow this situation to occur while providing a safe situation for the restrained persons. This proposal also allows the construction of the Group I-3 Condition 6 to meet the requirements for construction of the main building itself rather than Group I-3 construction for the room of restraint.

The limitation to only one Group I-3 Condition 6 in a building is deleted. Many larger facilities can have a need for different locations for temporary detention facilities. All of the provisions will apply in all locations.

G42-15 310.6

Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

310.6 Residential Group R-4. Residential Group R-4 occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive *custodial care*. Buildings of Group R-4 <u>occupancy</u> shall be classified as one of the occupancy conditions specified in Section 310.6.1 or 310.6.2. This group shall include, but not be limited to, the following: Alcohol and drug centers Assisted living facilities

Congregate care facilities Group homes Halfway houses Residential board and care facilities Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided where specific requirements for Group R-4 are prescribed. Group R-4, Condition 1 occupancies shall be permitted to comply with the construction requirements in this code the International Residential Code.

Reason: The Group R-4 facilities were developed to be consistent with the Fair Housing Act. Over time, changes have been made to the codes that have resulted in jurisdictions being subject to discrimination lawsuits under the Fair Housing Act. The Group R-4 occupancy, when it first was developed for the code, was permitted to comply with IRC. This allowance was taken away without technical justification. The IRC has a sprinkler requirement, so these homes should be permitted to be constructed in accordance with the IRC. Forcing a facility to drag a sprinkler system with them, just in case a jurisdiction may decide to not require single family home to sprinkler, is not good code practice.

If facilities decide to stay in the IBC, Group R-4, Condition 1 are required to have a NFPA 13D sprinkler system (Section 903.2.8.2) and Group R-4, Condition 2 are required to have a NFPA 13R sprinkler system (Section 903.2.8.3). The proposed wording is for consistency in the language in Chapter 3. The Group R-4, Condition 2, due to the level of care provided for the residents, the Condition 2 will stay with the IBC so it gets the increased sprinkler protection and attic protection. Group R-4, Condition 1, has residents capable of self-preservation, so they can go to the IRC and the sprinkler protection there.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the Code Technology Committee Mtg #32 CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction

The prescriptive requirements of the IRC are generally the same or lesser cost that IBC Type 5 construction.

G42-15 : 310.6-BALDASSARRA4269

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The following is a corrected Committee Reason Statement for G42 -15 and was posted May 15, 2015. It replaces the previously posted statement:

The committee approved this proposal to provide clarification regarding the requirements for R-4 occupancies. While in general R-4 occupancies are to comply with R-3 standards, there are specific provisions which apply specifically to R-4 occupancies. The proposal also clarifies that only R-4 Condition 1 occupancies have the option of comply with the provisions of the IRC. This assures that the higher needs residents of an R-4 Condition 2 occupancy are covered by the standard of the IBC. Within the family of I-Codes, the R-4 occupancy will be provided with sprinkler protection regardless of the code it is developed under. The committee acknowledged that some state adoptions have removed sprinkler requirements in the IRC.

Assembly Motion: Online Vote Results:

Disapprove Successful

Support: 68.52% (283) Oppose: 31.48% (130) Assembly Action :

Disapproved

Individual Consideration Agenda

Public Comment 1:

Proponent : Jeffrey Shapiro, representing IRC Fire Sprinkler Coalition (jeff.shapiro@intlcodeconsultants.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

310.6 Residential Group R-4. Residential Group R-4 occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive *custodial care*. Buildings of Group R-4 occupancy shall be classified as one of the occupancy conditions specified in Section 310.6.1 or 310.6.2. This group shall include, but not be limited to, the following:

Alcohol and drug centers Assisted living facilities
Congregate care facilities Group homes Halfway houses Residential board and care facilities Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except where specific requirements for Group R-4 are prescribed. Group R-4, Condition 1 occupancies shall be permitted to comply with the construction requirements in the *International Residential Code_provided an automatic sprinkler system is installed in accordance with* Section 903.3.1.3 or Section P2904 of the International Residential Code.

Commenter's Reason: We have no concern with this proposal being disapproved, as recommended by the online vote. However, if it is ultimately the membership's preference to allow R4 occupancies to be built under the IRC, the inclusion of fire sprinklers should be mandated by the IBC as a condition of this allowance. Mandating the sprinkler system under the IBC correlates with the committee recommendation and assembly action on G33-15 and with how the IRC deals with lodging houses under IRC Section 101.2 (and in the IBC if the public comment to G41-15 is successful).

It is important that the IBC specify a sprinkler requirement as a condition of allowing application of the IRC to non-family uses of dwellings to ensure that sprinklers are provided to protect occupants. Relying solely on the IRC sprinkler requirement, which has been legislatively blocked in 16 states and not yet adopted in many other jurisdictions, would certainly be inconsistent with the intent of the IBC and IRC, which is to require fire sprinklers in all residential occupancies.

If G42-15 were approved without this amendment, it is realistic to expect that single family homes, duplexes and townhouses will be constructed for group home applications that include rehab facilities, halfway houses, etc. with up to 16 occupants plus staff <u>in each dwelling unit</u> and having no fire sprinklers. That's a life safety risk that far outweighs arguing semantics and philosophical aspects of model codes and code adoption.

Public Comment 2:

Proponent : Assembly Action requests Disapprove.

Commenter's Reason: This code change proposal is on the agenda for individual consideration because the proposal received a successful assembly action. The assembly action for Disapprove was successful by a vote of 68.52% (283) to 31.48% (130) by eligible members online during the period of May 14 - May 28, 2015.

G42-15

G105-15 407.2.6 **Proposed Change as Submitted**

Proponent : Edward Kulik, representing Building Code Action Committee (bcac@iccsafe.org)

2015 International Building Code

Revise as follows:

407.2.6 Nursing home cooking facilities. In Group I-2, Condition 1, occupancies, rooms or spaces that contain a cooking facility with domestic cooking appliances shall be permitted to be open to the corridor where all of the following criteria are met:

- 1. The number of care recipients housed in the smoke compartment is shall not be greater than 30.
- 2. The number of care recipients served by the cooking facility is shall not be greater than 30.
- Only one cooking facility area is shall be permitted in a smoke 3. compartment.
- 4. The types of domestic cooking appliances permitted are shall be limited to ovens, cooktops, ranges, warmers and microwaves.
- The corridor is shall be a clearly identified space delineated by 5. construction or floor pattern, material or color.
- The space containing the domestic cooking facility shall be 6. arranged so as not to obstruct access to the required exit.
- 7. A domestic Domestic cooking hood hoods installed and constructed in accordance with Section 505 of the International *Mechanical Code* is shall be provided over the cooktop or range cooktops and ranges.
- The domestic cooking hood provided over the cooktop or range 8. Cooktops and ranges shall be equipped with an automatic fireextinguishing system of a type recognized for protection of domestic cooking equipment. Preengineered automatic extinguishing systems shall be tested protected in accordance with UL 300A and *listed* and *labeled* for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's instructions Section 904.13.
- A manual actuation device for the hood suppression system shall 9. be installed in accordance with Sections 904.12.1 and 904.12.2.
- 10. An interlock device shall be provided such that upon activation of the hood suppression system, the power or fuel supply to the cooktop or range will be turned off.
- <u>10.</u> A shut-off for the fuel and electrical power supply to the cooking equipment shall be provided in a location that is accessible only to staff.
- 11. A timer shall be provided that automatically deactivates the cooking appliances within a period of not more than 120 minutes.
- 12. A portable fire extinguisher shall be installed provided. Installation shall be in accordance with Section 906 of and the International Fire Code.extiguisher shall be located within a 30-foot (9144 mm) Code Technology Committee Mtg #32 September 14-15, 2015, Chicago

Reason: This public proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

During the 2015 code cycle requirements were added to allow domestic cooking appliances to be installed in areas of Group I-2, Condition 1 occupancies that are open to the corridor when certain conditions were met. That included protecting cooktops and ranges with UL 300A compliant extinguishing systems in the hood. This proposal accomplishes the following:

1. Introduces mandatory language into Section 407.2.6

2. Allows an option for cooktops and ranges with listed ignition resistant burners to be provided in lieu of a UL 300A extinguishing system. These types of systems are investigated to verify that pans and cooking materials do not exceed 350 degrees C (662 degrees F). Recent work by the Fire Protection Research Foundation confirms that burners meeting these specifications are highly unlikely to ignite cooking materials. See: http://www.nfpa.org/research/fire-protection-researchfoundation/reports-and-proceedings/other-research-topics/analytical-modeling-of-panand-oil-heating-on-an-electric-coil-cooktop

There will be a Group B corresponding code change proposal to IFC Section 904.13. The ICC Fire Code Action Committee (FCAC) supports this proposal and will be submitting the Group B proposal that follows:

904.13 Domestic cooking systems in Group I-2 Condition 1. In Group I-2 Condition 1, occupancies where cooking facilities are installed in accordance with Section 407.2.6 of this code, <u>cooktops and ranges shall be protected in accordance</u> with one of the following. the domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire-extinguishing system of a type recognized for protection of domestic cooking equipment. Preengineered automatic extinguishing systems shall be tested in accordance with UL 300A and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's instructions.

<u>1. Cooktops and ranges shall include heating elements or burners that have been tested and listed to not allow cooking pan temperatures to exceed 662 degrees F (350 degrees C), or</u>

<u>2</u> . The domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire-extinguishing system complying with both of the following:

a. The automatic fire-extinguishing system shall be of a type recognized for protection of domestic cooking equipment. Preengineered automatic extinguishing systems shall be tested in accordance with UL 300A and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's instructions, and

b. Manual actuation and system interconnection for the hood suppression system shall be installed in accordance with Sections 904.12.1 and 904.12.2, respectively.

904.13.1 Manual system operation and interconnection. Manual actuation and system interconnection for the hood suppression system shall be installed in accordance with Sections 904.12.1 and 904.12.2, respectively.

904.13.2 Portable fire extinguishers for domestic cooking equipment in Group I-2 Condition 1. A portable fire extinguisher complying with Section 906 shall be installed **Cost Impact:** WII not increase the cost of construction

This code change proposal will not increase the cost of construction. It includes editorial revisions and adds an option to the existing requirements to use ignition prevention cooktops.

> G105-15 : 407.2.6-KULIK4658

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: This was a new provision for the 2015 code. With experience, improvements to the text to allow more consistent interpretation and compliance are needed.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Wayne Morris, representing Association of Home Appliance Manufacturers requests Disapprove.

Commenter's Reason: The Association of Home Appliance Manufacturers (AHAM) is opposed to the Code Proposal G 105-15 and the change suggested to Section 904.13 and we would like to present the following information. While we agree that additional protections for cooking in Nursing Home facilities is important, we disagree with several provisions in this proposal.

The proposal G 105-15 represents a significant change to the use of cooking appliances in Nursing Home Cooking Facilities. Currently the International Building Code requires that the cooking area over a standard cooktop or range should be provided with an automatic fire extinguishing system to prevent unattended cooking fires. We object to both the section of the Proposal 402.7.6 and to the new proposal on Section 904.13 as included in proposal G105-15. This proposal would require not only the specific changes to an automatic shut-off of the range/cooktop but also that a cooktop or range not be allowed to have burners or elements that would exceed 662 deg F or 350 deg C.

It is quite possible that at the time the proposal was first developed, the maker of the proposal was unaware of major changes taking place in the appliance safety standards. The appliance industry, in cooperation with other stakeholders, has already proposed and gained the acceptance of new cooking safety requirements in the applicable US voluntary safety standard. The cooking-related proposals included in the 2015 IBC proposal are unnecessary, duplicative, design restrictive, and illadvised. They should be withdrawn.

AHAM is a strong supporter of the consensus standards process. We participate in over 50 safety standards for our industry. We help to develop standards committees, help to populate them, and help to support full participation by all stakeholders. In the case of safety of cooking appliances, the consensus process has considered and is still working on product safety standards.

The UL 858 standard for household ranges in the US recently released a new test requirement for coil cooktops to reduce the risk of fires from unattended cooking. The test involves running the burner in worst-case scenarios with cooking oil in a

pan, and the range must prevent the oil from igniting. This requirement will be in place on apply to all ranges and cooktops with coil heating elements within the next few years. A similar cooking safety test procedure is currently under review for inclusion in the Canadian Electric Range Standard, CSA 22.2 No. 61. Similar testing requirements are being developed for other cooking technologies, such as radiant and gas cooktops and ranges.

There are a number of reasons why this proposal would cause severe harm not only to the cooking appliance industry, but also to consumers through a very designspecific requirement.

- The proposal in G105-15 for a timer to shut off power after 120 minutes is very design restrictive. It also has no details nor does it explain whether this is to be part of the range or part of the power/fuel system to the range. Such a requirement could be quite risky in a gas cooktop. To shut the fuel source off is one thing, but to then re-engage the fuel without proper controls could increase the risk. We ask that the Committee to remove this requirement #11, "A timer shall be provided that automatically deactivates the cooking appliances within a period of not more than 120 minutes."
- 2. This proposal for automatic shut-off does not have any details about testing, how the device is to be applied, if it is on the product, how the deactivation will be accomplished and more important how it will be re-activated. There are no requirements in the applicable US safety standards for such a provision. This leaves the accomplishment of this to anyone's guess. This proposal should be made to the UL 858 and ANSI Z21.1 safety standards.
- 3. This proposal for automatic shut-off, while possibly well-meaning does not allow consumers to perform many of the functions of a cooktop or oven. Many operations such as "canning" take longer than 120 minutes. Many oven operations, such as slow cooking meats take longer than 120 minutes. We understand that this is for a "nursing home" but there are many highfunctioning adults in adult facilities and requiring such a restriction on the performance is not warranted.
- 4. This proposal in 904.13 is very design specific. The proposal seeks to restrict the temperature of the burner and not the pan or vessel that is used to cook. All research to date notes that the issue at question is the temperature in the pan/vessel in which food materials are placed. Thus, even though the issue is the temperature in the pan or vessel, this requirement would restrict the actual burner. There are no test methods, descriptions of how the test would be conducted and no understanding of how a product would be evaluated.
- 5. We believe this proposal in 904.13 is built around the promotion of one particular solution on the market. That solution has a number of specific issues:
 - 1. The solution is not safety certified for use in kitchen ranges in the United States or Canada. No safety certification agency has given the approval for this product to be used on or in ranges or cooktops.
 - 2. The solution is only available for coil-element ranges as a replacement device. It will not allow nor are there any solutions currently available in concept or on the market that would restrict the temperature of the burner on coil-element, radiant, glass ceramic, induction, or gas ranges/cooktops to less than 662 deg F or 350 deg C.
 - 3. The solution has been reported to have a number of concerns about its efficacy and usefulness to consumers. In some cases, this has prompted behavior with this device that have raised questions about whether it would be in the best interest of safety.

6. It is inappropriate for a consensus standards development committee to develop standards proposals that have only one technical solution and is written to promote one particular product on the market. We doubt the Committee fully understood this at the time. While this may seem to be a simple design requirement, the change proposed to 904.13 is a thinly veiled attempt to promote one product and to require it in the Code.

7. This proposal in 904.13 seems to be written without fully understanding the information on or the technologies in development to prevent unattended cooking

fires.

8. AHAM and its members are very aware of the tragic situations with unattended cooking fires. For many years, AHAM, standards developers, staff at the U.S. Consumer Product Safety Commission (CPSC), NFPA, and other stakeholders have been meeting to develop effective solutions to the issue of unattended cooking fires. Considerable research has been done, much of which has noted the importance of providing a solution that would reduce cooking fires but allow a full range of cooking to the consumer.

9. In October 2014, AHAM made a proposal to UL Standard 858 that would, for the first, time create a test in the standard for coil-element cooktops to simulate an unattended cooking situation and require that cooking oil not ignite. This will eventually be extended to glass-ceramic and eventually gas cooktops. However, even the concept feasibility of such a pan temperature control mechanism has only been demonstrated at this time for coil-element ranges. Proposal G 105-15 and the accompanying 904.13 would only allow purchasing people to choose to install coil-element ranges.

10. Nothing in this proposal G105-15 mentions the need for such a solution or device to be safety certified. We think this is a gross error in the standard and which could leave consumers, nursing home administrators, and housing authorities at great risk.

11. This proposal in 904.13 will result in a considerable reduction in the cooking temperature in the pan or vessel on the cooktop. By restricting the temperature to 350°C on the burner, the temperature in the pan (depending on pan materials) will be considerably less and will definitely affect the ability to properly cook food to a safe temperature. The proposed addition to the IBC of limiting pan temperature to 350°C is inadequate by itself, as the test and measurement procedures are a crucial part of the requirement. If consumers are faced with a significant reduction in cooking temperatures, they could be prompted to take steps which would increase risk.

12. The proposal in 904.13, as it stands, speaks only to the maximum temperature, but equally important is the rate of rise of the temperature. Heating elements on cooktops may be constructed of considerable mass, which will allow average temperatures to be maintained but with "overshoot" temperatures during initial heat-up to be considerably higher.

13. This proposal in G105-15 is very design restrictive for the International Building Code. We believe such a requirement should be in the product safety standard. It is one thing to require the accompaniment of an over-the-range fire protection or fire extinguishing system. This is certainly within the scope of the requirements of the ICC or IBC. However, dictating specific design or performance parameters for a piece of individual equipment without knowing all the other requirements is inappropriate for the ICC or IBC.

14. Repeated references to 'domestic' appliances appears as though it would encompass household appliances. While compliance with any of these new requirements would only be required of those wishing to sell into the Nursing Home market, we see a substantial concern that additional sources of regulation could be broadened to many other product market categories. To the extent that these proposed additions to the IBC, IMC and IFC could potentially encroach on regulations on household appliances, however, AHAM should stand strongly against and oppose such encroachment.

It is difficult for AHAM to give advice to the General Building Code Committee on fire prevention. However, it would seem that without the proposed changes the International Building Code contains adequate coverage for Nursing Home facilities with the requirement of fire suppression systems.

While AHAM generally does not discuss the issue of cost of proposals, this proposal makes the statement that there will be no cost impact. As there are no products currently on the market that meet this requirement and are safety certified, we

question how the maker of the proposal arrived at that conclusion. Thank you.

Bibliography: The Association of Home Appliance Manufacturers (AHAM) represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than \$30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency, safety, and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM is also a standards development organization and has authored numerous appliance performance testing standards used by manufacturers, consumer organizations and governmental bodies to rate and compare appliances. In partnership with the CSA Group, and UL Environment, AHAM developed the first sustainability standards for home appliances. AHAM's consumer safety education program has educated millions of consumers on ways to properly and safely use appliances such as portable heaters, clothes dryers, and cooking products. AHAM participates in the development of over 60 product safety standards and has authored numerous improvements to these standards.

Wayne Morris is the Vice President, Technical Operations and Standards and leads the standards development activities for the association.

G105-15

G118-15 420.2

Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

420.2 Separation walls. Walls separating *dwelling units* in the same building, walls separating *sleeping units* in the same building and walls separating *dwelling* or *sleeping units* from other occupancies contiguous to them in the same building shall be constructed as *fire partitions* in accordance with Section 708.

Exceptions:

- 1. <u>Where sleeping units include private bathrooms, walls between</u> <u>bedrooms and the associated private bathrooms are not required</u> <u>to be constructed as fire partitions.</u>
- 2. <u>Where sleeping units are constructed as suites, walls between</u> <u>bedrooms within the sleeping unit and the walls between the</u> <u>bedrooms and associated living spaces are not required to be</u> <u>constructed as fire partitions.</u>

Reason: There are two concerns related to separation – 1) suites within hotels, dormitories, and assisted living where a sleeping rooms may share a bathroom, or sleeping rooms may have associated living space, and 2) group homes that operate as a single family unit. There are separate proposals to deal with each. It is the intent for these proposals to work together. This proposal is for the suites. Some hotel rooms, assisted living and dormitories are designed as suites (see examples below). In a hotel or assisted living space, common designs are one or two bedrooms a living space and private bath. In a dorm, common designs are two rooms with a private bath between; or three or four bedrooms with a living space and private bath a living space and private bath a separate and private bathrooms. These units act as a group similar to an apartment; and without a kitchen, the associated fire hazards are reduced. When these bedrooms are combined into suites, they should be considered as one unit for purposes of separation. A separation would still be required between these units and the common corridor.





This is part of a group of proposals to address this style of design and group homes within single family residences. Changes are proposed for the definition for sleeping units, the Group classifications in Section 310.4 and 310.5, separation requirements in Section 420, and coordination with accessibility requirements in Section 1107. Proposals will be put forward as part of Group B for fire and smoke alarm systems. The proposals could work separately.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at:

http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction It is the committee's understanding that current language is not clear for where separations are required. In some cases this would be a reduction in separation requirements, and therefore a decrease in cost.

> G118-15:420.2 -BALDASSARRA4272

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: This is aimed at clarifying what constitutes a sleeping unit and whether a sleeping unit can have multiple rooms. And where multiple rooms exist, where are the separations required. The exceptions are necessary to clarify the intention of Section 420.2.

Individual Consideration Agenda

Public Comment 1:

Proponent : William Hall, Portland Cement Association, representing Portland Cement Association (jhall@cement.org) requests Disapprove.

Commenter's Reason: Fire separation is still a necassary component for dwelling units. We don't know what goes on behind closed doors. In the example of dormitory suite sleeping rooms, as a assistant state fire marshal, I have inspected many rooms where smoking occurs and a red solo cup was used to cover the smoke detector within the room. In addition, candles, other open flames, hot plates, microwave with burning popcorn, fireworks, etc. continue to keep the occupancies at elevated risks. Fire separation between any sleeping units should remain in the code for safety of the occupants.

Public Comment 2:

Proponent : Steven McDaniel, representing New York State Building Officials Conference requests Disapprove.

Commenter's Reason: Although I agree with the intent of what the proponent is doing with this code change, there are unintended consequences.

The term "suites" is not defined except with regards to Care facilities. The term "suites" used in this proposal is not limited to Care facilites.

Exception number 1 is already permitted by the code, so there is no need for the exception.

Exception number 2 as worded would allow for Dormitory facilities to be constructed with no separations between any of the "Dorm Rooms" just because they are constructed as suites.

This code change does more damage than it does any good. It needs to be Disapproved and more work is needed for the next code cycle.

Public Comment 3:

Proponent : Maureen Traxler, representing Seattle Dept of Planning & Development (maureen.traxler@seattle.gov) requests Disapprove.

Commenter's Reason: This code change is unnecessary. Section 420.2 doesn't require fire partitions within a dwelling or sleeping unit. It only requires them between dwelling units, between sleeping units, and to separate dwelling and sleeping units from other occupancies. The proponent is concerned about suites and group homes, but the proposed exceptions don't address those concerns. The exceptions both apply to "sleeping units" which are defined terms, and which are not required to have internal separations by 420.2. It might be helpful to explain in the Code Commentary how this section applies to various configurations of housing, but this code proposal merely adds confusion.

The Code Development Committee said "This is aimed at clarifying what constitutes

a sleeping unit and whether a sleeping unit can have multiple rooms." That's not the purpose of Section 420.2; it's the purpose of the definition. Much unclarity about suites will be addressed by approval of proposal G9-15. It clarifies that a sleeping unit may accommodate more than one person and may have more than one room. If G9-15 is approved, the residences shown in both the sketches submitted with this proposal would clearly be considered sleeping rooms.

G119-15 420.2, 420.3

Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

SECTION 420 GROUPS I-1, R-1, R-2, R-3 AND R-4

420.1 General. Occupancies in Groups I-1, R-1, R-2, R-3 and R-4 shall comply with the provisions of Sections 420.1 through 420.6 and other applicable provisions of this code.

420.2 Separation walls. Walls separating *dwelling units* in the same building, walls separating *sleeping units* in the same building and walls separating *dwelling* or *sleeping units* from other occupancies contiguous to them in the same building shall be constructed as *fire partitions* in accordance with Section 708.

Exception: In Group R-3 and Group R-4 facilities, walls within the dwelling unit or sleeping unit are not required to be constructed as fire partitions.

420.3 Horizontal separation. Floor assemblies separating *dwelling units* in the same buildings, floor assemblies separating *sleeping units* in the same building and floor assemblies separating *dwelling* or *sleeping units* from other occupancies contiguous to them in the same building shall be constructed as *horizontal assemblies* in accordance with Section 711.

Exception: In Group R-3 and R-4 facilities, floor assemblies within the dwelling or sleeping units are not required to be constructed as horizontal assemblies.

Reason: There are two concerns related to separation – 1) suites within hotels, dormitories, and assisted living where a sleeping rooms may share a bathroom, or sleeping rooms may have associated living space, and 2) group homes that operate as a single family unit. There are separate proposals to deal with each. It is the intent for these proposals to work together. This proposal is for the Group R-3 and R-4.

Group R-4 group homes operate as a single family home. If these facilities are considered dwelling units or sleeping units is not consistently interpreted. Separation requirements would require bedrooms to be separated from each other and the corridor. Doors would have to be rated and have closers. This is not appropriate for this type of facility.

There have been a series of lawsuits against jurisdictions across the United States regarding enforcement of requirements for group homes that exceed the requirements for single family homes. This is being interpreted as a violation of the Fair Housing Act. The CTC committee reviewed the requirements for group homes in the codes to see where there were differences and if these differences were justified due to the level of care provided for the residents. In some limited Code Technology Committee Mtg #32

September 14-15, 2015, Chicago 120 of 176 situations, where there was a question for Group R-4 group homes, the same issue existing for Group R-3 congregate residences. For consistency in the code, these need to be considered together rather than separately. Therefore, this proposal is for both Group R-4 and Group R-3 congregate residences (both with 16 or fewer residents per Sections 310.5 and 310.6.)

This is part of a group of proposals to address this style of design and group homes within single family residences. Changes are proposed for the definition for sleeping units, the Group classifications in Section 310.4 and 310.5, separation requirements in Section 420, and coordination with accessibility requirements in Section 1107. Proposals will be put forward as part of Group B for fire and smoke alarm systems. The proposals could work separately.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

This public proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 13 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes and the public comments. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction It is the committee's understanding that current language is not clear for where separations are required. In some cases this would be a reduction in separation requirements, and therefore a decrease in cost.

> G119-15 : 420.2 -BALDASSARRA4271

Public Hearing Results

Committee Action:

Approved as Modified

Modification:

420.2 Separation walls. Walls separating *dwelling units* in the same building, walls separating *sleeping units* in the same building and walls separating *dwelling* or *sleeping units* from other occupancies contiguous to them in the same building shall be constructed as *fire partitions* in accordance with Section 708.

Exception: In Group R-3 and Group R-4 facilities, walls within the dwelling unit or between sleeping units are not

required to be constructed as fire partitions.

420.3 Horizontal separation. Floor assemblies separating *dwelling units* in the same buildings, floor assemblies separating *sleeping units* in the same building and floor assemblies separating *dwelling* or *sleeping units* from other occupancies contiguous to them in the same building shall be constructed as *horizontal assemblies* in accordance with Section 711.

Exception: In Group R-3 and R-4 facilities, floor assemblies within the dwelling or between sleeping units are not required to be constructed as horizontal assemblies.

Committee Reason: The proposal clarifies that within a dwelling unit or within a sleeping unit, separations are unnecessary. These are the size of a dwelling unit and if the separations were imposed, it would impose rated doors within a dwelling unit. The hazards within such units is low. The modification was approved to reinforce that the separations are around the units and not within a unit.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : William Hall, Portland Cement Association, representing Portland Cement Association (jhall@cement.org) requests Disapprove.

Commenter's Reason: The proposed change creates confusion because section 708 already does not apply to R-4 occupancies. Safety in R-4 occupancies where 24 hour supervision is required is superior to that of R-3. Therefore separate criteria for the two occupancies should be maintained.

Public Comment 2:

Proponent : Maureen Traxler, Seattle Dept of Planning & Development, representing Seattle Dept of Planning & Development (maureen.traxler@seattle.gov) requests Disapprove.

Commenter's Reason: This code change, like G118-15, is unnecessary. Sections 420.2 and 420.3 don't require separations within a dwelling or sleeping unit. They only require them between dwelling units, between sleeping units, and to separate dwelling and sleeping units from other occupancies. By stating that separation isn't required in Group R-3 and R-4, the exceptions raise questions about whether separations are required in other occupancies.

The proponent is concerned about suites and group homes, but the proposed exception doesn't address those concerns. It might be helpful to explain in the Code Commentary how this section applies to various configurations of housing, but this code proposal merely adds confusion.

G121-15 420.7 (New), 420.7.1 (New), 420.7.2 (New) Proposed Change as Submitted

Proponent : Adolf Zubia, representing IAFC Fire & Life Safety Section

2015 International Building Code

Add new text as follows:

420.7 Dormitory cooking facilties. Domestic cooking appliances for use by residents of Group R-2 college dormitories shall be in accordance with Sections 420.7.1 and 420.7.2.

420.7.1 Cooking appliances. Where located in Group R-2 college dormitories, domestic cooking appliances for use by residents shall be in compliance with all of the following:

- 1. <u>The types of domestic cooking appliances shall be limited to</u> <u>ovens, cooktops, ranges, warmers, coffee makers and</u> <u>microwaves.</u>
- 2. Domestic cooking appliances shall be limited to approved locations.
- 3. <u>Cooktops and ranges shall be protected in accordance with</u> <u>Section 904.13.</u>
- 4. <u>Cooktops and ranges shall be provided with a domestic cooking</u> <u>hood installed and constructed in accordance with Section 505 of</u> <u>the international Mechanical Code</u>.

420.7.2 Cooking appliances in sleeping rooms. Cooktops, ranges and ovens shall not be installed or used in sleeping rooms.

Reason: This proposal is submitted by Fire and Life Safety Section of the International Association of Fire Chiefs.

This proposal accomplishes the following:

1. There currently are no requirements in the IBC that regulate domestic cooking appliances for use by residents in Group R-2 college dormitories. This proposal includes basic requirements for the code official to follow in approving such installations.

2. Proposed Sections 420.7 and 420.7.1 include requirements that permit domestic cooking appliances in both common areas and sleeping rooms in college dormitories. It does not cover resident dwelling units in college campuses that are not classified as dormitories.

3. Section 420.7.1 covers domestic cooking appliances in common areas in college dormitories. The cooking appliances allowed are the same as those allowed in Section 407.2.6, Item 4 for Group I-2, Condition 1 occupancies.

4. Section 420.7.2 prohibits ovens, cooktops and ranges from being used in sleeping rooms. This reflects that fact that cooktops and ranges are the leading causes of fires in residential settings. For details see:

http://www.iafc.org/files/1FIREPREV/flss_ResidentialRangeTopSafetyReport.pdf. This section does allow the use of other cooking appliances, such as microwaves and coffee makers, in sleeping rooms. However individual colleges may have more restrictive rules that prohibit some of these appliances from being used in their dormitories.

IFC/IBC Section 914.13 and 904.13.1 will be revised in the Group B code change cycle. The intent is to provide the same protection for domestic cooking appliances in R-2 college dormitories as currently provided in Group I-2, Condition 1 facilities. In essence a UL 300A fire-extinguishing system is required when a cooktop or range is provided. An automatic fire-extinguishing system is not required when only ovens, ranges, warmers, coffee makers or microwaves are provided. the revisions in Group B will be:

[F] 904.13 Domestic cooking systems in Group I-2 Condition 1. <u>Cooktops and</u> ranges installed in the following occupancies shall be protected in accordance with Sections 904.13.1 through 904.13.2:

<u>1.</u> In Group I-2 Condition 1, occupancies where domestic cooking facilities are installed in accordance with Section 407.2.6 of the International Building Code,

2. In Group R-2 college dormitories where domestic cooking facilities are installed in accordance with Section 420.7. the domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire extinguishing system of a type recognized for protection of domestic cooking equipment. Preengineered automatic extinguishing systems shall be tested in accordance with UL 300A and listed and labeled for the intended application. The system shall be facilities are installed in accordance with this code, its listing and the manufacturer's instructions.

[F] 904.13.1 Manual operation and interconnection <u>Automatic fire-</u> <u>extinguishing system</u>. Manual actuation and system interconnection shall be in accordance with Section 904.12.1 and 904.12.2, respectively. The domestic cooking hood provided over the cooktop or range shall be equipped with an approved automatic fire-extinguishing system complying with the following:

<u>1. The automatic fire-extinguishing system shall be of a type recognized for</u> protection of domestic cooking equipment. Preengineered automatic fireextinguishing systems shall be listed and labeled in accordance with UL 300A and installed in accordance with the manufacturer's instructions.

<u>2. Manual actuation of the fire-extinguishing system shall be provided in accordance</u> with Section 904.12.1.

<u>3. Interconnection of the fuel and electric power supply shall be in accordance with</u> <u>Section 904.12.2.</u>

Cost Impact: WII increase the cost of construction This code change has the potential to increase the cost of construction due to the additional protection.

> G121-15 : 420.7 (New)-ZUBIA4622

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The issue of cooking facilities in dormitories needs to be addressed. It occurs and the code doesn't clearly address. The provision is modeled after the provisions allowed for the I-2 occupancy. A related changed is planned for the IFC during the cycle next year. The committee raised the concern that if these occupancies are used during the summer as an R-1 whether accessibility provisions may come into play.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : C Ray Allshouse, City of Shoreline, WA, representing Code Technology Committee Mtg #32

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Washington Association of Building Officials Technical Code Development Committee (rallshouse@shorelinewa.gov) requests Disapprove.

Commenter's Reason: The proposed added code language is essentially unenforceable given the prescribed building permit process requirements provided in Chapter 1. Unless built-in, the named equipment would not be in place at a typical building final inspection. Simply put, an occurrence that can be fully resolved merely by hand unplugging and removal of a portable appliance has no place in the building code. Furthermore, built-in appliances are subject to and covered by mechanical and electrical code provisions. This proposal would be better suited for inclusion in the IFC and/or the IMC.

Public Comment 2:

Proponent : Wayne Morris, Association of Home Appliance Manufacturers, representing Association of Home Appliance Manufacturers requests Disapprove.

Commenter's Reason: Proposal G 121-15 (page 477 of the monograph) pertains to college dormitories where ranges and cooktops may be found in the living facilities. The Association of Home Appliance Manufacturers (AHAM) would like to comment on Code Proposal G 121-15 and the change suggested to Section 904.13 and we would like to present the following information.

The proposal G 121-15 represents a change to the use of cooking appliances in Dormitory Cooking Facilities. Currently the International Building Code requires that the cooking area over a standard cooktop or range should be provided with an automatic fire extinguishing system to prevent unattended cooking fires. **This proposal would require that all installations comply with 904.13.** However, a separate proposal has been submitted to change 904.13 which would create a significant challenge. We have strong objections to the changes to 904.13 that have been proposed in another section and which would require a maximum temperature on the heating element of the range or cooktop. For the proposal G121-15, we have questions on the provision of the interconnection of the hood-mounted extinguishing system with the fuel or electric supply. We suggest that this provision be further modified or additional information be supplied.

It is quite possible that at the time the proposal was first developed, the maker of the proposal was unaware of major changes taking place in the appliance safety standards. The appliance industry, in cooperation with other stakeholders, has already proposed and gained the acceptance of new cooking safety requirements in the applicable US voluntary safety standard. The cooking-related proposals included in the 2015 IBC proposal are unnecessary, duplicative, design restrictive, and illadvised. They should be withdrawn.

AHAM is a strong supporter of the consensus standards process. We participate in over 50 safety standards for our industry. We help to develop standards committees, help to populate them, and help to support full participation by all stakeholders. In the case of safety of cooking appliances, the consensus process has considered and is still working on product safety standards.

The UL 858 standard for household electric ranges and cooktops in the US recently released a new test requirement for coil cooktops to reduce the risk of fires from unattended cooking. The test involves running the burner in worst-case scenarios with cooking oil in a pan, and the range must prevent the oil from igniting. This requirement will be in place on apply to all ranges and cooktops with coil heating elements within the next few years. A similar cooking safety test procedure is currently under review for inclusion in the Canadian Electric Range Standard, CSA 22.2 No. 61. Similar testing requirements are being developed for other cooking

technologies, such as radiant and gas cooktops and ranges.

There are a number of reasons why this proposal would cause severe harm not only to the cooking appliance industry, but also to consumers through a very design-specific requirement.1.

- One of the provisions of this proposal, G121-15 is the change to 904.13.1 to require "Interconnection of the fuel and electric power supply shall be in accordance with Section 904.12.2." While on the outset, this may seem to be a very logical requirement, it must be considered very carefully, particularly with gas ranges. To immediately discontinue the gas fuel supply and then reconnect the range later, provisions need to be made to ensure that the range or cooktop has valves designed not to permit a free-flow of gas fuel. We suggest that this needs further study.
- 2. This proposal refers to Section 904.13, has been proposed to change to require a maximum temperature on the cooking element of 350 deg C. That proposal is very design specific. The proposal seeks to restrict the temperature of the burner and not the pan or vessel that is used to cook. All research to date notes that the issue at question is the temperature in the pan/vessel in which food materials are placed. Thus, even though the issue is the temperature in the pan or vessel, this requirement would restrict the actual burner. There are no test methods, descriptions of how the test would be conducted and no understanding of how a product would be evaluated.
- 3. This proposal to 904.13 seems to be written without fully understanding the information on or the technologies in development to prevent unattended cooking fires.
- 4. AHAM and its members are very aware of the tragic situations with unattended cooking fires. For many years, AHAM, standards developers, staff at the U.S. Consumer Product Safety Commission (CPSC), NFPA, and other stakeholders have been meeting to develop effective solutions to the issue of unattended cooking fires. Considerable research has been done, much of which has noted the importance of providing a solution that would reduce cooking fires but allow a full range of cooking to the consumer.
- 5. In October 2014, AHAM made a proposal to UL Standard 858 that would, for the first, time create a test in the standard for coil-element cooktops to simulate an unattended cooking situation and require that cooking oil not ignite. This will eventually be extended to glass-ceramic and eventually gas cooktops. However, even the concept feasibility of such a pan temperature control mechanism has only been demonstrated at this time for coil-element ranges. Proposal G 121-15 and the accompanying 904.13 would only allow purchasing people to choose to install coil-element ranges.
- 6. Nothing in this proposal mentions the need for such a solution or device to be safety certified. We think this is a gross error in the standard and which could leave consumers, college dormitory administrators, and housing authorities at great risk.
- 7. One of the problems with this proposal for adding a maximum temperature to 904.13 is that it is not restricted to just electric cooking appliances. Thus, if this were applied to a gas range, and the fire extinguishing system is activated, it could extinguish the fire but leave the gas supply continuing to supply raw natural gas. No mention is made of how to re-start the range. If a gas range did have the fuel supply interrupted, but was suddenly reconnected to a gas supply without completely resetting the range controls, raw natural gas could escape. We do not believe the Committee intended this to occur.
- 8. This proposal is very design restrictive for the International Building Code. We believe such a requirement should be in the product safety standard. It is one thing to require the accompaniment of an over-the-range fire protection or fire extinguishing system. This is certainly within the scope of the requirements of the ICC or IBC. However, dictating specific design or performance parameters for a piece of individual equipment without knowing all the other requirements is inappropriate for the ICC or IBC.
- 9. Repeated references to 'domestic' appliances appear as though it would encompass household appliances. While compliance with any of these new

requirements would only be required of those wishing to sell into the College Dormitory market, we see a substantial concern that additional sources of regulation could be broadened to many other product market categories.

10. For these reasons, we believe this proposal needs further consideration and should be modified accordingly.

It is difficult for AHAM to give advice to the General Building Code Committee on fire prevention. However, it would seem that without the proposed changes the International Building Code contains adequate coverage for college dormitory facilities with the requirement of fire suppression systems.

It is also difficult for AHAM to comment on the Cost Impact statement accompanying the code change. First, we do not normally consider cost when reviewing a safety standards change. However, since ICC and IBC do consider this, we would ask that consideration be given to the impact of a timer control addition and the impact of a range that has a temperature limit to the burners.

Wayne Morris

Vice President, Technical Operations & Standards Association of Home Appliance Manufacturers (AHAM)

Bibliography: The Association of Home Appliance Manufacturers (AHAM) represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than \$30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency, safety, and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM is also a standards development organization and has authored numerous appliance performance testing standards used by manufacturers, consumer organizations and governmental bodies to rate and compare appliances. In partnership with the CSA Group, and UL Environment, AHAM developed the first sustainability standards for home appliances. AHAM's consumer safety education program has educated millions of consumers on ways to properly and safely use appliances such as portable heaters, clothes dryers, and cooking products. AHAM participates in the development of over 60 product safety standards and has authored numerous improvements to these standards.

Public Comment 3:

Proponent : Region VII, representing ICC Region VII (admin@iccregionvii.org) requests Disapprove.

Commenter's Reason: Section 420.7.1 Item # 2 is redundant and item # 3 is requiring additional suppression, section 904.13 does not required suppression on a domestic appliance used in a domestic situation in an already sprinklered structure.

G121-15

G123-15 420.8 (New), 420.8.1 (New), 420.9 (New) Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technologies Committee (CTC@iccsafe.org)

2015 International Building Code

Add new text as follows:

420.8 Group I-1 cooking facilities. In Group I-1 occupancies rooms or spaces that contain a cooking facilities with domestic cooking appliances shall be in accordance with all the following criteria:

- 1. <u>In Group I-1 Condition 1 occupancies, the number of care</u> recipients served by one cooking facility shall not be greater than <u>30.</u>
- 2. <u>In Group I-1 Condition 2 occupancies, the number of care</u> recipients served by one cooking facility and within the same smoke compartment shall not be greater than 30.
- 3. <u>The types of domestic cooking appliances permitted shall be</u> <u>limited to ovens, cooktops, ranges, warmers and microwaves.</u>
- 4. <u>The space containing the domestic cooking facilities shall be</u> <u>arranges so as not to obstruct access to the required exit.</u>
- 5. <u>Domestic cooking hoods installed and constructed in accordance</u> with Section 505 of the International Mechanical Code shall be provided over cooktops or ranges.
- 6. <u>Cooktops and ranges shall be protected in accordance with</u> <u>Section 904.13.</u>
- 7. <u>A shut-off for the fuel and electrical supply to the cooking</u> equipment shall be provided in a location that is accessible only to staff.
- 8. <u>A timer shall be provided that automatically deactivates the</u> cooking appliances within a period of not more than 120 minutes.
- 9. <u>A portable fire extinguisher shall be provided. Installation shall be</u> in accordance with Section 906 and the extinguisher shall be located within a 30-foot (9144 mm) distance of travel from each domestic cooking appliance.

420.8.1 Cooking facilities open to the corridor. Cooking facilities located in a room or space open to a corridor, aisle or common space shall comply with Section 420.8.

420.9 Group R cooking facilities. In Group R occupancies, cooking appliances used for domestic cooking operations shall be in accordance with Section 917.2 of the *International Mechanical Code*.

Reason: The intent of the two proposals for a new Section 420.7 and 420.8 is to allow the same 'home style' environment for Group I-1 that is permitted to Sections 407.2.5 and 407.2.6 for Group I-2 nursing homes.

Section 420.8 and 420.8.1: This additional protection feature requirement clarifies Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 129 of 176 that kitchens in typical memory care neighborhood plans or assisted living neighborhood plans are allowed in contiguous spaces to rooms used for sleeping. This proposal then implements the additional protection features required in similar applications from Group I-2 as was approved for the 2015 IBC is Section 407. Section 420.9: While Group R (other than Group R-4) outside the scope of the CTC Care study group, since Section 420 includes provisions for Group I-1 and R, it was felt that something had to be said regarding Group R cooking facilities following the provisions of Group I-1 cooking facilities. The intent of Section 420.9 is to allow for hotel rooms, assisted living suites, dorm suites, and small congregate residences to be allowed to use the provisions in the IMC for domestic cooking appliances. If the hotel or dormitory has a central restaurant or cafeteria, this section would not be applicable because it would be commercial cooking.

A correlative change to IFC Section 904.13 for installation of the cooking systems will be provided in Group B. Basically the Group I-1 will follow the same limits as the Group I-2, Condition 2. This proposal is coordinated with a proposal coming from FCAC and BCAC for Group I-2, Condition 1 cooking facilities.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: Will increase the cost of construction

This is an increase in cost for Group I-1 facilities that use this option, however, it will allow for greater freedom in design. Alternatively, requiring a commercial appliance and hood in place of the domestic appliance could be more costly. This should not be a change for domestic cooking appliances in Group R.

> G123-15 : 420.8 (New)-BALDASSARRA4912

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: During the development of the 2015 IBC, such cooking facilties were allowed for I-2 facilities. I-1 with a concept of being more home-like should also be allowed the same options based on the same safeguards.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Wayne Morris, Association of Home Appliance Manufacturers, representing Association of Home Appliance Manufacturers (wmorris@aham.org) requests Disapprove.

Commenter's Reason: The Association of Home Appliance Manufacturers (AHAM) is opposed to the Code Proposal G 123-15 in its present form together with the change suggested to Section 904.13 and we would like to present the following information. Proposal G 123.15 (page 479 of the monograph) pertains to Group I-1 facilities, such Code Technology Committee Mtg #32

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as group home settings. The proposal not only refers back to Section 904.13 but also would require a timer that would automatically shut off power within 120 minutes of initiation of cooking. The proposal also refers to Section 904.13 which has been proposed to be changed to require a maximum burner temperature.

The Association of Home Appliance Manufacturers (AHAM) represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than \$30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency, safety, and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM is also a standards development organization and has authored numerous appliance performance testing standards used by manufacturers, consumer organizations and governmental bodies to rate and compare appliances. In partnership with the CSA Group, and UL Environment, AHAM developed the first sustainability standards for home appliances. AHAM's consumer safety education program has educated millions of consumers on ways to properly and safely use appliances such as portable heaters, clothes dryers, and cooking products. AHAM participates in the development of over 60 product safety standards and has authored numerous improvements to these standards.

The proposal G 123-15 represents a change to the use of cooking appliances in I-1 group home type cooking facilities. Currently the International Building Code requires that the cooking area over a standard cooktop or range should be provided with an automatic fire extinguishing system to prevent unattended cooking fires. The proposal not only refers back to Section 904.13 but also would require a timer that would automatically shut off power within 120 minutes of initiation of cooking.

It is quite possible that at the time the proposal was first developed, the maker of the proposal was unaware of major changes taking place in the appliance safety standards. The appliance industry, in cooperation with other stakeholders, has already proposed and gained the acceptance of new cooking safety requirements in the applicable US voluntary safety standard. The cooking-related proposals included in the 2015 IBC proposal are unnecessary, duplicative, design restrictive, and illadvised. They should be withdrawn.

AHAM is a strong supporter of the consensus standards process. We participate in over 60 safety standards for our industry. We help to develop standards committees, help to populate them, and help to support full participation by all stakeholders. In the case of safety of cooking appliances, the consensus process has considered and is still working on product safety standards. We request that the ICC IBC Committee allow the standards to exist in the product safety standards and note only that the Code requires products that comply with the applicable safety standards and are safety certified for that installation.

The UL 858 standard for household ranges in the US recently released a new test requirement for coil cooktops to reduce the risk of fires from unattended cooking. The test involves running the burner in worst-case scenarios with cooking oil in a pan, and the range must prevent the oil from igniting. This requirement will be in place on apply to all ranges and cooktops with coil heating elements within the next few years. A similar cooking safety test procedure is currently under review for inclusion in the Canadian Electric Range Standard, CSA 22.2 No. 61. Similar testing requirements are being developed for other cooking technologies, such as radiant and gas cooktops and ranges.

There are a number of reasons why this proposal would cause severe harm not only to the cooking appliance industry, but also to consumers through a very designspecific requirement.

- The proposal in G123-15 for a timer to shut off power after 120 minutes is very design restrictive. It also has no details nor does it explain whether this is to be part of the range or part of the power/fuel system to the range. Such a requirement could be quite risky in a gas cooktop. To shut the fuel source off is one thing, but to then re-engage the fuel without proper controls could increase the risk. We ask that the Committee to remove this requirement #8, "A timer shall be provided that automatically deactivates the cooking appliances within a period of not more than 120 minutes." There are no test methods, descriptions of how the test would be conducted and no understanding of how a product would be evaluated.
- 2. The proposal 420.8 No. 8 requires the use of some form of a timer on the power source. This is not currently part of the design of a residential cooktop or range. While this could be added to the building or installation design, this should be carefully considered.
 - 1. This would restrict the use to electric ranges and cooktops only. It is difficult to imagine such a timer on a gas-fueled range, since not only would the controls be removed at 120 minutes but there is no provision for safe re-start of the gas range.
 - 2. Safe re-start is a major concerns of the range and cooktop manufacturers. If the power source is severed at the 120 minute mark, and power is later restored, there is a chance that raw gas would continue to flow if the burner controls are left in the "on" position.
 - 3. In addition, it is unclear what is the reason behind the 120 minute requirement. Considering that many pieces of research note that it is possible to have a cooking fire in less than 5 minutes, we see no rationale for the 120 minute proposal.

3. The proposal states that "A timer shall be provided that automatically deactivates the cooking appliances within a period of not more than 120 minutes." But, some baking functions in ovens take more than 120 minutes and the proposal does not distinguish between ovens and cooktop surfaces. It just says "...cooking appliances..." Many operation on the surface cooking, such as canning, require more time than 120 minutes. Several baking functions, such as slow cooking meats, require more than 120 minutes. This proposal for automatic shut-off does not have any details about testing, how the device is to be applied, if it is on the product, how the deactivation will be accomplished and more important how it will be re-activated. There are no requirements in the applicable US safety standards for such a provision. This leaves the accomplishment of this to anyone's guess. This proposal should be made to the UL 858 and ANSI Z21.1 safety standards.

4. Regarding the reference to 904.13 and the new proposal to that section on a maximum temperature limit on the burner, we believe it is inappropriate for a consensus standards development committee to develop a standards proposal that has only one technical solution and is written to promote one particular product on the market. We doubt the Committee fully understood this at the time. While this may seem to be a simple design requirement, it seems to be an attempt to promote one product and to require it in the Code.

5. This proposal seems to be written *without* fully understanding the information on or the technologies in development to prevent unattended cooking fires.

6. AHAM and its members are very aware of the tragic situations with unattended cooking fires. For many years, AHAM, standards developers, staff at the U.S. Consumer Product Safety Commission (CPSC), NFPA, and other stakeholders have been meeting to develop effective solutions to the issue of unattended cooking fires. Considerable research has been done, much of which has noted the importance of providing a solution that would reduce cooking fires but allow a full range of cooking to the consumer.

7. In October 2014, AHAM made a proposal to UL Standard 858 that would, for the first, time create a test in the standard for coil-element cooktops to simulate an unattended cooking situation and require that cooking oil not ignite. This will eventually be extended to glass-ceramic and eventually gas cooktops. However, even the concept feasibility of such a pan temperature control mechanism has only been demonstrated at this time for coil-element ranges. Proposal G 123-15 and the

accompanying 904.13 would only allow purchasing people to choose to install coilelement ranges.

8. Nothing in the proposal to 904.13 for a maximum heating element temperature mentions the need for such a solution or device to be safety certified. We think this is a gross error in the standard and which could leave consumers, I-1 home administrators, and housing authorities at great risk.

9. This proposal is very design restrictive for the International Building Code. We believe such a requirement should be in the product safety standard. It is one thing to require the accompaniment of a over-the-range fire protection or fire extinguishing system. This is certainly within the scope of the requirements of the ICC or IBC. However, dictating specific design or performance parameters for a piece of individual equipment without knowing all the other requirements is inappropriate for the ICC or IBC.

10. Repeated references to 'domestic' appliances appears as though it would encompass household appliances. While compliance with any of these new requirements would only be required of those wishing to sell into the I-1 group home market, we see a substantial concern that additional sources of regulation could be broadened to many other product market categories. The proposed additions to the IBC, IMC and IFC could potentially encroach on regulations on household appliances.

It is difficult for AHAM to give advice to the General Building Code Committee on fire prevention. However, it would seem that without the proposed changes, the International Building Code contains adequate coverage for I-1 group home facilities with the requirement of fire suppression systems.

It is also difficult for AHAM to comment on the Cost Impact statement accompanying the code change. First, we do not normally consider cost when reviewing a safety standards change. However, since ICC and IBC do consider this, we would ask that consideration be given to the impact of a timer control addition and the impact of a range that has a temperature limit to the burners. Depending on how this is configured, this could have a cost impact on Group R type domestic residential cooking appliances. Today, these appliances are not equipped with this type of shut-off timer mechanism and are not equipped with maximum temperature controls on burners.

Wayne Morris

Vice President, Technical Operations and Standards

Association of Home Appliance Manufacturers

Washington, DC

Bibliography: UL Standard 858 Safety of Electric Ranges

Change to standard to include Section 58, Abnormal Operation Test for Coil Element Cooktops

Addition of test to prevent ignition of cooking oil.

June 2015

G123-15

G195-15 3001.2 (New) Proposed Change as Submitted

Proponent: Andrew Cid, representing Private Citizen for The Initiative for Emergency Elevator Communication Systems for the Deaf, Hard of Hearing and Speech Impaired (andycid99@gmail.com)

2015 International Building Code

Add new text as follows:

<u>3001.2</u> <u>Emergency elevator communication systems for the deaf,</u> <u>hard of hearing and speech impaired</u> <u>An emergency two-way</u> <u>communication system shall be provided that:</u>

 Is a visual text-based and a video-based live interactive system,
Is fully accessible by the deaf and hard of hearing and speech impaired, and

<u>3. Is located between the elevator car and the local emergency authorities at a point outside of the hoistway.</u>

Reason: Reason for Addition / Change to the Language of IBC 3001.2: The addition of the terms "visual, text-based and video-based live interactive communication systems" is strongly recommended to emphasize the need for totally accessible communication in elevators between local government emergency authorities and individuals who are: Deaf, Hard of Hearing, and Speech Impaired. This type of comunication system is long overdue and strongly recommended for installation and retrofit into public elevators in existing buildings and for new construction. A similar proposal was considered by the A117.1 Standards Committee in 2014, but not approved. The IBC and IEBC should take the lead on this topic and establish this requirement that is needed by our communities..

Cost Impact: Will not increase the cost of construction Cost Impact - The cost impact, to a recommended 70% of the existing building inventory for public and commercial buildings that are three (3) stories or higher with elevators, is expected to be negligible or minimal to the building owner / operator. Any costs incurred is anticipated to be alleviated wth the use of various incentives such as tax write offs for complying with new accessibility standards. In addition, for new construction, it is expected that there will be no significant additional costs involved because it will be built into the design / build. For existing buildings, the estimated cost for such a system is approximately \$2,500. For new construction, the system will cost approximately \$5,000.

> G195-15 : 3001.2 (New)-CID3932

<u>Public Hearing Results</u> Code Technology Committee Mtg #32

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Committee Action:

Modification:

3001.2 Emergency elevator communication systems for the deaf, hard of hearing and speech impaired. An emergency two-way communication system shall be provided that:

- 1. Is a visual <u>and</u> text-based and a video-based <u>24/7</u> live interactive system,.
- 2. Is fully accessible by the: deaf and hard of hearing and, the speech impaired, the visually impaired, and shall include voice-only options for hearing individuals.
- Is located between the elevator car<u>The ability to</u> <u>communicate with emergency personnel utilizing existing</u> <u>video conferencing technology</u>, and the local emergency authorities at a point outside of the hoistwaychat / text <u>software</u>, or other approved technology.

Committee Reason: This belongs in the code. A significant part of the population is serviced by this proposal where currently there is a void. Current technologies should be able to be readily adapted to meet the requirements of this proposal. The committee approved modifications are intended to provide more flexibility and options for manufacturers and for compliance.

Assembly Motion: Online Vote Results: Support: 69.77% (217) Oppose: 30.23% (94) Assembly Action : Disapprove Successful

Disapproved

Individual Consideration Agenda

Public Comment 1:

Proponent : karen francis, representing self (karenfrancis99@gmail.com) requests Approve as Modified by Committee.

Commenter's Reason: I fully support proposal # IBC-G-G195-15 as modified by the committee by CID 3 because, as an individual who is severely hard of hearing, I feel this proposal is long overdue and this is a life / safety issue that needs to be addressed as soon as possible. The technology exists so there is no reason to put this off any longer.

Public Comment 2:

Proponent : Michael Trentadue, VTCSecure, representing VTCSecure requests Approve as Modified by Committee.

Commenter's Reason: I am in support that elevators should contain fully accessible emergency communication systems for the Deaf & Hard of Hearing Communities. Video Relay service for the Deaf and Hard of Hearing has been around for almost two decades. It is a huge safety risk not having a way for the Deaf and Hard of Hearing communities to call for help.

Public Comment 3:

Proponent : Andrew Cid, representing self (andycid99@gmail.com) requests Approve as Modified by this Public Comment.

Further Modify as Follows:

2015 International Building Code

3001.2 Emergency elevator communication systems for the deaf, hard of hearing and speech impaired <u>.</u> An Where provided in <u>elevators</u>, emergency two-way communication system <u>systems shall</u> provide video, audio, and text options for live interactive communication between elevator occupants and responding personnel. The video, audio, and text communications shall be provided that:

1. Is a visual text-based and a video-based live interactive system, 2. Is fully accessible by operational during the deaf and hard of hearing and speech impaired, and

3. Is located between hours the elevator car and the local emergency authorities at a point outside of the hoistway.

communications system is operational.

Commenter's Reason: G 195-15 was approved by the IgCC Committee as modified. The Committee Reason is as follows:

"This belongs in the code. A significant part of the population is serviced by this proposal where currently there is a void. Current technologies should be able to be readily adapted to meet the requirements of this proposal. The committee approved modifications are intended to provide more flexibility and options for manufacturers and for compliance."

However, for the 07/17/2015 due date, I am submitting this new public comment to the ICC and IBC, as owner of the previously approved, as modified, proposed code change. The proposed public comment is a simplification and clarification.

The amended wording offers a much more simplified and bullet-proof version to the previously approved version. This code change proposal offers full accessibility to all, not just the hearing impaired. The aim of this version is to clarify in very simple terms what is needed in the code. This code change is strongly recommended to emphasize the need for fully accessible communication in elevators between first responders and entrapped individuals who cannot use the current auditory systems that are present in all elevators.

The IBC and ICC should take the lead on this and permit the code change, approved, as modified, per IBC-G 195-15 CID 3, dated 4/25/15, and per this Public Comment submission, dated 07/17/2015. There are ample and substantive reasons to pass

this code.

In the spirit of the 25th anniversary of the ADA, the time is now. Many changes have occurred in the environment making buildings accessible for many people that otherwise may not have been able to participate in what America offers its citizens and guests (visitors). The ADA has provided access to the buildings, so why not further this idea of having people become active participants to also include the advances in technology that is now commercially available, to be included in elevators? Let's start implementing the available technology into elevators, for the 48 million deaf and hard of hearing people that use elevators every day. A significant portion of the U.S. population (almost 1/6 of the total U.S. population) will definitely benefit from this code change. I am profoundly Deaf with a dB loss of 110, so this affects me personally. But this is not about me. This is about you, your family, friends, relatives, colleagues, and 48 million other individuals who cannot use the present auditory communication systems in elevators. I gain nothing from this, financial or otherwise, except for equal emergency communication access in elevators. This is all about equal access for everyone in mainstream society. Please note that there are some opponents in industry who are resistant to change and would like others to believe that this code change is not doable, too expensive, not needed, or the technology does not exist. I am here to say that those claims are a simple and resounding "not true". The technology (there are numerous video technology applications and options already available in the commercial marketplace) has been in existence for decades, is entirely affordable and doable, and this is direly needed.

Cost Impact - The cost impact is expected to be negligible or minimal. In new construction, it is expected that the estimated cost for such a system is, on the lower end, of an estimate of approximately \$250 to \$1,000.

Thank you for your support !!

Public Comment 4:

Proponent : Carl Wren, representing City of Austin, Texas (carl.wren@austintexas.gov) requests Approve as Modified by this Public Comment.

Further Modify as Follows:

2015 International Building Code

3001.2 Emergency elevator communication systems for the deaf, hard of hearing and speech impaired An emergency two-way communication system shall be provided that:-

1. Is is a visual text-based and a video-based live interactive system, 2. Is The system shall be fully accessible by the deaf and hard of hearing and speech impaired, and

3. Is located between Upon the elevator car and arrival of emergency response personnel, the system shall provide the ability to communicate directly with local emergency authorities response personnel at a point outside of the hoistway.

Where approved by the fire code official or fire chief and the building code official, communication shall be permitted to be provided using other technologies such as video conferencing, chat/text software, or other equipment. **Commenter's Reason:** The proponent of this comment agrees with the committee that this type of requirement belongs in the building code and further agrees with the original proponent of the code change that this requirement is long overdue. The public comment adds flexibility for the code official while retaining the intent of the proponent of the original code change proposal. By adding more flexible language, there should be room for the industry to explore and find the best and most cost effective solutions. It is hoped that my fellow members of the ICC as well as the elevator industry will be proactive in response to this request for the inclusion of safety equipment for a very patient group that is a part of all of our communities.

Public Comment 5:

Proponent : Assembly Action requests Disapprove.

Commenter's Reason: This code change proposal is on the agenda for individual consideration because the proposal received a successful assembly action. The assembly action for Disapprove was successful by a vote of 69.77% (217) to 30.23% (94) by eligible members online during the period of May 14 - May 28, 2015.

Public Comment 6:

Proponent : Kevin Brinkman, representing National Elevator Industry, Inc. (klbrinkman@neii.org) requests Disapprove.

Commenter's Reason: The National Elevator Industry, Inc. (*NEII*®) has a strong history of supporting changes that improve safety and increase accessibility for individuals with disabilities, but we cannot support this change for several reasons as outlined below. In addition, *NEII*® supports the comments provide by BOMA.

- This is a technical proposal which belongs in either ASME A17.1/CSA B44 or in ICC A117, not in the IBC. ICC A117 has reviewed a similar proposal and decided not to include it during its current cycle, not because it was not needed or did not belong in that standard, but because technology was not readily available and the specifications were not clear. They recommended that it be reviewed in conjunction with ASME (as opposed to the building code).
- 2. As written, this proposal would actually conflict with the requirements currently in ASME A17.1/CSA B44, Section 2.27.1.
- 3. The technology required is not readily available today for elevators and the proposal is not clear on the actual requirements because there are no Standards for the design and specifications, testing, approval, and inspection of the proposed device.
- 4. Proposed requirement 3001.2(3) is unclear.
- 5. The proponent of this change has mentioned technology that would utilize a vandal proof tablet, Ethernet cable, a custom app, and an altimeter.
 - 1. The requirements for a "vandal proof" tablet are not defined and attempts to make a tablet vandal proof will likely render it unusable
 - Ethernet cable is not available in elevator traveling cables and cannot be added because it would be in violation of NFPA 70 National Electric Code
 - 3. The custom app is not currently available and there is no criteria provided to ensure this app would work with all devices
 - 4. It is not clear who would provide the custom app
 - 5. The purpose of an altimeter is not clear
- 6. As noted in the BOMA comment, the lack of a reference standards to ensure uniform design and function, may actually reduce the usability and

effectiveness of the systems.

- 7. Elevators typically have an expected life of 20 or more years. Communication technology evolves at a much faster rate than the replacement of elevator systems. Communication system technology in elevators will be based on technology available at the time of installation and will become obsolete. The use of personal hand held devices would be more effective for the persons who need special features. (Please see attached document "NEII Public Comment G195-15 Additional Information").
- 8. It is not clear where these features would be located. Elevator car operating panels are already limited on location and features and room is not available to add other significant sized devices or features.
- 9. It will increase the cost of construction, operation, and maintenance.
- 10. Calls do not go to the local fire department or other emergency personnel. Typically, calls are directed to a national call center and local emergency services are alerted if necessary. The use of technology associated with personal hand held devices and that employed by elevator call centers could support a more effective system.
- 11. ASME A17.1/CSA B44 requires a two-way communication means that includes a visual signal to indicate when the call has been received at the call center. The code also requires a daily operational check by an automated monitoring system, which provides an audible and visual warning when the system is not functioning properly.

Public Comment 7:

Proponent : Steven Orlowski, representing Building Owners and Managers Association, International (sorlowski@boma.org) requests Disapprove.

Commenter's Reason: BOMA agrees with the proponent that the code needs to address the emergency communication needs for individuals who are deaf, hard of hearing or speech impaired. However, as written BOMA cannot support this code change. The language approved by the committee does not provide the guidance necessary for designers, building owners and code enforcement officials to know what would be an approved device and more importantly, how these devices are supposed to function. When the code requires any piece of hardware or system to be installed, the code relies on referenced standards to ensure proper application and installation. Currently, there are no product standards that code officials and building owners can use to indicate what type of visual/text-based/video-based devices would be acceptable, who will be monitoring/receiving the communication and what type uninterrupted and/or stand by power would be required. Neither NFPA 72 Fire Alarms and Signaling code nor the ANSI/ASME A17.1 Safety Code for Elevators and Escalators address these devices. Not having a referenced product standard to explain what these devices are or how they should function was one of the reasons the A117.1 Accessible and Usable Buildings and Facilities committee disapproved a similar proposal this past cycle. Lacking any guidance from a product standard will result in designers, building owners, and code officials installing devices that may prove to be ineffective or unreliable during a real emergency. BOMA encourages the final assembly to disapprove the code change and allow industry to develop a product standard for two-way emergency communication device for the purpose of assisting the deaf/hard of hearing or speech impaired, that will clearly define the performance, notification and transmission of these critical communication devices.

G195-15

G200-15 3006.2

Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, ICC Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

3006.2 Hoistway opening protection required. Elevator hoistway door openings shall be protected in accordance with Section 3006.3 where an the elevator hoistway is required to be located in a shaft enclosure, connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and where any of the following conditions apply exist

-

1. The elevator hoistway exceeds 420 feet in height.

<u>2</u>1. The building is not protected <u>equipped</u> throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.

<u>3</u>-2. The building contains a Group I-1 Condition 2 occupancy.

<u>4</u>3. The building contains a Group I-2 occupancy.

<u>5</u>4. The building contains a Group I-3 occupancy-

5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) in height. The height of the hoistway shall be measured from the lowest floor to the highest floor of the floors served by the hoistway.

Exceptions:

- 1. Protection of elevator hoistway door openings is not required where the elevator serves only open parking garages in accordance with Section 406.5.
- 2. Protection of elevator hoistway door openings is not required at the level(s) of exit discharge, provided the level(s) of exit discharge is equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 3. Enclosed elevator lobbies and protection of elevator hoistway door openings are not required on levels where the elevator hoistway opens to the exterior

<u>The height of the hoistway shall be measured from the top of the lowest</u> <u>finished floor to the top of the highest finished floor of the floors served by</u> <u>the hoistway</u>.

The height of elevator hoistways sharing a common atmosphere by elevator door openings at a common floor or by openings between hoistways shall be measured from the top of the lowest finished floor to the top of the highest finished floor of the floors served by the non separated hoistways.

Reason: This proposal is a follow-up to what was proposed in the 2012 cycle as proposal FS66-12. This version has been updated to work with the new language Code Technology Committee Mtg #32 September 14-15, 2015, Chicago found in Section 3006.2 and addresses the reasons for disapproval, including that midrise buildings may not have been equipped throughout with an automatic sprinkler system.

This issue has been viewed very differently throughout the US with many jurisidictions requiring elevator lobbies and many not. The IBC has required these lobbies since the 2000 edition and have always been heavily debated. This debate has been the reason the CTC has been carefully studying this issue. The work that led to FS66-12 included a technical analysis that looked at issues such as stack effect and also looked at the reliability of sprinklers through the use of the fire safety concepts tree. The technical analysis is available at the following link. https://cdpaccess.com/proposal/fileupload/get/280

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Elevator Lobbies Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: WII not increase the cost of construction If the requirements for elevator lobbies are made less restrictive then the cost of construction would go down.

> G200-15 : 3006.2-BALDASSARRA4170

Public Hearing Results

Committee Action:

Committee Reason: The study cited in the testimony on the floor as substatiation for this proposal is still underway. It is premature to make a decision on this proposal before the study is completed and adequate technical justification is provided.

Assembly Motion: Online Vote Results: Support: 21.11% (72) Oppose: 78.89% (269) Assembly Action : Disapproved

As Submitted

Failed

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Carl Baldassarra, P.E., FSFPA, representing Code Technology Committee (CTC@iccsafe.org) requests Approve as Submitted.

Commenter's Reason: This proposal was disapproved at the code action hearings based upon further information from a modeling project being conducted at the University of Texas Austin. A report has been prepared containing the results of Code Technology Committee Mtg #32 September 14-15, 2015, Chicago several computer modeling runs examining the need for enclosed elevator lobbies in fully sprinklered buildings where the sprinklers are both operating and failed. These represent the first of a number of scenarios developed by the CTC. A link to the full report is provided here. <u>UT Austin Report</u>. The conclusions excerpted from their report are as follows:

Conclusion

From the current results, some conclusions can be drawn. Compared with previous research[5][6] which considered post-flashover fires with temperature rise of more than 700°C, this study used a single workstation fire of 7MW, which elevates the gas temperature around the elevator lobby by only about 50°C. Thus the fire hazard examined in this report is much smaller than that proposed by others, and the fire-induced stack effect is also smaller. One effect that has not been considered in previous work is the effect of sprinklers. The effects of sprinklers to control the fire were directly considered in this study.

When sprinklers are normally activated, fires can be quickly controlled and suppressed. After the fire is extinguished on the fire floor, the hot environment of the building maintains the fire-induced stack effect in the elevator shafts and transports the smoke to the upper floors. Generally, however, the smoke is less thick than on the fire floor and gradually dissipates.

For an extreme ventilation condition, when the elevator doors are open at the fire floor, significant smoke moves to the upper floors. For such a case, the enclosure of the elevator lobbies significantly delays the smoke spread to the upper floors. When the doors on the enclosing walls are open, the gas temperature and pressure differences are almost 50% of the unenclosed conditions. When the elevator lobbies are separated by closed doors with modeled leakage, the fire barely affects the elevator lobbies, and little smoke is transported to the upper floors.

For the extreme ventilation cases when the elevator doors and windows are open on the fire floor, there are two ways to satisfy the visibility-based fire safety criterion. One is by ensuring the functional operation of the sprinklers during fires, and the other is to enclose the elevator lobbies.

When the elevator doors and windows are closed and a normal building envelope leakage area exists, the smoke generated from the fire floor still affects the upper floors. Although the total mass flow rate for these typicallyventilated cases are relatively smaller than for the more open/extreme cases, the smoke concentration is larger and thus the visibility-based safety criterion still indicates a safety problem. Thus, the fire hazard is nearly the same as the extreme ventilations cases of open windows and elevator doors on the fire floor. The cold weather condition showed a slight increase in the fire hazard, but it is not the governing factor.

Regardless of stack effect, the modeling showed that in a fully sprinklered building where the sprinklers operate the fire is essentially extinguished, produces minimal smoke and tenability is maintained. Full failure of the sprinkler system will result in extensive smoke spread without lobbies but this is a conservative scenario. The IBC includes several provisions to greatly reduce this potential, such as electrical supervision of the system, remote monitoring, and redundant water supply risers and on-site water storage in very tall or seismic zone buildings. It was also noted for the full sprinkler failure scenario that simply having a lobby reduced smoke spread significantly even with a partially open door.

This proposal still requires that lobbies be provided in hoistways exceeding 420 feet in height where stack effect is greater.

Members are encouraged to consider this additional report along with other extensive studies and work by the ICC Code Technology Committee (CTC) in support of this change, which can ve found at the link below. The CYC has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Elevator Lobbies Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at: <u>http://www.iccsafe.org/cs/CTC/Pages/default.aspx.</u>

http://media.iccsafe.org/cdpACCESS/docs/SmokeSpread-HighRise.pdf

G200-15

G204-15 3007.3, 3008.3 Proposed Change as Submitted

Proponent : Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technologies Committee (CTC@iccsafe.org)

2015 International Building Code

Revise as follows:

3007.3 Water protection. An *approved* method to prevent water-<u>Water</u> from the operation of an automatic sprinkler system outside the enclosed lobby shall be prevented from infiltrating into the hoistway enclosure from the operation of the *automatic sprinkler system* outside the enclosed fire service access elevator lobby shall be provided. in accordance with an approved method.

3008.3 Water protection. An *approved* method to prevent water <u>Water</u> from the operation of an automatic sprinkler system outside the enclosed lobby shall be prevented from infiltrating into the hoistway enclosure from the operation of the *automatic sprinkler system* outside the enclosed occupant evacuation elevator lobby shall be provided. in accordance with an approved method.

Reason: As currently written it is often misinterpreted that water protection should be provided from sprinklers activating within the enclosed lobby itself. In fact, this provision is specifically looking only at sprinkler activation outside the lobby. If a sprinkler was activated within the lobby itself then there are larger concerns about the safety of the elevator operations. Also if sprinklers have activated within the lobby the lobby smoke detection would have also activated and recalled the elevators to the lobby. This section is not intended to include fire fighter hose stream. The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the WTC Area of Study. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website at:

http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction This is merely a clarification. It may be a savings if it was interpreted to include the activation of an automatic sprinkler system within the enclosed elevator lobby.

> G204-15 : 3007.3-BALDASSARRA4191

Public Hearing Results

Committee Action:

Approved as Submitted

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Committee Reason: This is a necessary clarification to the code that addresses items that are commonly misinterpreted.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Jonathan Siu, City of Seattle Department of Planning & Development, representing City of Seattle Department of Planning & Development (jon.siu@seattle.gov) requests Disapprove.

Commenter's Reason: We are recommending this proposed code change be disapproved because the proposal is unnecessary, and it includes an unenforceable performance standard.

The reason statement for this proposal asserts that the current text can be misinterpreted to require the heads in the lobby to be the source of the water that is being dealt with in this section. However, we do not see how the current text can be interpreted in that way. That is, it clearly says the source of the water is not the heads in the elevator lobby, but the heads outside the lobby ("...from the operation of the automatic sprinkler system <u>outside</u> the enclosed fire service access elevator lobby...." [emphasis ours]) So the premise for the proposal doesn't seem to support the need for a change. In addition, the proposed text does not increase clarity on the issue, since it uses terminology that is substantially the same as the 2015 code.

Regarding the second point, the 2015 IBC text says there needs to be an approved <u>method</u> to prevent the water from going into the hoistway. We read this to say we're approving a design that is supposed to prevent it. In reality, however, the system may not perform as designed in a real event for any number of reasons, including an event that exceeds the design assumptions--there is always some probability of failure. We hope the probability is very small, but it's not zero.

The proposed text says water "shall be prevented" from getting into the hoistway. No ifs, ands, or buts. This is creating an absolute performance standard. That is, this means that if the system did not perform in a real event as specified, i.e., water from a sprinkler head outside the elevator lobby got into the hoistway <u>for whatever</u> <u>reason</u>, there was a code violation, and it becomes a liability issue for the designer of the system. This is akin to saying a building that collapses for any reason must not have conformed to the code and the engineer is liable, even if the event was something beyond what the structure was designed for. Note also that compliance with this provision as written cannot be verified in any practical manner at the time of C of O, so verification will only happen when an actual event happens. (Finding a building owner who would be willing to run a test of the system prior to C of O by turning on the sprinklers in the newly-constructed building and letting them run for an unspecified amount of time to test the drainage system is a very doubtful proposition). For these reasons, the proposed language is unenforceable, and the proposal should be disapproved.

G206-15 3007.8, 3007.8.1 (New) <u>Proposed Change as Submitted</u>

Proponent : Dave Frable, US General Services Administration, representing US General Services Administration

2015 International Building Code

Revise as follows:

3007.8 Electrical power. The following features serving each fire service access elevator shall be supplied by both – <u>Sufficient</u> normal-power and Type 60/Class 2 X/Level 1 standby power: 1. Elevator shall be provided to simultaneously operate all designated fire service access elevators and their associated elevator equipment. 2. Elevator , elevator hoistway lighting. 3. *Ventilation*, elevator car lighting, and the ventilation and cooling equipment for their respective elevator machine rooms, control rooms, machine spaces and control spaces. 4. Elevator car lighting.

Add new text as follows:

3007.8.1 Standby power evaluation and analysis An evaluation and analysis shall be provided to determine the appropriate minimum time, in hours, that standby power must be provided following loss or failure of the normal power supply for the fire service access elevators to operate for the specific building and application. The subject evaluation and analysis shall be prepared by the responsible registered design professional and shall be approved prior to installation.

Reason: Currently as written all designated fire service access elevators must comply with Section 3007.8 which requires 2 hours of standby power for each designated fire service access elevator and associated equipment simultaneously. In many 120 foot tall buildings across the country, the current 2-hour standby power requirement becomes costly and is likely much more conservative than necessary. The intent of this code change is to provide a more reasonable approach for providing standby power in lieu of using an arbitrary/absolute value of 2-hours. NFPA 110, Standard for Emergency and Standby Power Systems permits the use of Class X systems (Other time, in hours, as required by the application). Please note the Class defines the minimum time, in hours, for which the standby power system is designed to operate at its rated load without being refueled or recharged.

This proposal would permit the Building Official to approve an evaluation and analysis prepared by the registered design professions for determining the appropriate minimum time, in hours, that standby power must be provided for the respective building. In addition, it should also be pointed out that the 2-hour standby power requirement is also not consistent with reviews of the WTC bombing in 1996 that concluded buildings should not take longer than 1-hour to evacuate.

Cost Impact: WII not increase the cost of construction

This proposal will decrease the cost of construction as it will possibly reduce the size of the emergency power supply system providing standby power as well as determing the appropriate timeframe necessary for providing standby power for the operation of the fire service access elevators during an emergency.

> G206-15:3007.8-FRABLE5021

Public Hearing Results

Committee Action:

Committee Reason: There are some portions of this proposal that may be valid. However, there is a common misunerstanding that fire service elevators are intneded to transfer one team of firefighters. The real object is to stay operational for the entire duration of the fire in order to move firefighting equipment and injured firefighters, etc.

The proposal does not clearly state that the approval is intended to be by the fire service.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Dave Frable, representing US General Services Administration (dave.frable@gsa.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

3007.8.1 Standby power. Standby power loads for fire service access elevators shall be a minimum of Type 60/Class 2/Level 1 standby power. Exception: Where approved ty the fire official, the Class that defines the minimum time, in hours, for the duration of standby power is allowed to be determined by a standby power evaluation and analysis that complies with Section 3008.1.1.

3007.8.1 <u>3007.8.1.1</u> Standby power evaluation and analysis. *No* change to text.

Commenter's Reason: Currently as written all designated fire service access elevators must comply with Section 3007.8 which requires 2 hours of standby power to ensure these elevators and associated equipment are operational for the entire duration of the fire. However, in many 120 foot tall buildings (approximately 10 stories) across the country, the current 2-hour standby power requirement becomes costly and is likely much more conservative than necessary. The intent of this code change is to provide an alternative that would permit the fire

chief to approve a standby power evaluation and analysis to determine the appropriate period of time, that standby power must be provided following loss or failure of the normal power supply to sustain fire service operations for the specific building and application.

We believe this approach is a reasonable alternative for demining the minimum standby power duration for fire service access elevators than utilizing the absolute value of 2 hours.

Disapproved

G210-15 3008.8, 3008.8.1 (New) <u>Proposed Change as Submitted</u>

Proponent : Dave Frable, representing US General Services Administration

2015 International Building Code

Revise as follows:

3008.8 Electrical power. The following features serving each occupant evacuation elevator shall be supplied by both<u>Sufficient</u> normal power and Type 60/Class <u>2X</u>/Level 1 standby power: <u>1. Elevatorshall be provided to simultaneously operate all occupant evacuation elevators along with their associated elevator equipment.². Ventilation, elevator hoistway lighting, elevator car lighting, and the ventilation and cooling equipment for their respective elevator machine rooms, control rooms, machinerymachine spaces and control spaces. <u>3. Elevator car lighting</u>.</u>

3008.8.1 Standby power evaluation and analysis. An evaluation and analysis shall be provided to determine the appropriate minimum time, in hours, that standby power must be provided following loss or failure of the normal power supply for the occupant evacuation elevators to operate for the specific building and application. The subject evaluation and analysis shall be prepared by the responsible registered design professional and shall be approved prior to installation.

Reason: Currently as written all occupant evacuation elevators must comply with Section 3007.8 which requires 2 hours of standby power for each occupant evacuation elevator and associated equipment simultaneously. In many tall buildings across the country, the current 2-hour standby power requirement becomes costly and is likely much more conservative than necessary. The intent of this code change is to provide a more reasonable approach for providing standby power in lieu of using an arbitrary/absolute value of 2-hours. NFPA 110, Standard for Emergency and Standby Power Systems permits the use of Class X systems (Other time, in hours, as required by the application). Please note the Class defines the minimum time, in hours, for which the standby power system is designed to operate at its rated load without being refueled or recharged.

This proposal would permit the Building Official to approve an evaluation and analysis prepared by the registered design professions for determining the appropriate minimum time, in hours, that standby power must be provided for the respective building. In addition, it should also be pointed out that the 2-hour standby power requirement is also not consistent with reviews of the WTC bombing in 1996 that concluded buildings should not take longer than 1-hour to evacuate.

Cost Impact: WII not increase the cost of construction

This proposal will decrease the cost of construction as it will possibly reduce the size of the emergency power supply system providing standby power as well as determing the appropriate timeframe necessary for providing standby power for the operation of occupant evacuation elevators during an emergency.

> G210-15 : 3008.8-FRABLE5036

Public Hearing Results

Committee Action:

Committee Reason: This proposal requires a fire evacuation analysis. Not all buildings may need that. Furthermore, the design team will be required to hire a separate expert, which is cost prohibitive.

Assembly Action :

None

Disapproved

Individual Consideration Agenda

Public Comment 1:

Proponent : Dave Frable, representing US Gneral Services Administration (dave.frable@gsa.gov) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Building Code

3008.8.1 Standby power evaluation and analysis <u>.</u> An evaluation and analysis <u>Standby power loads for occupant evacuation elevators</u> shall be provided to determine a minimum of Type 60/Class 2/Level 1 standby power.

Exception: Where an egress analysis in accordance with Section 3008.1.1 determines that the appropriate time required for full building evacuation is less than one hour, the Class that defines the minimum time, in hours, that for the duration of standby power must be provided following loss or failure of the normal power supply for the occupant evacuation elevators to operate for the specific building and application. The subject evaluation and analysis shall be prepared by not less than twice the responsible registered design professional and shall be approved prior to installation calculated evacuation time.

Commenter's Reason: Based on the General Committee's action to approve as submitted G 207-15, this code change proposal coordinates the electrical power and standby power requirements with new section 3008.8.1 "Determination of standby power load" and provides a reasonable alternative.

Currently as written all designated occupant evacuation elevators must comply with Section 3008.8 which requires 2 hours of standby power to ensure these elevators and associated equipment are operational for the entire duration of the building evacuation. However, in many tall buildings across the country, the current 2-hour standby power requirement becomes costly and is likely much more conservative than necessary.

The intent of this code change is to provide an alternative that would permit the Class that defines the minimum time for the standby power to be determined based on twice the calculated evacuation time of the egress analysis in Section 3008.1.1.1. We believe this approach which incorporates a safety factor of 2 is a reasonable alternate for demining the minimum standby power duration than utilizing the absolute value of 2 hours. In addition, it should also be pointed out that the 2-hour standby power requirement is also not consistent with reviews of the WTC bombing in 1996 that concluded buildings should not take longer than 1-hour to evacuate.

G210-15

M23-15

202 (New), 403.1, 403.3, 403.3.1, 403.3.2, 403.3.2.1, 403.3.2.2, 403.3.2.3 Proposed Change as Submitted

Proponent : Mike Moore, Newport Ventures, Representing Broan-NuTone, representing Newport (mmoore@newportventures.net)

2015 International Mechanical Code

Add new definition as follows:

SECTION 202 DEFINITIONS

NONTRANSIENT Characterized by occupancy of a dwelling unit for greater than 30 days by occupants who are primarily permanent in nature.

Revise as follows:

403.1 Ventilation system. Mechanical ventilation shall be provided by a method of supply air and return or *exhaust air* except that mechanical ventilation air requirements for Group R 2, R 3 and R 4 occupancies three stories and less <u>dwelling units</u> in height above grade plane <u>nontransient</u> residential occupancies shall be provided by an exhaust system, supply system or combination thereof. The amount of supply air shall be approximately equal to the amount of return and *exhaust air*. The system shall not be prohibited from producing negative or positive pressure. The system to convey *ventilation air* shall be designed and installed in accordance with Chapter 6.

403.3 Outdoor air and local exhaust airflow rates. Group R-2, R-3 and R-4 occupancies three stories and less

<u>Dwelling units</u> in height above grade plane <u>nontransient residential</u> <u>occupancies</u> shall be provided with outdoor air and local exhaust in accordance with Section 403.3.2. All other buildings intended to be occupied shall be provided with outdoor air and local exhaust in accordance with Section 403.3.1.

403.3.1 Other buildings intended to be occupied. The design of local exhaust systems and ventilation systems for outdoor air for occupancies other than Group R 2, R 3 and R 4 three stories and less above grade plane dwelling units in nontransient residential occupancies shall comply with Sections 403.3.1.1 through 403.3.1.5.

403.3.2 Group R-2, R-3 and R-4 <u>Dwelling units in nontransient</u> <u>residential</u> occupancies, three stories and less. The design of local exhaust systems and ventilation systems for outdoor air in Group R 2, R 3 and R 4 occupancies three stories and less <u>dwelling units</u> in height above grade plane <u>nontransient residential occupancies</u> shall comply with Sections 403.3.2.1 through 403.3.2.3.

403.3.2.1 Outdoor air for dwelling units in nontransient residential occupancies. *No change to text.*

Delete without substitution: Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 150 of 176 **403.3.2.2 Outdoor air for other spaces.** Corridors and other common areas within the conditioned space shall be provided with outdoor air at a rate of not less than 0.06 cfm per square foot of floor area.

Revise as follows:

TABLE 403.3.2.3MINIMUM REQUIRED LOCAL EXHAUST RATES FOR GROUP R-2, R-3, ANDR-4 DWELLING UNITS IN NONTRANSIENT RESIDENTIALOCCUPANCIES

AREA TO BE	EXHAUST RATE		
EXHAUSTED	CAPACITY		
Kitchens	100 cfm intermittent or 25 cfm continuous		
Bathrooms and toilet	50 cfm intermittent or 20		
rooms	cfm continuous		

For SI: 1 cubic foot per minute = $0.0004719 \text{ m}^3/\text{s}$.

Reason: This proposal is intended to simplify the optional mechanical ventilation compliance path for all dwelling units in nontransient residential occupancies, regardless of building height. This change is aligned with a recent scope change in standards ASHRAE 62.2 and 62.1 that moved jurisdiction of dwelling units in nontransient residential occupancies to the scope of ASHRAE 62.2, regardless of building height.¹ This change was strongly supported by both committees, primarily for the following reason:

• Ventilation rates for dwelling units in nontransient residential occupancies should be consistent across all units, regardless of building height. Why should a dwelling unit in a 4 story building require an outdoor air ventilation rate that is up to two times greater than that in a 3 story building?

Approval of this particular proposal to the IMC would have the following benefits:

- More closely align the IMC's ventilation requirements with consensus standards without requiring the user to access or purchase those standards.
- Simplify the design, specification, and enforcement of outdoor air ventilation and exhaust requirements for dwelling units in nontransient residential occupancies, regardless of building height.
- Save significant energy: As an example, the IMC currently requires a 1000 sqft, 2 bedroom apartment with 9 foot ceilings to be provided with 53 cfm of outdoor air when located in a three story building (using equation 4-9). For the identical unit in a four story building, the IMC requires 53-105 cfm of outdoor air, depending on the type of HVAC system installed (equations 4-1 and 4-2, and tables 403.3.1.1 and 403.3.1.1.1.2). So, up to 50% of the ventilation energy currently required for high-rise dwelling units can be saved by simply transitioning all ventilation requirements for dwelling units in nontransient residential occupancies to those currently contained in Section 403.3.2.

Bibliography:

1. ASHRAE 62.2-2013 Addendum G. To access a free copy, please contact ASHRAE at (404) 636-8400.

Cost Impact: WII not increase the cost of construction This change is not expected to increase the cost of construction because it serves to simplify the design, specification, and enforcement of outdoor air ventilation and exhaust requirements for dwelling units in nontransient residential occupancies, regardless of building height.

> M23-15:403-**MOORE4858**

Public Hearing Results

Committee Action:

Committee Reason: With the deletion of Section 403.2.2, corridors would no longer be covered. Nontransient is not the exact opposite of transient. Sleeping rooms are not addressed.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Mike Moore, Newport Ventures, representing Broan-NuTone (mmoore@newportventures.net) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Mechanical Code **SECTION 202 DEFINITIONS**

NONTRANSIENT Characterized by occupancy of a dwelling unit for greater than 30 days by occupants who are primarily permanent in nature.

403.3 Outdoor air and local exhaust airflow rates. Dwelling units in nontransient residential occupancies shall be provided with outdoor air and local exhaust in accordance with Section 403.3.2. All other Other spaces in buildings intended to be occupied shall be provided with outdoor air and local exhaust in accordance with Section 403.3.1.

403.3.1 Other spaces within buildings intended to be occupied. No change to text.

Commenter's Reason: It is important to note that this proposal does not introduce any new requirements for mechanical ventilation. The intent of this proposal is to align the IMC with recent revisions to the scopes of ASHRAE 62.1 and ASHRAE 62.2. The proposal is meant to simplify and streamline mechanical ventilation provisions for dwelling units where required. This will lead to greater consistency in design, specification, and enforcement of code provisions. Unfortunately, there was confusion with the proposal and its effects at the first hearing, which I hope to resolve here by responding to the committee's objections. 1. Committee: With the deletion of Section 403.2.2, corridors would no longer be covered.

> Response: Corridors are not considered residential dwelling units, and so would no longer be covered under Section 403.2.2. Instead, corridors,

Disapproved

common areas, and other areas of residential occupancies that are not within residential dwelling units would be addressed in Section 403.3.1, as they have been historically. No change will result in the ventilation requirements for these areas.

2. Committee: Sleeping rooms are not addressed.

Response: sleeping rooms have different facilities than dwelling units and so do not have the same ventilation requirements. Moving forward, ventilation requirements for sleeping units will still be covered under Section 403.2.2, as they are currently.

3. Committee: Nontransient is not the exact opposite of transient.

Response: "Transient" is defined in the IBC and both "nontransient" and "transient" are used in IBC Section 310. I've deleted the proposed definition of "nontransient" to avoid any confusion that could otherwise be caused. We can assume that industry is familiar with the terms "nontransient" and "transient" since they have been used in the IBC since at least 2003.

M23-15

M44-15 505, 505.1 (New), 505.2 (New), 505.1, 505.4 <u>Proposed Change as Submitted</u>

Proponent : Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

2015 International Mechanical Code

Revise as follows:

SECTION 505 DOMESTIC KITCHEN <u>COOKING</u> EXHAUST EQUIPMENT

Add new text as follows:

505.1 General. Domestic cooking exhaust equipment shall comply with the requirements of this section.

505.2 Domestic cooking exhaust. Where domestic cooking exhaust equipment is provided it shall comply with the following as applicable:

<u>1. Overhead range hoods and downdraft exhaust equipment not integral with the cooking appliance shall be listed and labeled in accordance with UL 507.</u>

2. Domestic cooking appliances with integral downdraft exhaust equipment shall be listed and labeled in accordance with UL 858 or ANSI Z21.1.

<u>3. Microwave ovens with integral exhaust for installation over the cooking surface shall be listed and labeled in accordance with UL 923.</u>

Revise as follows:

505.1 <u>505.3</u> Domestic systems. <u>Exhaust ducts.</u> Where domestic range hoods and domestic appliances equipped with downdraft <u>Domestic cooking</u> exhaust are provided, such hoods and appliances <u>equipment</u> shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems.

Exceptions:

- In other than Group I-1 and I-2, where installed in accordance with the manufacturer's instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.
- 2. Ducts for domestic kitchen cooking appliances equipped with downdraft exhaust systems shall be permitted to be constructed of Schedule 40 PVC pipe and fittings provided that the installation complies with all of the following:
 - 2.1. The duct shall be installed under a concrete slab poured on grade.

- 2.2. The underfloor trench in which the duct is installed shall be completely backfilled with sand or gravel.
- 2.3. The PVC duct shall extend not more than 1 inch (25 mm) above the indoor concrete floor surface.
- 2.4. The PVC duct shall extend not more than 1 inch (25 mm) above grade outside of the building.
- 2.5. The PVC ducts shall be solvent cemented.

505.4 Other than Group R. In other than Group R occupancies, where domestic cooktops, ranges, and open-top broilers are used for domestic purposes, domestic cooking appliances are utilized for domestic purposes, such appliances shall be provided with domestic range hoods. Hoods and exhaust systems shall be in accordance with Sections 505.1 and 505.2. provided.

Add new standard(s) as follows:

ANSI Z21.1 - 2010 Household Cooking Gas Appliances

UL 507 - 2014 Standard for Safety Electric Fans

Reason: The IMC currently has no criteria for exhaust hoods and downdraft equipment. This proposal accomplishes the following:

1. Includes a new charging Section 505.1 that is similar to other charging sections in the IMC.

2. New section 505.2 describes the listing standards used to investigate the various types of exhaust equipment.

3. Section 505.3 (formerly Section 505.1) was retitled "Exhaust ducts" to more accurately reflect what is covered in the section. Some edits were made to clarify the wording. No substantive changes were made to the requirements for the exhaust ducts.

4. Section 505.4 was revised to clarify the types of domestic cooking appliance that requires a domestic cooking exhaust system. Without this change an exhaust system could be required for a coffee maker, wall mounted oven, rice cooker, etc.

Cost Impact: Will increase the cost of construction

In most cases there should be no increase in costs if exhaust hoods and downdraft equipment are listed to the specified standards, which appears to be common practice.

Analysis:

A review of the standard proposed for inclusion in the code, UL 507, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

M44-15 : 505-ROBERTS5747

Public Hearing Results

Committee Action:

Approved as Modified

Modification:

505.4 Other than Group R. In other than Group R occupancies, where <u>domestic</u> cooktops, ranges, and open-top broilers are <u>installed</u> <u>used for domestic purposes</u>, domestic cooking exhaust systems shall be provided.

Committee Reason: The code needs the added coverage for domestic exhaust equipment and needs to reference the relavent product standards. The modification limits the application to domestic uses as was intended in the revised text of Section 505.4, however, such distinction was lost as the section was originally revised.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Mechanical Code

505.2 Domestic cooking exhaust. Where domestic cooking exhaust equipment is provided it shall comply with the following as applicable:

1. Overhead The fan for overhead range hoods and downdraft exhaust equipment not integral with the cooking appliance shall be listed and labeled in accordance with UL 507.

2. <u>Overhead range hoods and downdraft exhaust equipment with integral</u> fans shall comply with UL 507.

<u>3.</u> Domestic cooking appliances with integral downdraft exhaust equipment shall be listed and labeled in accordance with UL 858 or ANSI Z21.1. <u>3 4</u>. Microwave ovens with integral exhaust for installation over the cooking surface shall be listed and labeled in accordance with UL 923.

Commenter's Reason: This change as originally proposed exceeds the scope of UL 507. UL 507 is a standard for fans and blowers, not range hoods. Included in the scope of the standard are overhead range hoods and downdraft exhaust equipment that have integral hoods. UL 507 does not regulate stand-alone range hoods that do not have an integral fan.

These prefabricated range hoods have served the industry successfully for many years. There is no justification for removing a viable range hood. If the code change is approved as proposed, one could only install a range hood that has an integral fan. That would be overly restrictive.

The modification corrects the mistake with the original submittal. UL 507 regulates all fans used for overhead range hoods and downdraft exhaust equipment. It also addresses range hoods and downdraft exhaust equipment with integral fans.

UL 507 does not regulate range hoods, whether prefabricated or field made. Hence, it is inappropriate to reference the standard for this application.

If this modification is not accepted, the change must be denied since the reference to UL 507 exceeds the scope of the standard. This is a violation of ICC policy.

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P31-15 Table 403.1 (IBC Table 2902.1) Proposed Change as Submitted

Proponent : Stephen DiGiovanni, Clark County Building Department, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountynv.gov)

2015 International Plumbing Code

Revise as follows:

TABLE 403.1MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections403.1.1 and 403.2)

				WATER CLOSETS (URINALS: SEE SECTION 419.2)		
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE	м
		A-1 ^d	Theaters and other buildings for the performing arts and motion pictures			
		A-2 ^d	Nightclubs, bars, taverns, dance halls and buildings for similar purposes Restaurants, banquet halls and food			
I	I	Code Technology Comm September 14-15, 2019 158 of 176	ttee Mtg #32 5, Chicago	I	I	I

					1
1	Assembly	A-3 ^d	Auditoriums without perma- nent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums		
			Passenger terminals and transportation facilities		
			Places of worship and other religious services		

				CLC (URIN/ SECTIC	OSETS ALS: SEE ON 419.2)
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE
1	Assembly	A-4	Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities		

(cont.)		A-5	Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities	
2	Business	В	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	
3	Educational	E	Educational facilities	
4	Factory and industrial	F-1 and F-2	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	
	Co	de Technology Committee September 14-15, 2015, Ct	Residential Mtg #32 Nicago	

		I-1	care	
			Hospitals, ambulatory nursing home care recipient	
		I-2	Employees, other than residential care ^b	_
5	Institutional		Visitors, other than residential care	
			Prisonsb	
		I-3	Reformitories, detention centers, and correctional centers ^b	_
			Employeesb	
		I-4	Adult day care and child day care	



NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE	M
6	Mercantile	М	Retail stores, service stations, shops, salesrooms, markets and shopping centers			
		R-1	Hotels, motels, boarding houses (transient)			
		R-2	Dormitories, fraternities, sororities and boarding houses (not transient)			
7	Residential	R-2	Apartment house			
		R-3 Code Technology Commi September 14-15, 2015 162 of 176	Congregate living facilities ttee Mtg #32 5, Chicago			

			with 16 or fewer persons
		R-3	One- and two- family dwellings and lodging houses with five or fewer guestrooms
		R-4	Congregate living facilities with 16 or fewer persons
8	Storage	S-1 S-2	Structures for the storage of goods, warehouses, store- house and freight depots. Low and Moderate Hazard.

(Portions of table not shown remain unchanged)

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted

provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

e. For business and mercantile occupancies with an occupant load of 15 or fewer,sService sinks shall not be required- where the occupant load is 30 or fewer.

Reason: This proposal revises note e and applies note "e" to each of the service sink entries in the table, so that it addresses all occupancies required to have service sinks, not just B and M occupancies. Note "e" is revised to trigger the service sink at an occupant load of over 30, rather than the current trigger of 15 found in the note.

Cost Impact: Will not increase the cost of construction

This proposal provides a more lenient approach for fixture requirements, so the cost of construction is not increased.

P31-15 : T403.1-DIGIOVANNI3856

Public Hearing Results

Committee Action:

Committee Reason: Raising the number of occupants threshold and applying the note to all service sink applications would result in some occupancies that really need these sinks, such as small healthcare offices and small restaurants not to have service sinks (but need them to meet other regulations).

Assembly Action :

Individual Consideration Agenda

Public Comment 1:

Proponent : Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Plumbing Code

TABLE 403.1

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a(See Sections 403.1.1 and 403.2)

			WATER
			CLOSETS
			(URINALS: SEE
	Code Technology Commi September 14-15, 2015	ttee Mtg #32 5 Chicago	

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Disapproved

None

				SECTION 419.2)		
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE	M
6	Mercantile	М	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		
		R-1	Hotels, motels, boarding houses (transient)	1 per ເ	1 per sleeping unit	
		R-2	Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10 1 per dwelling unit		
7	Residential	R-2	Apartment house			1
		Code Technology Commi	Congregate			
		165 of 176	, onicayo			

		R-3	living facilities with 16 or fewer persons	1 per 10	
		R-3	One- and two- family dwellings and lodging houses with five or fewer guestrooms	1 per dwelling unit	1
		R-4	Congregate living facilities with 16 or fewer persons	1 per 10	
8	Storage	S-1 S-2	Structures for the storage of goods, warehouses, store- house and freight depots. Low and Moderate Hazard.	1 per 100	

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room

and provision for privacy for the toilet room user is provided. d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

e. Service sinks shall not be required where the occupant load is 30 or fewer.

Commenter's Reason: The proposed modification is editorial in nature. The proposed change would only require a service sink when there is an occupancy of more than 30. These two facilities always have an occupant load of less than 30. Therefore, there is no need to reference a service sink.

The proponent has a valid reason for reducing the requirements for service sink. This is a plumbing fixture that architects and engineers are constantly requesting be not required, especially for smaller buildings. The code should allow the building owner to determine if a service sink is necessary for smaller buildings.

Most smaller building do not use their service sink. Often times, the trap dries out from lack of use allowing sewer gas to enter the building. One has to weight the perceived health issues of not having a service sink versus providing one that allows sewer gas into the building. It is more appropriate to remove the requirement for a service sink when the occupant load is 30 or less.

P31-15

P34-15 Table 403.1 (IBC Table 2902.1) Proposed Change as Submitted

Proponent : Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

2015 International Plumbing Code

Revise as follows:

TABLE 403.1MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections
403.1.1 and 403.2)

				WATER CLOSETS (URINALS: SEE SECTION 419.2)		
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE	м
		A-1 ^d	Theaters and other buildings for the performing arts and motion pictures			
		A 2^d	Nightclubs, bars, taverns, dance halls and buildings for similar purposes Restaurants, banquet halls and food courts			
		Code Technology Commi September 14-15, 2019 168 of 176	ttee Mtg #32 5, Chicago			

1	Assembly	A 3^d	Auditoriums without perma- nent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums		
			Passenger terminals and transportation facilities		
			Places of worship and other religious services		

				WATER CLOSETS (URINALS: SEE SECTION 419.2	
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE
1	Assembly	A-4	Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities		

(cont.)		A 5	Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities		
2	Business	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses		
3	Educational	÷	Educational facilities		
4	Factory and industrial	Factory and industrial F-1 and F-2			
	Cc	H-1 de Technology Committee	Residential care Mtg #32		

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	1			Г
5	Institutional	1-2	Hospitals, ambulatory nursing home care recipient	
			Employees, other than residential care ^b	
			Visitors, other than residential care	
		+3	Prisonsb	
			Reformitories, detention centers, and correctional centersb	
			Employeesb	
		+4	Adult day care and child day care	

				W/ CLC (URIN/ SECTIC	ATER DSETS ALS: SEE DN 419.2)	I
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE	м
		Code Technology Commi	Retail stores, service stations, ttee Mtg #32 S Chicago			
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6	Mercantile	H	shops, salesrooms, markets and shopping centers		
		R-1	Hotels, motels, boarding houses (transient)		
		R-2	Dormitories, fraternities, sororities and boarding houses (not transient)		
		R-2	Apartment house		
7	Residential	R-3	Congregate living facilities with 16 or fewer persons		
		R-3	One- and two- family dwellings and lodging houses with five or fewer guestrooms		
		R-4	Congregate living facilities with 16 or fewer persons	1 per 10	
		Code Technology Commi September 14-15, 2015	Structures for the storage of ttee Mtg #32 5, Chicago		

8	Storage	S 1 S 2	goods, warehouses, store- house and freight depots. Low and Moderate Hazard.		
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(Portions of table not shown remain unchanged)

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

e. For business and mercantile occupanciesclassifications with an occupant load of 15 or fewer, service sinks shall not be required.

Reason: Section 403.1 was revised for the 2015 IPC to direct the reader to the use of a building rather than its IBC occupancy classification (Group) for determining the number of plumbing fixtures. The occupancy column is Table 403.1 is now really confusing as Section 403.1 says to use the Description column but this Occupancy column implies that the IBC classification is to be used. This proposal removes the occupancy column for clarity and coordination with what Section 403.1 states.

Table 403.1 will still retain the classification column, although that column doesn't seem to add any clarification to the table as the IPC doesn't speak of "classifications" for various uses. However, as Table 403.1 is reprinted in the IBC (as Table [P] 2902.1), the classification column might incorrectly lead IBC readers to assume that the IBC occupancy classification (Group) has something to do with selection of an appropriate row for plumbing fixture requirements. IBC Section [P] 2902.1 is identical to Section 403.1 in the IPC but if the reader neglects reading the IBC section and jumps directly to the table, the existence of classification column could cause a misunderstanding.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 191. **Cost Impact:** Will not increase the cost of construction This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

> P34-15 : T403.1-SNYDER3931

Public Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: Based on changes made to Section 403.1 for the 2012 IPC, the occupancy classsification of a building space no longer impacts the selection of the row in Table 403.1 for determining the number of plumbing fixtures. The use description does, therefore, the occupancy classification column needs removed from the table to avoid confusion about how the table is to be used.

Assembly Action :

None

Individual Consideration Agenda

Public Comment 1:

Proponent : Carl Baldassarra, P.E., FSFPA, representing Code Technologies Committee (CTC@iccsafe.org); John Williams, CBO, representing Adhoc Healthcare Committee (AHC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as Follows:

2015 International Plumbing Code

TABLE 403.1MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections403.1.1 and 403.2)

			WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVA	TORIES	BATHTUBS/
NO.	CLASSIFICATION	DESCRIPTION	MALE	FEMALE	MALE	FEMALE	SHOWERS
2	Business	Buildings for the transaction of business, professional services, other services involving merchandise, office Code Technology September 14-7	1 pe the f and 1 fo rem Committee 5, 2015, C	r 25 for first 50 L per 50 r the ainder Mtg #32 hicago	1 pe t first 8 per 80 rem	r 40 for he 0 and 1) for the ainder	_

		buildings, banks, light industrial <u>,</u> <u>ambulatory</u> <u>care</u> and similar uses	exceeding 50	exceeding 80	
		Residential care <u>Custodial</u> care facilities	1 per 10	1 per 10	1 per 8
		<u>Medical care</u> <u>recipients in</u> hospitals , ambulatory nursing homes care recipient	1 per room ^c	1 per room ^c	1 per 15
		Employees , <u>in</u> <u>hospitals and</u> <u>nursing</u> <u>homesother</u> than residential care ^b	1 per 25	1 per 35	_
5	Institutional	Visitors <u>in</u> <u>hospitals and</u> <u>nursing</u> <u>homes, other</u> than residential care	1 per 75	1 per 100	_
		Prisons ^b	1 per cell	1 per cell	1 per 15
		Reformitories, detention centers, and correctional centers ^b	1 per 15	1 per 15	1 per 15
		Employees <u>in</u> <u>reformitories,</u> <u>detention</u> <u>centers and</u> <u>correctional</u> <u>centers</u> ^b	1 per 25	1 per 35	_
		Adult day care and child day care	1 per 15	1 per 15	1

The fixtures shown are based on one fixture being the minimum Code Technology Committee Mtg #32 September 14-15, 2015, Chicago 175 of 176 a.

required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

e. For business and mercantile classifications with an occupant load of 15 or fewer, service sinks shall not be required.

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Commenter's Reason: This is intended as clarification only. Without the distinction between the Group I requirements, which row to use for requirements is not clear. For example, two different rows are specified for 'employees'. The phases used are consistent with the defined terms for custodial care and medical care facilities.

P34-15