Code Technology Committee

Meeting #33

March 29-30, 2016

CTC Group B Care Facilities Code Changes (Agenda Items 5.0 and 6.1)

This report includes the matrix of care facility related code changes that the Code Technology Committee has proposed or will monitor as related issues.

ADM78-16

Part I:
IBC: [A] 107.2, 107.2.7 (New), Chapter 35; IEBC: [A] 106.2, 106.2.6 (New), Chapter 16
Part II:
IRC: R106.1.1, Chapter 44

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

Proponent : Jonathan Wilson, National Center for Healthy Housing, representing National Center for Healthy Housing (jwilson@nchh.org); Joan Ketterman representing Improving Kids' Environment (joan.ketterman@envtlmgmt.org); Steve Weil representing the Lead and Environmental Hazard Association (weilcm2@verizon.net); and Jack Leonard representing the Environmental Management Institute (indyjel@gmail.com).

Part I

2015 International Building Code

Revise as follows:

[A] 107.2 Construction documents. *Construction documents* shall be in accordance with Sections 107.2.1 through ~~107.2.6~~ 107.2.7.

Add new text as follows:

107.2.7 Certifications where painted surfaces are disturbed Where repair, alteration, or addition being performed in a Group R-2, R-3, or R-4 occupancy built before 1978 is covered by the Lead Renovation, Repair, and Painting rule at 40 CFR 745 or a state program authorized by that rule, and will disturb painted surfaces, the construction documents shall include a copy of the firm's certificate to conduct the disturbance activities under the applicable rule.

Exception: The occupancy is not a target housing or child-occupied facility as defined by 40 CFR Part 745.

2015 International Existing Building Code

Revise as follows:

[A] 106.2 Construction documents. Construction documents shall be in accordance with Sections 106.2.1 through ~~106.2.5~~ 106.2.6.

Add new text as follows:

106.2.6 Certifications where painted surfaces are disturbed. Where repair, alteration, or addition being performed in a Group R-2, R-3, or R-4 occupancy built before 1978 is covered by the Lead Renovation, Repair, and Painting rule at 40 CFR 745 or a state program authorized by that rule, and will disturb painted surfaces, the construction documents shall include a copy of the firm's certificate to conduct the disturbance activities under the applicable rule.

Exception: The occupancy is not a target housing or child-occupied facility as defined by 40 CFR Part 745.

Reference standards type:
Add new standard(s) as follows:

U.S. Environmental Protection Agency, 40 CFR 745 Lead-Based Paint Poisoning Prevention in Certain Residential Structures (2015)

Part II

2015 International Residential Code

Revise as follows:

R106.1.1 Information on construction documents. *Construction documents* shall be drawn upon suitable material. Electronic media documents are permitted to be submitted where *approved* by the *building official*. *Construction documents* shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the *building official.* Where repair, alteration, or addition being performed in an occupancy built before 1978 is covered by the Lead Renovation, Repair, and Painting rule at 40 CFR 745 or a state program authorized by that rule, and will disturb painted surfaces, the construction documents shall include a copy of the firm's certificate to conduct the disturbance activities under the applicable rule.

Reference standards type:
Add new standard(s) as follows:

U.S. Environmental Protection Agency, 40 CFR 745 Lead-Based Paint Poisoning Prevention in Certain Residential Structures (2015)

Reason: Since April 22, 2010, renovations performed for compensation in child-occupied facilities and housing built before 1978 must comply with federal requirements at 40 Code of Federal Regulations (CFR) Part 745 Subpart E, known as the Renovation, Repair and Painting (RRP) rules. While it was not a consensus process, the Environmental Protection Agency (EPA) adopted the rule in 2008 after considering more than 750 public comments,[1] completing a detailed cost-benefit analysis, and demonstrating that the rule would result in a net benefit to society.[2] As of December 31, 2014, 14 states[3] (Alabama, Delaware, Georgia, Iowa, Kansas, Massachusetts, Mississippi, North Carolina, Oklahoma, Oregon, Rhode Island, Utah, Washington, and Wisconsin) have adopted equivalent regulations and are responsible for administering the requirements. In the remaining 36 states, EPA is responsible for compliance and enforcement.

As of December 31, 2014, more than 130,000 firms have been certified by EPA or a state to perform work covered by the RRP rule.[4] More than 500,000 individuals have been certified to supervise the work on behalf of these lead-safe certified renovation firms. With these numbers, property owners have reasonable access to sufficient lead-safe certified renovation firms and certified renovators.

EPA has taken aggressive action to enforce the RRP rule. In 2014 alone, EPA took action against 61 renovators, as well as one home improvement chain, requiring compliance with the rule, and collecting more than $500,000 in fines.[5] The 14 EPA-authorized states have taken additional enforcement actions.

These enforcement actions highlight two challenges. First, people in the homes and child-occupied facilities were not adequately protected from lead hazards, especially lead in dust. Children are most vulnerable to lead because exposure can cause permanent harm to their brain development.[6] Second, renovators who are certified and complying with the rule are put at a serious competitive disadvantage against those who ignore or are unaware of the requirements.

Rather than focusing on enforcement, a better approach is to prevent the violations through education and planning and to level the playing field for the hundreds of thousands of renovators that consistently comply with the RRP rule. While state and local building code officials have no direct responsibilities to ensure compliance with these federal and state requirements, their role in administering the International Existing Building Code (IEBC) as required by Section 101.3 to "achieve compliance with minimum requirements to safeguard the public health, safety and

welfare insofar as they are affected by the repair, alteration, change of occupancy, addition and relocation of existing buildings" is critical to educating contractors and identifying potential compliance problems so that children's health is protected. Similar provisions in the International Building Code (IBC) and the International Residential Code (IRC) make safeguard the public health, safety and general welfare a priority.

This proposal modifes the IEBC and IBC, by adding new sections 106.2.6 and 107.2.7 respectively that require permit applicants who are conducting activities covered by the rule to include, with their other construction documents, a copy of their lead-safe certified renovator certificate. It would only apply to Group R-2, R-3, and R-4 occupancies built before 1978 that are within the scope of the rule. An exception in the section makes clear that the requirement would only apply in child-occupied facilities, such as child-care centers, and housing other than those without a separate bedroom (known as zero-bedroom dwellings). It also modifies sections 106.2.6 of the IEBC and 107.2 of the IBC to include the new section.

To the IRC, it modifies section R106.1.1 to require permit applicants who are conducting activities covered by the rule to include, with the other construction documents, a copy of their lead-safe certified renovator certificate.

By requiring the documentation as part of the permitting process, renovators are alerted to the RRP requirements so that they can obtain the necessary training and certification before undertaking the work. They will also be reminded of their work practice compliance requirements under the RRP rule. This provision asks the code official to confirm that the person has submitted a copy of the certificate provided by EPA or the state. It does not ask the code official to enforce the federal rule. Because it is not a technical requirement, it is appropriate to include in Chapter 1 for administrative requirements.

This oversight will help to level the playing field between contractors who are complying with the rule and those who are under-pricing and undercutting their competitors by not complying with the law, whether intentionally or out of ignorance. By merely asking an applicant for the missing documents, the code official can influence those not following the law into compliance before the work even starts.

Compliance is important because renovation of painted surfaces in pre-1978 housing is a significant source of lead dust that poisons children. The dangers associated with lead poisoning are well known: serious health effects, detrimental effects on cognitive and behavioral development, with serious personal and social consequences that may persist throughout their lifetime.[6]

There is no safe level of lead exposure for children; even low levels of lead exposure can damage intelligence.[6]

Bibliography: [1] Lead Renovation, Repair, and Painting Program Docket, U.S. Environmental Protection Agency, accessed January 7, 2015, http://www.regulations.gov/#!docketBrowser;rpp=25;po=0;dct=PS;D=EPA-HQ-OPPT-2005-0049.

[2] Lead Renovation, Repair, and Painting Program OMB Review Under Executive Order 12866, U.S. Environmental Protection Agency, http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPPT-2005-0049-1438.

[3] Locate Certified Renovation and Lead Dust Sampling Technician Firms, U.S. Environmental Protection Agency, accessed January 7, 2014, http://cfpub.epa.gov/flpp/searchrrp_firm.htm.

[4] Fiscal Year 2015, Justification of Appropriation Estimates for the Committee on Appropriations, USEPA, 2014, EPA-190-R-14-002, page 480-482, www.epa/gov./ocfo.

[5] EPA Takes Action to Protect Public from Harmful Lead Exposure, U.S. Environmental Protection Agency, 2014, http://yosemite.epa.gov/opa/admpress.nsf/bd4379a92ceceeac8525735900400c27/4d5ce2ba2475c83485257db30058

6 CDC Response to Advisory Committee on Childhood Lead Poisoning Prevention Recommendations in "Low Level Lead Exposure Harms Children: A Renewed Call of Primary Prevention, Centers for Disease Control and Prevention, 2012, www.cdc.gov/nceh/lead/acclpp/cdc_response_lead_exposure_recs.pdf.

Cost Impact: Will not increase the cost of construction

Renovators are already required to comply with the RRP rule. This proposal will simply require that the construction documentation submitted to the building code official include the certificate demonstrating that the firm is a lead-safe certified renovation firm. Under the rule, the renovation firm is required to possess these certifications at the work site. Therefore, including them in the construction documentation should not affect construction costs.

The economic benefits from this rule are substantial. Authorizing a code official to be able to ask for the certificates should prompt property owners to select the certified renovation firms that can provide the necessary

documents. To become certified, the renovators had to complete a training course successfully and demonstrate that they have the know ledge to perform the w ork safely. The firms and the renovators also commited to complying w ith the rule.

The renovations performed by certified individuals and firms should be done more safely. Consistent w ith the rule, they w ill avoid making excessive lead-contaminated dust, contain the dust they incidentally make, clean up any dust residues, and pass a w ipe test they administer. In justifying the rule, the EPA demonstrated that these methods w ill result in few er children w ith high levels of lead in their blood. As a result, children are less likely to suffer harm from lead-contaminated dust.

The rule may actually low er the costs of construction by avoiding the costs of expensive clean-ups w hen a renovation firm lacking the training and certification creates lead-contaminated dust that remains after the renovations are done. Once dust is spread throughout a home, it is difficult and expensive to cleanup.

Analysis: A review of the standard(s) proposed for inclusion in the code,40 CFR Part 745, w ith regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) w ill be posted on the ICC w ebsite on or before April 1, 2016.

ADM78-16 : 106.2.6 (New)-WILSON5193

CE157-16

Part I:
IECC: C101.4.1, C101.5, C202, C202 (New), C403.3, C406.7, C407.5.1, C407.5.2.3.
Part II:
IECC: R101.4.1, R101.5.

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE IECC-COMMERCIAL COMMITTEE. PART II WILL BE HEARD BY THE IECC-RESIDENTIAL COMMITTEE. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

Proponent : David Collins, representing Sustainability, Energy, High Performance Code Action Committee

Part I

2015 International Energy Conservation Code

Revise as follows:

C101.4.1 Mixed ~~occupancy.~~ Residential and Commercial buildings Where a building includes both ~~r~~*~~residential~~ esidential building* and *commercial building*~~occupancies,~~ portions, each ~~occupancy~~ portion shall be separately considered and meet the applicable provisions of IECC—Commercial Provisions or IECC—Residential Provisions.

C101.5 Compliance. *Residential buildings* shall meet the provisions of IECC—Residential Provisions. *Commercial buildings* shall meet the provisions of IECC—Commercial Provisions.

SECTION 202 DEFINITIONS

STOREFRONT. A ~~nonresidential~~ system of doors and windows mulled as a composite fenestration structure that has been designed to resist heavy use. *Storefront*systems include, but are not limited to, exterior fenestration systems that span from the floor level or above to the ceiling of the same story on commercial buildings, with or without mulled windows and doors.

Add new definition as follows:

GROUP R Buildings or portions of buildings that contain any of the following occupancies as established in the International Building Code:

1. Group R-1.
2. Group R-2 where located more than three stories in height above grade plane.
3. Group R-4 where located more than three stories in height above grade plane.

Revise as follows:

C403.3 Economizers (Prescriptive). Each cooling system shall include either an air or water economizer complying with Sections C403.3.1 through C403.3.4

Exceptions: Economizers are not required for the systems listed below.

1. In cooling systems for buildings located in Climate Zones 1A and 1B.
2. In climate zones other than 1A and 1B, where individual fan cooling units have a capacity of less than 54,000 Btu/h (15.8 kW) and meet one of the following:
    - 2.1. Have direct expansion cooling coils.
    - 2.2. The total chilled water system capacity less the capacity of fan

units with air economizers is less than the minimum specified in Table C403.3(1).The total supply capacity of all fan-cooling units not provided with economizers shall not exceed 20 percent of the total supply capacity of all fan-cooling units in the building or 300,000 Btu/h (88 kW), whichever is greater.

3. Where more than 25 percent of the air designed to be supplied by the system is to spaces that are designed to be humidified above 35°F (1.7°C) dew-point temperature to satisfy process needs.
4. Systems that serve ~~residential~~ Group R occupancy spaces where the system capacity is less than five times the requirement listed in Table C403.3(1).
5. Systems expected to operate less than 20 hours per week.
6. Where the use of outdoor air for cooling will affect supermarket open refrigerated casework systems.
7. Where the cooling efficiency meets or exceeds the efficiency requirements in Table C403.3(2).
8. Chilled-water cooling systems that are passive (without a fan) or use induction where the total chilled water system capacity less the capacity of fan units with air economizers is less than the minimum specified in Table C403.3(1).
9. Systems that include a heat recovery system in accordance with Section C403.4.5.

C406.7 Reduced energy use in service water heating. Buildings shall be of the following types to use this compliance method:

1. Group R-1: Boarding houses, hotels or motels.
2. Group I-2: Hospitals, psychiatric hospitals and nursing homes.
3. Group A-2: Restaurants and banquet halls or buildings containing food preparation areas.
4. Group F: Laundries.
5. Group R-2~~: Buildings with residential occupancies~~.
6. Group A-3: Health clubs and spas.
7. Buildings showing a service hot water load of 10 percent or more of total building energy loads, as shown with an energy analysis as described in Section C407.

TABLE C407.5.1 (2)
HVAC SYSTEMS MAP

CONDENSER COOLING SOURCE[a]	HEATING SYSTEM CLASSIFICATION[b]	STANDARD REFERENCE DESIGN HVC SYSTEM TYPE[c]		
		Single-zone Residential System	Single-zone Nonresidential System	All Other
Water/ground	Electric resistance	System 5	System 5	System 1
	Heat pump	System 6	System 6	System 6
	Fossil fuel	System 7	System 7	System 2

Air/none	Electric resistance	System 8	System 9	System 3
	Heat pump	System 8	System 9	System 3
	Fossil fuel	System 10	System 11	System 4

a. Select "water/ground" where the proposed design system condenser is water or evaporatively cooled; select "air/none" where the condenser is air cooled. Closed-circuit dry coolers shall be considered air cooled. Systems utilizing district cooling shall be treated as if the condenser water type were "water." Where no mechanical cooling is specified or the mechanical cooling system in the proposed design does not require heat rejection, the system shall be treated as if the condenser water type were "Air." For proposed designs with ground-source or groundwater-source heat pumps, the standard reference design HVAC system shall be water-source heat pump (System 6).

b. Select the path that corresponds to the proposed design heat source: electric resistance, heat pump (including air source and water source), or fuel fired. Systems utilizing district heating (steam or hot water) and systems with no heating capability shall be treated as if the heating system type were "fossil fuel." For systems with mixed fuel heating sources, the system or systems that use the secondary heating source type (the one with the smallest total installed output capacity for the spaces served by the system) shall be modeled identically in the standard reference design and the primary heating source type shall be used to determine *standard* reference design HVAC system type.

c. Select the standard reference design HVAC system category: The system under "single-zone residential system" shall be selected where the HVAC system in the proposed design is a single-zone system and serves a ~~residential space~~ Group R occupancy. The system under "single-zone nonresidential system" shall be selected where the HVAC system in the proposed design is a single-zone system and serves other than ~~residential spaces~~ Group R occupancies. The system under "all other" shall be selected for all other cases.

C407.5.2.3 ~~Multifamily residential~~ Group R-2 occupancy buildings. ~~Residential~~ Group R-2 occupancy spaces shall be modeled using one thermal block per space except that those facing the same orientations are permitted to be combined into one thermal block. Corner units and units with roof or floor loads shall only be combined with units sharing these features.

Part II

2015 International Energy Conservation Code

Revise as follows:

R101.4.1 Mixed ~~occupancy.~~ Residential and Commercial buildings Where a building includes both *residential building* and *commercial building* ~~occupancies~~ portions, each ~~occupancy~~ portion shall be separately considered and meet the applicable provisions of the IECC—Commercial Provisions or IECC—Residential Provisions.

R101.5 Compliance. *Residential buildings* shall meet the provisions of IECC—Residential Provisions. *Commercial buildings* shall meet the provisions of IECC—Commercial Provisions.

Reason: The code is split in Commercial and Residential halves. The definitions of commercial buildings and residential buildings rely on the occupancy categories found in the IBC. While used in the Commercial provisions the terms 'Group R' and 'residential' are not defined. Group R occupancies can occur in a building defined as a Commercial Building. Non-residential occupancies can not, by definition, occur in a Residential Building. People with an IBC background – when using the IECC-C and encountering the word 'residential' are likely to consider one of the Group R occupancies. People with an ASHRAE background, on the other hand, will also include such things as nursing home rooms and hospital patient rooms as 'residential'. The result is inconsistent application.
This proposal would end the issue by defining 'Group R' as those having one of the IBC Group R occupancies that can occur in a Commercial building and then it either removes or replaces the word 'residential' in various provisions. Group R is already used in various places in the code, most notably the building envelope (insulation) assembly tables.

Specific amendments:

1. The definitions of entrance door and storefront (a type of door) both have the word 'nonresidential' removed. The truth is these types of doors are often found on Group R buildings such as hotels and larger apartment buildings. Removal of the term 'non-residential' will not change how the fenestration industry considers these doors.

2. Section C101.4.1 and R101.4.1 are both now titled Mixed occupancy - but the discussion is not about mixed occupancy as someone used to the IBC would consider a mixed occupancy, but is addressing when a building might meet the definitions of Residential Building and Commercial Building. This controls which half of the code is used - not provisions within each half of the code.

3. Section C406.7: The text is removed because it is redundant. Group R-2 buildings are residential occupancy buildings.

4. C407.5.2.3 In this case the term Multifamily residential building appeared to be applying to Group R-2 apartments and not other types of residential occupancy. If the committee believes this applies to hotels, motels and Group R-4 care facilities - then the term Group R should be used instead of Group R-2.

This proposal was submitted by the ICC Sustainability Energy and High Performance Code Action Committee (SEHPCAC). The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2015, the SEHPCAC has held three two- or three-day open meetings and 25 workgroup calls, which included members of the SEHPCAC as well as any interested parties, to discuss and debate proposed changes and public comments. Related documentation and reports are posted on the SEHPCAC website at: http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx

Cost Impact: Will not increase the cost of construction
The intent of the proposal is editorial in nature. To the extent that people had previously interpreted 'residential' to apply to hospital patient room and nursing home sleeping units, there may be some increase in cost for envelope insulation or HVAC systems.

Analysis: This proposal does not impact Chapter 11 of the IRC.

CE157-16 : C403.3-COLLINS11666

CE292-16

IECC: , C505.1, C505.2 (New), C505.2.1 (New), C505.2.2 (New), C505.3 (New), C505.3.1 (New), C505.3.2 (New), C505.3.3 (New).

Proponent : Jennifer Senick, Rutgers University, Center for Green Building, representing Rutgers University, Center for Green Building (jsenick@rutgers.edu)

2015 International Energy Conservation Code

Revise as follows:

C505.1 General. Spaces undergoing a change in occupancy ~~that would result in an increase in demand for either fossil fuel~~ from a F,H or ~~electrical energy~~ U occupancy to any other occupancy classification shall comply with this code. ~~Where the use in~~ Other spaces undergoing a ~~space changes from one use in Table C405.4.2(1) or C405.4.2(2) to another use in Table C405.4.2(1) or C405.4.2(2), the installed lighting wattage~~ change of occupancy shall comply with Sections C505.2 and C505.3. *Alterations* made concurrently with the change of occupancy shall be in accordance with Section ~~C405.4~~ C503.

Add new text as follows:

C505.2 Loads. Lighting loads and ventialtion shall comply with Sections C505.2.1 and C505.2.2.

C505.2.1 Lighting Wattage. Where the use in a space changes from one use in Table C405.4.2(1) or C405.4.2(2) to another use in Table C405.4.2(1) or C405.4.2(2), the installed lighting wattage shall comply with Section C405.4.

C505.2.2 Ventilation. Where the use in a space changes from one use to another as listed in Table 403.3.1.1 of the *International Mechanical Code* (IMC) the ventilation rate provided shall be as specified for the new occupancy in the IMC.

C505.3 Energy Intensities. Where a change of occupancy or use is made to an existing building that results in an increase in energy intensity classification as specified in Table C505.3.1, C505.3.2 or 505.3.3, the building or portion thereof shall comply with Sections C505.3.1 through C505.3.3 respectively that are applicable to the new occupancy and use. Where changes in occupancy and use are made to portions of an existing building only those portions of the building shall comply with Sections C505.3.1 through C505.3.3 as specified herein.

Exceptions:

1. Where it is demonstrated by analysis *approved* by the *code official* that the change will not increase usage of fossil fuel or electrical energy.
2. Where the occupancy or use change is less than 5,000 square feet in area.

C505.3.1 Space Heating, Cooling and Ventilation.
Where the change of occupancy or use results in an increase in energy intensity classification as specified in Table C505.3.1, the building or space undergoing the change shall comply with Section C402 and C403 applicable to the new occupancy and use. Where a change of occupancy or use is made to a whole building that exceeds the maximum fenestration area

allowed by Section C402.4.1, the building shall comply with Section C402.1.5

Exception:
Where the change of occupancy or use is made to a portion of the building, the new occupancy is exempt from Section C402.4.1 provided that there is not an increase in fenestration.

TABLE C505.3.1
Space Heating, Cooling and Ventilation.

Energy Intensity Classification	IBC Occupancy Classifcation and Use
1. High	A-2, B-Laboratories, I-2
2. Medium	A-1, A-3[a], A-4, B[b], E, I-1, I-3, M, R-4
3. Low	A-3-Places of Religious Worship, R-1, R-2, S-1, S-2

C505.3.2 Lighting Where the change of occupancy or use results in an increase in energy intensity classifcation as specified in Table C505.3.2, the building or space undergoing the change shall comply with Section C405 applicable to the new occupancy and use except for Section C405.5.

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TABLE C505.3.2
Lighting

Energy Intensity Classification	IBC Occupancy Classifcation and Use
1. High	A-2, B-Laboratories, I-2, M-Food Sales
2. Medium	A-3-Courtrooms, B[c], I-1, I-3, M[b], R-1, R-2, R-4, S-1, S-2
3. Low	A-1, A-3[a], A-4, E

C505.3.3 Service Water Heating. Where the change of occupancy or use results in an increase in energy intensity classification as specified in Table C505.3.3, the building or space undergoing the change shall comply with Section C404 applicable to the new occupancy and use.

TABLE C505.3.3
Service Water Heating

Energy Intensity Classification	IBC Occupancy Classifcation and Use
1. High	A-2, I-1, I-2, R-1, R-4
2. Low	All other occupancies and uses

Reason: The IECC 2015 change of occupancy requirement states (C505.1):

"Spaces undergoing a change in occupancy that would result in an increase in demand for either fossil fuel or electrical energy shall comply with this code."

Field research and surveys of building officials demonstrate that this requirement is not widely enforced. Once reason for this is that while it is a clear performance requirement, there is no simple compliance evaluation method other than energy modeling, which is beyond the capabilities of most change of occupancy permit applicants. Another is that there is an inconsistency between the IECC Commentary on this requirement, which interprets energy demand as peak energy demand, and the intent of the IECC, **C101.3 Intent**: "This code shall regulate the design and construction of buildings for the use and **conservation** of energy over the life of each building" (emphasis added). Peak energy demand does not necessarily correlate with energy use. In our experience, building officials often require energy efficiency equipment upgrades, such as lighting or HVAC, in change of occupancy.

This proposal advances intensity per square foot as the metric for energy demand and the trigger for code compliance. Historic energy intensity per square foot is recorded for commercial buildings in the Commercial Buildings Energy Consumption Survey (CBECS) and the Building Performance Database (BPD), for residential buildings in the Residential Energy Consumption Survey (RECS), and for industrial buildings in the Manufacturers Energy Consumption Survey (MECS). These databases make it possible to rank building occupancies in the order of their energy intensities. Note that the ranking of occupancies to trigger specific code requirements has been a feature of the IEBC since its first edition (see IEBC 2015 Section 1012, Change of Occupancy Classification, Tables 1012.4, 1012.5 and 1012.6), and thus is familiar to building code officials.

Energy intensity data is further broken down by various end uses, as suggested by current enforcement practices: space conditioning, lighting, and water heating, which makes it possible to trigger code compliance of specific sections of the IECC by an increase in intensity for the use regulated by those sections. Only an increase in energy intensities in all three of the end uses triggers full compliance with the code.

There are ventilation requirements in the IMC and lighting wattage requirements in the IECC that are triggered by occupancy changes that do not correspond exactly to the energy intensity order of occupancies. The requirements are preserved by Section 505.2 of the proposed code change respectively.

There are two exceptions that apply to all three end uses:

C505.3 Exception 1 allows the applicant to demonstrate by analysis that the specific change will not increase energy intensity.

C505.3 Exception 2 provides an area limitation as a consideration of fairness to smaller applicants.

Three exceptions apply to specific end uses:

C505.3.1 Exceptions 1 and 2 address specific fenestration requirements.

C505.3.2 Exceptions excludes exterior lighting.

A matrix has been developed for each end use that displays a scale fo 2-3 groups in descending order from high to low energy intensities, measured in annual kBTU/ft2 (Tables 1-3). Within these scales are grouped CBECS building types and the corresponding International Building Code (IBC) occupancy classifications. Data sources for this analysis included primarily U.S. Department of Energy's CBECS 2003 and 2012 (aspects), BPD 2015, and RECS

2009. It was decided to include F, H and U occupancies in the code change proposal. An analysis of the 2010 Manufacturing Energy Consumption Survey (MECS) showed that many industries in these occupancy classifications could be classified in the low energy intensity categories, some were higher. However, since F, H and U buildings are not designed primarily for occupant comfort and safety, it was decided that a change from F, H and U to any other occupancy should comply with the code.

Table 1. Change of Occupancy Scale - Space Heating, Cooling, and Ventilation

	CBECS Building Type	EI Range kBTU/sq.ft.	IBC Occupancy Classification
1. High	Health Care (Inpatient), Food Service, Laboratories	Above 75	A-2, B-Laboratories, I-2
2. Medium	Public Assembly, Education, Public Order and Safety, Office, Service, Health Care (Outpatient), Retail, Residential Care/Assisted Living	34-75	A-1, A-3, A-4, B, E, I-1, I-3, M, R-4
3. Low	Religious Worship, Lodging, Apartments, Warehouse and Storage	0-33	A-3-Places of Religious Worship, R-1, R-2, S-1, S-2

Table 2. Change of Occupancy Scale - Lighting

	CBECS Building Type	EI Range kBTU/sq.ft.	IBC Classification
1. High	Health Care (Inpatient), Food Sales, Food Service, Laboratories	Above 31	A-2, B-Laboratories,I-2, M-Food Sales
2. Medium	Retail, Lodging, Office, Health Care (outpatient), Public Order and Safety, Service, Lodging, Apartments, Residential Care/Assisted Living,Warehouse and Storage	13-31	A-3-Courtrooms, B, I-1, I-3, M, R-1, R-2, R-4, S-1, S-2
3. Low	Public Assembly, Religious Worship,	0-12	A-1, A-3, A-4, E

Table 3. Change of Occupancy Scale - Water Heating

	CBECS Building Type	EI Range kBTU/sq.ft.	IBC Occupancy Classification
1. High	Food Service, Health Care (Inpatient),Lodging,Residential Care/Assisted Living	Above 15	A-2, I-1, I-2, R-1, R-4
2. Low	All the rest	0-15	All the rest

The concept for this code change proposal was presented at the 2015 DOE Energy Code Conference in Nashville and at two annual codes conferences organized by NEEP. It has benefited from extensive reveiw and feedback from numerous building officials in multiple states, other stakeholders participating in SEHPCAC and from technical reviewers at CBEI.

This code change has been developed withe the support from the Consortium for Building Energy Innovation (CBEI), a project of the U.S. Department of Energy.

Cost Impact: Will not increase the cost of construction
The current code requirement triggers full compliance with the code when there is an increase in energy demand. The proposed code change offers the metric of energy intensity per square foot per year for measuring energy demand by occupancy. It applies this metric separately to three energy end uses: space conditioning, lighting, and water heating. Therefore, compliance with the code is triggered only for the end uses for which energy intensity is increased.

In most cases, the proposed change triggers partial code compliance, and only rarely will it trigger full code compliance.

CE292-16 : C505.1-SENICK12379

EB60-16

IEBC: [BS] A301.2.

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

THIS CODE CHANGE WILL BE HEARD BY THE IBC-STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEES.

2015 International Existing Building Code

Revise as follows:

[BS] A301.2 Scope. The provisions of this chapter apply to residential buildings of light-frame wood construction containing one or more of the structural weaknesses specified in Section A303.

Exception: The provisions of this chapter do not apply to the buildings, or elements thereof, listed below. These buildings or elements require analysis by a registered design professional in accordance with Section A301.3 to determine appropriate strengthening:

1. Group R-1.
2. ~~Group R-1, R-2 or R-4 occupancies with more than four dwelling units.~~
3. Group R with more than four dwelling units.
4. Buildings with a lateral force-resisting system using poles or columns embedded in the ground.
5. Cripple walls that exceed 4 feet (1219 mm) in height.
6. Buildings exceeding three stories in height and any three-story building with cripple wall studs exceeding 14 inches (356 mm) in height.
7. Buildings where the *code official* determines that conditions exist that are beyond the scope of the prescriptive requirements of this chapter.
8. Buildings or portions thereof constructed on concrete slabs on grade.

Reason: The purpose of this code change is to coordinate the exceptions to Section A303 with the Group R occupancies and uses in the IBC. The original scope of this appendix in the UBC was limited to single-family homes, duplexes, and other small congregate residences. Proposal EB78-04/05 modified the scope and exception to replace the reference to UBC Group R, Division 1 with the what was intended to be the appropriate Group R categories in the IBC. The modification was not quite correct.
Detached small group homes/congregate residences are equivalent to single family homes, Thus, the exception needs to be modified to remove the limitation on Group R-4 buildings. These facilities should be able to use this appendix.

In addition, the language regarding number of dwelling units typically does not apply to Group R-1, but more typically to Group R-2 and R-3. It is noted the UBC originally excluded all multifamily occupancies and other Group R, Division 1 occupancies and uses from the appendix. Thus the limiting language is split between transient lodging (Group R-1) and facilities with dwelling units (all Group R).

Below is the original change.

EB78-04/05
A301.2
Proponent: Michael Valley, Magnusson Klemencic Associates, Seattle, WA, representing CSEA/Structural Engineers Association of Washington

Revise as follows:

A301.2 Scope. The provisions of this chapter apply to light, wood–frame residential buildings of light-frame wood construction ~~that are in~~ assigned to Seismic Design ~~Category~~ Categories C, D, or E ~~and F of the 2003 IBC (located in~~

~~Seismic Zones 3 and 4 of the UBC)~~, containing one or more of the structural weaknesses specified in Section A303.

Exception: The provisions of this chapter do not apply to the buildings, or elements thereof, listed below. These buildings or elements require analysis by an engineer or architect in accordance with Section A301.3 to determine appropriate strengthening.
1. Group ~~R, Division 1~~R-1, R-2 or R-4 occupancies with more than four dwelling units.
2. Buildings with a lateral–force–resisting system using poles or columns embedded in the ground.
3. Cripple walls that exceed 4 feet (1219 mm) in height.
4. Buildings exceeding three stories in height and any three–story building with cripple wall studs exceeding 14 inches (356 mm) in height.
5. Buildings where the building official determines that conditions exist that are beyond the scope of the prescriptive requirements of this chapter.

The provisions of this chapter do not apply to structures, or portions thereof, constructed on a concrete slab on grade.
The details and prescriptive provisions herein are not intended to be the only acceptable strengthening methods permitted. Alternative details and methods may be used when approved by the building official. Approval of alternatives shall be based on test data showing that the method or material used is at least equivalent in terms of strength, deflection and capacity to that provided by the prescriptive methods and materials.
The provisions of this chapter may be used to strengthen historic structures, provided they are not in conflict with other related provisions and requirements that may apply.

Reason: Editorial: Revise construction type to be consistent with IBC language (see IBC Section 2302.1), and revise occupancy in exception 1 to be consistent with the IBC (see IBC Section 310.1). Note that the IBC specifies four Group R occupancies, while the UBC specified only two such divisions. The added IBC divisions are added to the exception to maintain the previous scope of this chapter based on the UBC occupancy classification.
It is not appropriate to exempt buildings assigned to SDC C from these requirements as this covers buildings in what is considered a moderate level of seismic hazard. SDC F is only associated with Occupancy Category IV, to which this chapter does not apply.

This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
The original intent was for the provisions of Appendix A3 to apply to single family homes, including small group homes, for reasons of public health and safety. This proposal restores that intent. This is an allowance for group homes to utilize Appendix A3, not an additional requirement.

EB60-16 : [BS] A301.2-
BALDASSARRA12036

FS1-16

IBC: 806.3 (New), [F] 806.1, [F] 806.2, [F] 806.3, [F] 806.4.

Proponent : Carl Baldassarra, P.E., FSFPE, representing the Code Technology Committee (CTC@iccsafe.org);
Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

THIS CODE CHANGE WILL BE HEARD BY THE FIRE CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2015 International Building Code

Revise as follows:

[F] 806.1 General. Combustible decorative materials, other than decorative vegetation, shall comply with Sections 806.2 through 806.8.

[F] ~~806.3~~ 806.2 Combustible decorative materials. In other than Group I-3, curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall comply with Section 806.4 and shall not exceed 10 percent of the specific wall or ceiling area to which such materials are attached.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered *interior finish* shall comply with Section 803 and shall not be considered *decorative materials* or furnishings.

Exceptions:

1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.13 of this code.
2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and similar decorative materials suspended from walls or ceiling shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.
3. In Group B and M occupancies, the amount of combustible fabric partitions suspended from the ceiling and not supported by the floor shall comply with Section 806.4 and shall not be limited.

Delete without substitution:

~~**[F] 806.2 Noncombustible materials.** The permissible amount of noncombustible materials shall not be limited.~~

Add new text as follows:

806.3 Occupancy-based requirements. Occupancy-based requirements for combustible decorative materials not complying with Section 806.4 shall comply with Sections 807.5.1 through 807.5.6 of the *International Fire Code*.

[F] 806.4 Acceptance criteria and reports. Where required to exhibit improved fire performance, curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall be tested by an *approved agency* and meet the flame propagation performance criteria of Test 1 or 2, as appropriate, of NFPA 701, or exhibit a maximum heat release rate of 100 kW when tested in accordance with NFPA 289, using the 20 kW ignition source. Reports of test results shall be prepared in accordance with the test method used and furnished to the *building official* upon request.

Reason: *F109-13 deleted what is currently shown in IBC 806.2. Basically an exception for noncombustible materials is not needed in a section on combustible materials. The IBC and IFC should be consistent. It is not proposed to copy IFC 807.2 Limitations, because it includes maintenance issues, not construction requirements. The reference for occupancy specific decorative materials in 806.4 is to make the code official aware of the provisions for Group A, E, I, and R-2 in the IFC. Another alternative would be to repeat the sections here and scope administration to the IFC.*

It should be noted that the current text in IBC Section 806.1, 806.3 and 806.4 are copies of the text in IFC 807.1, 807.3 and 807.4. IBC Section 806.5 through 806.8 are also direct copies of sections in the IFC.

IBC section	***IFC Section***
806.1	*807.1*
806.2	*Text deleted from 2015 IFC by F109-13*
806.3	*807.3*
806.4	*807.4*
806.5	*804.2*
806.6	*807.5.1.4*
806.7	*804.1.1*
806.8	*804.4*

This proposal is submitted by the ICC Code Technology Committee (CTC) and the ICC Fire Code Action Committee (FCAC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This is a coordination with the requirement in the IFC. There are not changes to construction requirements

FS1-16 : 806-BALDASSARRA12042

G35-16

IBC: [F] 2702.1.7; IFC: 604.1.7.

Proponent : Gregory Wilson (gregory.wilson2@fema.dhs.gov); Rebecca Quinn, representing Federal Emergency Management Agency (rcquinn@earthlink.net)

THIS CODE CHANGE WIILL BE HEARD BY THE IFC COMMITTEE. SEE THE HEARING ORDER FOR THIS COMMITTEE.

2015 International Building Code

Revise as follows:

[F] 2702.1.7 Group I-2 occupancies. In Group I-2 occupancies~~, in new construction or where the building is substantially damaged, where an essential electrical system is~~ located in flood hazard areas established in Section 1612.3 where new or replacement essential electrical systems are installed, the ~~system~~ systems shall be located and installed in accordance with ASCE 24. Where connections for hook up of temporary generators are provided, the connections shall be located at or above the elevation required in ASCE 24.

2015 International Fire Code

Revise as follows:

604.1.7 Group I-2 occupancies. In Group I-2 occupancies~~, where an essential electrical system is~~ located in flood hazard areas established in Section 1612.3 of the *International Building Code*~~and~~ where new or replacement essential electrical ~~system generators~~ systems are installed, the ~~system~~ systems shall be located and installed in accordance with ASCE 24. Where connections for hook up of temporary generators are provided, the connections shall be located at or above the elevation required in ASCE 24.

Reason: This proposal does two things to combine texts in two codes to produce the same phrasing in both sections, which was the original intent when these sections were approved for the 2015 editions. The differences between IBC 2702.1.7 and IFC 604.1.7 were brought to the attention of ICC staff several months ago.
First, the proposal makes the requirement apply to new and replacement essential electrical systems. Second, it makes the requirement apply to essential electrical systems, not just "essential electrical system generators" because a generator is a part of an essential electrical system. The term "essential electrical system" is used in the IBC and IFC, but defined in NFPA 99.

The proposal adds a requirement related to hook up of temporary generators. Hook ups should be above the required flood elevation (i.e., at or above the same elevation as the building's lowest floor or dry floodproofing level), otherwise if inundated, the hook ups may not be functional and readily when floodwater rises to that elevation.

Cost Impact: Will not increase the cost of construction
Intent is to make the sections consistent.

G35-16 : [F] 2702.1.7-WILSON12138

F76-16

IFC: 604.4, 604.4.1 (New), 604.5, 604.5.1 (New).

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

2015 International Fire Code

604.4 Maintenance. Emergency and standby power systems shall be maintained in accordance with NFPA 110 and NFPA 111 such that the system is capable of supplying service within the time specified for the type and duration required.

Add new text as follows:

604.4.1 Group I-2. In Group I-2 occupancies, emergency and standby power systems shall be maintained in accordance with NFPA 99.

604.5 Operational inspection and testing. Emergency power systems, including all appurtenant components, shall be inspected and tested under load in accordance with NFPA 110 and NFPA 111.

> **Exception:** Where the emergency power system is used for standby power or peak load shaving, such use shall be recorded and shall be allowed to be substituted for scheduled testing of the generator set, provided that appropriate records are maintained.

604.5.1 Group I-2. In Group I-2 occupancies, emergency and standby power systems shall be maintained in accordance with NFPA 99.

Reason: There are special requirements in NFPA 99 for the maintenance and inspection of generators installed at hospitals and nursing homes. In addition to these special requirements, 99 also references NFPA 110. It is important to reference this code as it is the current federal standard and the one facilities are used to complying with.
This is a joint proposal submitted by the ICC Ad Hoc Committee on Healthcare (AHC) and the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 the ICC Ad Hoc Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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: AHC.
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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is already required under the requirements for federal funding and participation in Medicare.

F76-16 : 604.4-WILLIAMS12002

F78-16

604.2.6, 1105.10; IBC 407.10, [F] 2702.2.6

Proponent : Jonathan Roberts (jonathan.roberts@ul.com)

2015 International Fire Code

Revise as follows:

604.2.6 (IBC [F] 2702.2.6) Group I-2 occupancies. Essential electrical systems for Group I-2 occupancies shall be in accordance with Section 1105.10 and with Section 407.10 of the *International Building Code*.

1105.10 Essential electrical systems. Essential electrical systems in Group I-2 Condition 2 occupancies shall be in accordance with Sections 1105.10.1, 1105.10.2 and ~~1105.10.2~~ 604.

2015 International Building Code

Revise as follows:

407.10 Electrical systems. In Group I-2 occupancies, the essential electrical system for electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of ~~Chapter 27~~ Section 2702 and NFPA 99.

Reason: Essential electrical equpment for Group I-2 are not consistent with the way other emergency and standby power systems are handled. This proposal provides a needed link between existing codes sections and it follows the format used throughout the code for essential electrical, emergency and standby power, and makes no substantive changes.

Cost Impact: Will not increase the cost of construction
Only provides linkage within the code bewtween related existing code sections.

F78-16 : 6042.6-ROBERTS11469

F127-16

IFC: 805.2, 805.2.1, 805.2.1.1.

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

2015 International Fire Code

Revise as follows:

805.2 Group I-2~~, nursing homes~~ and ~~hospitals~~ ambulatory care facilities. The requirements in Sections 805.2.1 through 805.2.2 shall apply to ~~nursing homes~~ Group I-2 occupancies and ~~hospitals classified in Group I-2~~ ambulatory care facilities.

805.2.1 Upholstered furniture. Newly introduced upholstered furniture shall meet the requirements of Sections 805.2.1.1 through 805.2.1.3.

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

> **Exception:** Upholstered furniture belonging to the patients in sleeping rooms of ~~nursing homes (~~Group I-2~~)~~ Condition 1 occupancies, provided that a smoke detector is installed in such rooms. Battery-powered, single-station smoke alarms shall be allowed.

Reason: This requirement is already in place in facilities that conform with federal standards, which is effective for the patient care environment. Flamespread in ambulatory care facilities, where patients are rendered incapable of self preservation, are important to prevent the spread of fire to protect that vulnerable population.
The language in the Exception of 805.2.2.1 is being clarified to reflect the accurate Condition for Nursing Home Occupancies, which is I-2, Exception 1, which was changed in the 2015 cycle.
This is a joint proposal submitted by the ICC Ad Hoc Committee on Healthcare (AHC) and the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 the ICC Ad Hoc Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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: AHC.
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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This requirement is already met by a wide range of manufacturers that specialize in furniture in the healthcare environment, making products available and at competitive pricing.

F130-16

806, 806.2, 806.3, 806.4, 806.5, 807, 807.1, 807.5 (New), 807.5.1 (New), 807.5.2 (New), 807.5 (IBC [F] 806.1)

Proponent : Marcelo Hirschler, representing GBH International (gbhint@aol.com); Robert Davidson, Davidson Code Concepts, LLC, representing Self (rjd@davidsoncodeconcepts.com)

2015 International Fire Code

Revise as follows:

SECTION 806 NATURAL DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS

Delete without substitution:

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

Revise as follows:

~~**806.3**~~ **806.2 Obstruction of means of egress.** *No change to text.*

~~**806.4**~~ **806.3 Open flame.** *No change to text.*

~~**806.5**~~ **806.4 Electrical fixtures and wiring.** The use of unlisted electrical wiring and lighting on natural vegetation, including natural cut trees ~~and artificial decorative vegetation~~ , shall be prohibited. ~~The use of electrical wiring and lighting on artificial trees constructed entirely of metal shall be prohibited.~~

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

807.1 General. Combustible decorative materials, ~~other than~~ including artificial decorative vegetation, shall comply with Sections 807.2 through ~~807.5.6~~ 807.6. Natural decorative vegetation shall comply with Section 806.

Add new text as follows:

807.5 Artificial Decorative Vegetation Artificial decorative vegetation shall comply with this section as well as with the requirements of Sections 806.2 and 806.3.

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

807.5.2 Electrical Fixtures and Wiring on Artificial Vegetation The use of unlisted electrical wiring and lighting on artificial decorative vegetation shall be prohibited. The use of electrical

wiring and lighting on artificial trees constructed entirely of metal shall be prohibited.

Revise as follows:

~~807.5~~ 807.6 Occupancy-based requirements. In occupancies specified, combustible decorative materials not complying with Section 807.3 shall comply with Sections ~~807.5.1~~ 807.6.1 through ~~807.5.6~~ 807.6.6.

Reason: This proposal moves all of the requirements for artificial decorative vegetation into the section on decorative materials. In that way the limitations in section 807.2 through 807.4 will apply to them as well. It has been claimed that there is often interest in displaying seasonal decorative items like a wreath and that it is not always possible to determine compliance of these items with NFPA 701 or NFPA 289. However, large artificial vegetation items that do not comply with either of the fire tests have been shown to generate massive amounts of heat when they burn. Therefore, this proposal would allow the fire code official to handle these items like any other combustible decorative material within the limitations of section 807.
This proposal creates a new section 807.5 dealing with artificial decorative vegetation within 807, which is the section on all decorative materials. The existing section 806.2 is moved to 807.5.1 and the requirements dealing with lighting and electrical are split so that section 806 contains only those dealing with natural vegetation and the new section 807.5.2 contains those dealing with artificial vegetation.

All existing section 807.5, dealing with specific occupancies, is being moved to become section 807.6, without change.

Cost Impact: Will not increase the cost of construction
Reorganizes the section to include artificial decorative vegetation with all other decorative materials.

F130-16 : 806-HIRSCHLER12692

F131-16

IFC: 806.1.4 (New).

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

2015 International Fire Code

Add new text as follows:

806.1.4 Fire retardant treatments for natural cut trees. If a fire retardant treatment is used to improve the fire performance of a natural cut tree the treatment shall have been approved for the application.

Reason: It has been shown that multiple treatments exist that claim to be appropriate for improving the fire performance of natural cut trees (typically Christmas trees) but not all of them are equally suitable for the application. If a treatment is used it must have been approved. In the state of California such an approval procedure exists and in ASTM a committee has developed a test method for conducting such approvals. The present proposal does not endorse any specific method because that is up to the ahj, but it is important that someone approves the use of any treatment being proposed for use. When a natural tree burns it can generate very high rates of heat release.

Cost Impact: Will increase the cost of construction
This will require treatments to show that they are effective before being allowed for regulated use.

**F131-16 : 806.1.4 (NEW)-
HIRSCHLER11656**

F132-16
IFC: 806.2.

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

2015 International Fire Code

Revise as follows:

806.2 Artificial vegetation. Artificial decorative vegetation shall meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701. Meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall be documented and certified by the manufacturer in an *approved* manner. Alternatively, the artificial decorative vegetation item shall be tested in accordance with NFPA 289, using the 20 kW ignition source, and shall have a maximum heat release rate of 100 kW.
Exception: In Groups I-1, I-2 Condition 1 or R-4 equipped throughout with an approved automatic sprinkler system installed in accordance with 903.3.1, artificial vegetation shall be of limited quantities such that a hazard of fire development or spread is not present.

Reason: In Group I-1 (Assisted Living), I-2 Condition 1 (Nursing homes) and R-4 (Group homes) residents often seek to create a home-like environment and personalize their space by displaying seasonal decorative items, like a wreath at their unit entry door. It is not always possible, or practical, to determine compliance with NFPA 701 or NFPA 289, especially for items procured by individual residents. The language of this proposed text is similar to the provisions for decorative materials in these use groups under Section 807. Further, by adding the language requiring sprinkler coverage, there would be a reduced risk for detrimental effects of limited quantities of artificial vegetation. Last code cycle, a similar proposal was brought to the floor and the committee approved it, with the deletion of the NFPA 701 testing method. The public comment sought to reinstate the NFPA 701 testing, but deleted the exception language at the same time. We are seeking to keep all of the testing methods, but make sure that the exception language, that the committee approved, is added.
This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is a reduction in elements for review by the Fire Code official.

F132-16 : 806.2-
BALDASSARRA12046

F133-16

IFC: 806.2.

Proponent : Amy Carpenter, SFCS Architects, representing Hulda B. and Maurice L. Rothschild Foundation

2015 International Fire Code

Revise as follows:

806.2 Artificial vegetation. Artificial decorative vegetation shall meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701. Meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 shall be documented and certified by the manufacturer in an *approved* manner. Alternatively, the artificial decorative vegetation item shall be tested in accordance with NFPA 289, using the 20 kW ignition source, and shall have a maximum heat release rate of 100 kW.
Exceptions: Testing of artificial vegetation is not required in Groups R-2 and R-3 occupancies, equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1, where such artificial vegetation complies with the following:
1. Wreaths and other decorative items on doors shall not obstruct the door operation and shall not exceed 50% of the surface area of the door.
2. Decorative artificial vegetation shall be limited to not more than 30% of the wall area to which they are attached.
3. Decorative artificial vegetation, not on doors or walls, shall not exceed 3 feet (914 mm) in any dimension.

Reason: In many apartment buildings, residents often seek to create a welcoming environment and personalize their space by displaying seasonal decorative items like a wreath at their entry door. It is not always possible, or practical, to determine compliance with NFPA 701 or 289, especially for items procured by individual residents. While this decorative practice is already very common in apartment buildings across the country, it is not addressed by the code and not uniformly enforced. This proposal seeks to add language clarifying what can be permitted, give the AHJ guidance, and to make sure that this only occurs in sprinklered buildings.
The language of this proposed text is similar to the provisions for combustible decorative materials in Section 807. Further, the proposal seeks to provide more guidance to what has previously been allowed under "limited quantities". The concern is, for artificial vegetation, that it is difficult to quantify and limit the objects. We have set three limiting factors.
1. Items such as wreaths on apartment entry doors, we are quantifying a maximum size and stating that it can't interfere with the operation of the door itself.
2. Items such as garlands or other items that might be attached to a wall, we are taking the same language limiting combustible decorations as is currently in the code in Section 807.5.3.3 for Nursing Homes.
3. Lastly, because often decorative vegetation items are not on a wall or a door, but rather placed on a shelf or table, like in the attached image, we have placed a size limit on these other items. Larger items, such as an artificial tree or larger artificial plant would need to comply with the NFPA testing requirements in the base paragraph.

Last code cycle, a similar proposal was brought to the floor that allowed for "limited quantities" of untested vegetation, but also replaced the NFPA 701 testing method with the NFPA 289 test. The committee approved it. A public comment was brought to the floor to reinstate the NFPA 701 test, but removed the limited quantities provision at the same time. We are maintaining all of the testing methods, but seeking to allow the defined, limited quantities of untested vegetation.

I invite you to also look at the following research: BRE Global, LTD report: Effectiveness of Fire Sprinklers in Residential Premises (2005) – This study found residential sprinklers effective to stop the majority of residential fires. Fuel sources included furniture, finishes and draperies. http://www.bre.co.uk/page.jsp?id=422

Cost Impact: Will not increase the cost of construction
As most decorative vegetation is supplied by individual residents, it will have no impact on the cost of construction. It may actually decrease the cost for code officials by decreasing the number of elements for review.

F133-16 : 806.2-CARPENTER10985

F134-16

807.1 (IBC [F] 806.1)

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Revise as follows:

807.1 General. ~~Combustible~~
In Groups A, E, I and R-1, and dormitories in Group R-2, combustible decorative materials, other than decorative vegetation, shall comply with Sections 807.2 through 807.5.6.

Reason: When F109-13 was submitted, the reason stated that it was only a clarification. But in fact, the requirements for combustible decorative materials which previously had only applied to A, E, I, R-1 and dormitories in R-2 suddenly applied to all occupancies. It appears that change was done unintentionally, so this proposal intends to correct that situation.
There is no significant reason to begin regulating drapes and curtains in Group F, S or U occupancies.

Additionally, there are no specific occupancy limitations noted in Sections 807 and 808 for Groups F, S and U. So this proposal is consistent with the remainder of the provisions.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This proposal will not increase the cost of construction. In fact, it will reduce the cost of construction in those occupancies which do not need to comply.

F134-16 : 807.1-O'BRIAN11009

F135-16

IFC: 807.3 (IBC: [F] 806.3)

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

2015 International Fire Code

807.3 Combustible decorative materials. In other than Group I-3, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached. In Group I-3 combustible decorative materials are prohibited.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered *interior finish*, shall comply with Section 803 and shall not be considered *decorative materials* or furnishings.

Exceptions:

1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and other similar combustible decorative material suspended from walls or ceilings shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.13 of the *International Building Code*.
2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and other similar decorative materials suspended from walls or ceilings shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.
3. In Group B and M occupancies, the amount of combustible fabric partitions suspended from the ceiling and not supported by the floor shall comply with Section 807.4 and shall not be limited.
4. In other than Group I-3, curtains, draperies, fabric hangings and similar combustible decorative materials used as window coverings.

Reason: The first change would reinstate the prohibition against the use of combustible materials in Group I-3 occupancies. The second change would remove any limitations on window coverings. Virtually every hotel room in the world has a window; in fact natural light in hotel rooms is a requirement under section 1205 of the code. Some hotel rooms use glazing for the entire exterior wall. Without this proposal typical hotel room drapes at required windows could not be used. This proposal intends to solve any interpretation issues that may occur with window coverings.

Cost Impact: Will not increase the cost of construction
The proposal will provide clarity for Group I-3 occupancies and more flexibility for window coverings, therefore there are no cost impacts associated with this proposal.

**F135-16 : 807.3-
DIGIOVANNI3840**

F136-16

807.3 (IBC [F] 806.3)

Proponent : Bob Morgan, Fort Worth Fire Department, representing Fort Worth Fire Department

2015 International Fire Code

807.3 Combustible decorative materials. In ~~other than~~ occupancies in Groups A, E, I-1, I-2, I-4, and R-1, and dormitories in Group ~~I-3~~ R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered *interior finish*, shall comply with Section 803 and shall not be considered *decorative materials* or furnishings.

Exceptions:

1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and other similar combustible decorative material suspended from walls or ceilings shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.13 of the *International Building Code*.
2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and other similar decorative materials suspended from walls or ceilings shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.
3. In Group B and M occupancies, the amount of combustible fabric partitions suspended from the ceiling and not supported by the floor shall comply with Section 807.4 and shall not be limited.

Reason: Section 807 was re-arranged and modified in the 2015 edition. The language proposed would change the charging statement for curtains, draperies, and hangings back to the legacy language. The current 2015 edition wording would apply the 701 limitation and 10% criteria to all new and existing occupancies other than I-3. Such a change is a tremendous expansion of the requirement and unenforceable. No justifcation that I could find (and I did call ICC to clarify and notify them of the issue) was provided in the code change to the 2015 edition to account for this vast change in the requirement.
This proposed change is just an effort to go back to the more reasonable requirement from past editions of the code and to correct the apparent mistake that occurred in the 2015 edition. I would be supportive of increasing the requirement in general, especially for new construction, but such should be substantiated and justified to the committee and membership.

Cost Impact: Will not increase the cost of construction
This change could save many thousands of dollars, possibly millions, especially considering the effect that the 2015 edition requirement would have on existing buildings if the language were to be enforced as written across the country.

F136-16 : 807.3-MORGAN13234

F138-16

IFC: 808.1, 808.1.1 (New), 808.1.2 (New).

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

2015 International Fire Code

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

Add new text as follows:

808.1.1 Capacity density. The average capacity density of containers located in an individual room or space shall not be greater than 0.5 gal/ft2 (20.4 L/m2).

808.1.2 Recycling clean waste containers. Recycling clean waste containers, including their lids, shall not exceed an individual capacity of 96 gallons (363 L).

Reason: This proposal will provide correlation with NFPA 101-2012, originally base Section 19.7.5.7.1, which contains similar provisions for healthcare occupancies. This proposal will also provide correlation with current CMS licensure inspection requirements.
In I-1, I-2 and I-3 occupancies, there is a great need for containers to handle a wide range of waste material. For institutional settings where occupants are sleeping, this is a particular issue. On a patient bed unit (either hospital, nursing home, or skilled care) or an inmate area, hampers containing soiled linen, regulated medical waste, and infectious waste are needed to be placed in rooms in a safe manner. In a clerical setting, there is paper with sensitive information that needs to be specially handled and destroyed, which requires separate waste containers. Paper recycling is also a concern for proper storage. This standard seeks to regulate the concentration of these materials so as not to create a hazard that goes beyond the active and passive fire containment systems in place in the hospital. The recommended size and space concentration are based on current federal standards, which are already being followed by hospitals, nursing homes, correctional facilities, and any other facility receiving federal funding.
This is a joint proposal submitted by the ICC Ad Hoc Committee on Healthcare (AHC) and the ICC Code Technology Committee (CTC) in cooperation with Robert Davidson.

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. In 2014 and 2015 the ICC Ad Hoc Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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: AHC.

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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes.

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 CTC.

Robert Davison is co-sponsoring this code change proposal regarding Group I-3 criteria.

Cost Impact: Will not increase the cost of construction
The proposed chance is reflective of current operational practices, and will not increase construction costs.

F138-16 : 808.1.1 (NEW)-WILLIAMS11993

F150-16

901.11 (New)(IBC [F] 901.9 (New)), 903.2.10 (New) (IBC [F] 903.2.10 (New))

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

2015 International Fire Code

Add new text as follows:

901.11 (IBC [F] 901.9) Risk Category Fire protection requirements based on Risk Category shall use the classification of buildings and structures in accordance with Table 901.11.

TABLE 901.11
Risk Category of Buildings and Other Structures

RISK CATEGORY	NATURE OF OCCUPANCY
I	Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to: • Agricultural facilities. • Certain temporary facilities. • Minor storage facilities.
II	Buildings and other structures except those listed in Risk Categories I, III and IV.
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing Group E occupancies with an occupant load greater than 250. • Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500. • Group I-2 occupancies with an occupant load of 50 or more resident care recipients but not having surgery or emergency treatment facilities. • Group I-3 occupancies. • Any other occupancy with an occupant load greater than 5,000.a • Power-generating stations, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV. • Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the *International Fire Code*; and

	Are sufficient to pose a threat to the public if released.

IV	Building and other structures designated as essential facilities, including but not limited to:
	• Group I-2 occupancies having surgery or emergency treatment facilities.
	• Fire, rescue, ambulance and police stations and emergency vehicle garages.
	• Designated earthquake, hurricane, or other emergency shelters.
	• Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.
	• Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures.
	• Buildings and other structure containing quantities of highly toxic materials that:
	  ○ Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the *International Fire Code;* and
	  ○ Are sufficient to pose a threat to the public if released.
	• Aviation control towers, air traffic control centers and emergency aircraft hangars.
	• Buildings and other structures having critical national defense functions.
	• Water storage facilities and pump structures required to maintain water pressure for fire suppression.

903.2.10 Risk Category An *automatic sprinkler system*, according to Section 903.3.1.1, shall be provided throughout all buildings and structures assigned as Risk III or Risk IV by Table 901.11 with a building area greater than 1,000 square feet.

Exceptions:
1. Airport traffic control towers in accordance with Section 412.3 of the International Building Code.
2. Storm shelters with an occupant load of 16 or less.

Reason: These buildings and structures represent a substantial benefit to human life in the event of a catastrophe in the community and are designated as essential facilities by the IBC. Fire sprinklers protect property and provide life safety to these buildings in times of need by the community (before and) after any disaster. Experience with fire sprinklers shows that where fire occurs, fire sprinklers control the fire with minimal downtime and damage to the facility.
Table 901.11 is an exact reproduction of IBC Table 1604.5. The structural importance of a facility that is elevated for the reason of availability and service after a disaster is just as important to Chapter 9 as it is to Chapter 16 of the IBC. Some of these buildings and structures in Table 1604.5 of the IBC and the proposed IFC Table 901.11 are required to have sprinklers from other sections of the code (Chapter 9, Chapter 5 of the IBC). However, some can be classified as business or educational occupancies that the code determines to not be required to have fire sprinklers. If the message from Table 1604.5 for buildings in Risk III and IV is viability and resilience, then active fire protection should certainly be a part of these buildings. Fire sprinklers control fires and provide continuity. Fire sprinklers enhance a structure's performance and by leaving sprinklers out of some of these structures, they are compromised. This change provides consistency and provides a baseline for life and fire safety for these critical buildings in the community.

Bibliography: U.S. Experience with Sprinklers, John R. Hall, 2013, http://www.nfpa.org/research/reports-and-statistics/fire-safety-equipment/us-experience-with-sprinklers
IBC Code and Commentary, Volume 1, International Code Council, 2015, Page 16-8 through 16-11

Cost Impact: Will increase the cost of construction
Fire sprinkler systems increase the initial cost of the structure, however there are numerous economic benefits with having a fire sprinkler system installed throughout the building. Reduction in insurance premiums, business continuity, construction exceptions, community ratings, to name a few that provide a balance and payback of system installation costs.

F150-16 : 901.11 (NEW)-HUGO11623

F165-16

903.3.1.1.2 (IBC [F] 903.3.1.1.2)

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

2015 International Fire Code

Revise as follows:

903.3.1.1.2 Bathrooms. In Group R occupancies~~, other than Group R-4 occupancies,~~ sprinklers shall not be required in bathrooms that do not exceed 55 square feet (5 m^2) in area and are located within individual *dwelling units* or *sleeping units*, provided that walls and ceilings, including the walls and ceilings behind a shower enclosure or tub, are of noncombustible or limited-combustible materials with a 15-minute thermal barrier rating.

Reason: This exception is permitted for all other Group R occupancies. NFPA 101 does not require sprinklers in bathrooms based on fire studies in similar occupancies. There is no technical reason to require sprinklers in bathrooms in Group R-4.

This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is a reduction in sprinkler coverage requirements from current code.

F165-16 : 903.3.1.1.2-BALDASSARRA12028

F171-16

903.3.1.2.3 (New) (IBC [F] 903.3.1.2.3 (New))

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

2015 International Fire Code

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

903.3.1.2 NFPA 13R sprinkler systems. *Automatic sprinkler systems* in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18 288 mm) in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13R.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the *International Building Code* shall be measured from the horizontal assembly creating separate buildings.

903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of *dwelling units* and *sleeping units* where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

903.3.1.2.2 Open-ended corridors. Sprinkler protection shall be provided in *open-ended corridors* and associated *exterior stairways* and *ramps* as specified in Section 1027.6, Exception 3.

Add new text as follows:

903.3.1.2.3 Attics that are concealed combustible spaces. Attics constructed in a manner creating a concealed combustible space shall be protected in accordance with NFPA 13, Section 8.15.1.1 Concealed Spaces Requiring Sprinkler Protection if the roof assembly is located more than more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access.

The height of the roof assembly shall be determined by measuring the distance from the lowest level of the fire department vehicle access adjacent to the building vertically to the height of the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance.

Reason: The spread of fire into and throughout the concealed combustible spaces including attics of NFPA 13R protected buildings is because unlike NFPA 13, NFPA 13R does not require any protection of those spaces. Even the NFPA "Automatic Sprinkler Systems for Residential Occupancies Handbook, 2013 edition" recognizes this is occurring on a more frequent basis.

> "... although recently an increasing number of fires have spread through unsprinklered 13R attics. Although these fires have not resulted in loss of life, on several occasions they have resulted in a "total" property loss."

A simple solution other than eliminating the application of the NFPA 13R system altogether is to require that the concealed combustible spaces be protected as required by NFPA 13. There are a number of options to protect the spaces in NFPA 13 in addition to the option of an extension of the sprinkler system into the spaces.

The proposed modification to the code for the application of NFPA 13R systems when attics are constructed in a manner creating a concealed combustible space would require that attic to be protected in accordance with the

NFPA 13 requirements for concealed combustible spaces. There are numerous options within NFPA 13 for addressing this hazard in addition to installing sprinkler protection in the space offering designers and builders choices. The trigger for the application of this requirements is taken from Section 905.3.1 of the code addressing standpipes installations. This is the height at which the code traditionally recognizes an impact on the use of hose lines directly off a fire engine and that concept would be the same in the case of the attics, i.e., a height beyond which another level of fire protection is needed due to impacts on application of water from hose lines hand stretched from responding apparatus.

Based upon the recent fire history this modification is warranted. The sprinkler design advantages of NFPA 13R are maintained with the exception of the attic spaces at the higher level which would now be protected against the rapid and uncontrolled spread of fire.

Cost Impact: Will increase the cost of construction
This proposed change will increase the cost of construction by requiring additional protection for certian buildings with concealed combustible space constructed attics.

F171-16 : 903.3.1.2.3 (NEW)-DAVIDSON13517

F172-16

903.3.1.2.3 (New) (IBC [F] 903.3.1.2.3 (New)), 903.2.8.3 ([F] 903.2.8.3) , 903.2.8.3.1 (IBC [F] 903.2.8.3.1), 903.2.8.3.2 (IBC [F] 903.2.8.3.2)

Proponent : Jeffrey Shapiro, representing National Multifamily Housing Council ((jeff.shapiro@intlcodeconsultants.com); Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

903.3.1.2 NFPA 13R sprinkler systems. *Automatic sprinkler systems* in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18 288 mm) in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13R.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the *International Building Code* shall be measured from the horizontal assembly creating separate buildings.

Add new text as follows:

903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of *dwelling units* and *sleeping units* where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

903.3.1.2.2 Open-ended corridors. Sprinkler protection shall be provided in *open-ended corridors* and associated *exterior stairways* and *ramps* as specified in Section 1027.6, Exception 3.

903.3.1.2.3 Attics Attic protection shall be provided as follows:

1. Attics that are used or intended for living purposes or storage shall be protected by sprinklers.

2. Where fuel-fired equipment is installed in an unsprinklered attic, at least one quick-response intermediate temperature sprinkler shall be installed above the equipment.

3. Where located in a building of Type III or Type V construction designed in accordance with Section 510.2 or Section 510.4 of the *International Building Code*, attics not required by Item 1 to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet (16 764 mm) above the lowest level of required fire department vehicle access:
   a. Provide sprinkler protection.
   b. Construct the attic using noncombustible materials.
   c. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the *International Building Code*.
   d. Fill the attic with noncombustible insulation.

The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the

highest parapet, whichever yields the greatest distance. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503.

4. Group R-4 Condition 2 occupancy attics not required by Item 1 to have sprinklers shall comply with one of the following:

a. Provide sprinkler protection.
b. Provide a heat detector system throughout the attic that is arranged to activate the building fire alarm system in accordance with Section 907.2.10.
c. Construct the attic using noncombustible materials.
d. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the *International Building Code*.
e. Fill the attic with noncombustible insulation.

Revise as follows:

[F] 903.2.8.3 Group R-4 Condition 2. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4 Condition 2 occupancies. ~~Attics shall be protected in accordance with Section 903.2.8.3.1 or 903.2.8.3.2.~~

Delete without substitution:

~~**[F] 903.2.8.3.1 Attics used for living purposes, storage or fuel-fired equipment.** Attics used for living purposes, storage or fuel-fired equipment shall be protected throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.2.~~

~~**[F] 903.2.8.3.2 Attics not used for living purposes, storage or fuel-fired equipment.** Attics not used for living purposes, storage or fuel-fired equipment shall be protected in accordance with one of the following:~~

~~1. Attics protected throughout by a heat detector system arranged to activate the building fire alarm system in accordance with Section 907.2.10.~~
~~2. Attics constructed of noncombustible materials.~~
~~3. Attics constructed of fire-retardant-treated wood framing complying with Section 2303.2 of the *International Building Code*.~~
~~4. The *automatic sprinkler system* shall be extended to provide protection throughout the attic space.~~

Reason: This proposal is recommended as a response to fire-service concerns about suppressing a fire involving a tall pedestal building attic. Such attic or attics will be required to have increased fire protection. The proposed threshold is modeled after a combination of two existing code sections, Appendix D Section 105.1 (which establishes requirements for aerial ladder access based on attic height) and Section 903.2.11.3 (which uses 55 feet as a building height threshold related to sprinklers). Pedestal buildings that exceed 4 stories above grade plane, including the pedestal, are anticipated to be affected by this proposal, as would be some pedestal buildings with fewer stories that are located on sloped lots with fire department vehicle access roads required along a lower-elevation portion of the perimeter. The intent of stating "required" fire vehicle access is to make it clear that, simply because access is available on an adjacent road or parking lot, that road need not be considered in the height measurement unless it is required as part of satisfying the code requirement for vehicle access to the building. The permissible attic protection options for pedestal buildings are generally modeled after existing Section 903.2.8.3, which was added to the 2015 code for R-4 Condition 2 occupancies. However, based on feedback received during the drafting/review process for this proposal, it was decided to exclude the R-4's heat-detection option for pedestal building attic protection because numerous stakeholders did not consider heat detection as equivalent in safety to the other listed options.

Note that allowances to use noncombustible construction materials, fire-retardant treated wood, and filling with

noncombustible insulation are already permitted by NFPA 13 as an alternative to installing sprinklers in concealed spaces in otherwise fully-sprinklered buildings. These allowances are duplicated in the proposed IBC/IFC text so that an architect or developer can identify the attic protection concern and permissible solutions early in the design process, as opposed to expecting building designers to know of these allowances buried deep in the text of NFPA 13. Having the exceptions in the IBC/IFC will make it clear that these NFPA 13 exceptions are appropriate for NFPA 13R attic protection as well, even though they are not included in NFPA 13R (because NFPA 13R doesn't ordinarily require attics to be protected).

Finally, the proposal relocates the existing requirements in 903.2.8.3 for enhanced attic protection in Group R-4 Condition 2 occupancies to the new Section 903.3.1.2.3 so that all IBC/IFC supplemental protection requirements for NFPA 13R sprinkler systems are consolidated in one location. The existing requirements for R-4 Condition 2 were also revised with respect to fuel-fired equipment in attics to clarify that, in an otherwise unsprinklered attic, the entire attic wouldn't be required to be sprinklered based on the presence of fuel-fired equipment. Instead, NFPA 13R (Section 6.6.6.1 of the 2013 edition) only requires that a sprinkler be installed over the equipment in such cases.

Cost Impact: Will increase the cost of construction
The added requirement for attic protection will increase the cost of construction for affected buildings.

F172-16 : 903.3.1.2.3 (NEW)-
SHAPIRO12188

F176-16

904.12.5, 904.12.5.1, 904.12.5.2, 904.13.2 (IBC [F] 904.13.2), 906.1 (IBC [F] 906.1), 906.4 (IBC F] 906.4)

Proponent : Jonathan Roberts (jonathan.roberts@ul.com)

2015 International Fire Code

Delete without substitution:

~~**904.12.5 Portable fire extinguishers for commercial cooking equipment.** Portable fire extinguishers shall be provided within a 30-foot (9144 mm) distance of travel from commercial-type cooking equipment. Cooking equipment involving solid fuels or vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher in accordance with Section 904.12.5.1 or 904.12.5.2, as applicable.~~

~~**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 within a 30-foot (9144 mm) distance of travel from domestic cooking appliances.~~

Add new text as follows:

906.1 Where required. Portable fire extinguishers shall be installed in all of the following locations:

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.
   Exception: In Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each *dwelling unit* is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C.
2. Within 30 feet (9144 mm) distance of travel from commercial cooking equipment, and from domestic cooking equipment in Group I-2 Condition 1.
3. In areas where flammable or *combustible liquids* are stored, used or dispensed.
4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 3315.1.
5. Where required by the sections indicated in Table 906.1.
6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the *fire code official*.

906.4 Cooking ~~grease~~ equipment fires. Fire extinguishers provided for the protection of cooking ~~grease fires~~ equipment shall be of an *approved* type compatible with the automatic fire-extinguishing system agent. Cooking equipment involving solid fuels or vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher in accordance with Section ~~904.12.5~~ 906.1, item 2, 906.4.1 and 906.4.2 as applicable.

Revise as follows:

~~904.12.5.1~~ 906.4.1 Portable fire extinguishers for solid fuel cooking appliances. *No change to text.*

~~904.12.5.2~~ 906.4.2 Class K portable fire extinguishers for deep fat fryers. Where hazard areas include deep fat fryers, listed Class K portable fire extinguishers shall be provided as follows:

1. For up to four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: one Class K portable fire extinguisher of a minimum 1.5-gallon (6 L) capacity.
2. For every additional group of four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: one additional Class K portable fire extinguisher of a minimum 1.5-gallon (6 L) capacity shall be provided.
3. For individual fryers exceeding 6 square feet (0.55 m^2) in surface area: Class K portable fire extinguishers shall be installed in accordance with the extinguisher manufacturer's recommendations.

Reason: The portable fire extinguishers requirements are not in the correct section, which is section 906 entitled Portable Fire Extinguishers. This proposal corrects the problem as follows:

- The requirements in 904.13.2 were moved to 906.1 and Section 904.13.2 was deleted.
- 904.12.5 contained the requirements for travel distance which were already covered by section 906.1 and the cooking equipment requirements were moved to 906.4.
- 904.12.5.1 and 904.12.5.2 were simply renumbered and will become sections 906.4.1. and 906.4.2

Cost Impact: Will not increase the cost of construction
This simply moves the already existing requirements from one code section to another no substantive changes were made.

F176-16 : 904.12.5-ROBERTS10753

F177-16

904.13 (IBC [F] 904.13), 904.13.1 (IBC [F] 904.13.1), 904.13.2 (IBC [F] 904.13.2)

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

2015 International Fire Code

Revise as follows:

904.13 Domestic cooking systems in ~~Group~~ Groups I-1 or I-2 Condition 1. In ~~Group~~ Groups I-1 or I-2 Condition 1 occupancies where cooking facilities are installed in accordance with Section 407.2.6 of the *International Building Code*, 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.

904.13.1 Manual system operation and interconnection. Manual actuation and system interconnection for the hood suppression system shall be 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~~. *No change to text.*

Reason: This is coordination with G123-15(AS) and M45-15(AS). G 123-15 added criteria for domestic cooking in Group I-1 areas with a limited number of residents. M45-15 added a reference to this section for hoods in both Group I-1 and I-2.
Section 904.13.2 is a subsection of 904.13, so the group does not have to be in the title. In addition, the group is not in the text.

This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This clarification that will most likely reduce the cost of the hoods required.

F177-16 : 904.13-BALDASSARRA12044

F178-16

904.13 (IBC [F] 904.13)

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

2015 International Fire Code

Revise as 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 the *International Building Code*, the domestic recirculating or exterior vented 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.

Reason: NFPA 96 allows for recirculating hoods in commercial kitchens. These kitchens are not commercial cooking, but are limited to domestic cooking for a limited number of residents. This will not be a health issue for residents, but is needed to allow for flexibility in design of these spaces. The aromas of cooking are one of the primary benefits for allowing kitchens in these home-like environments.
This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This will be either a reduction or no change to construction requirements for venting.

F178-16 : 904.13-BALDASSARRA12047

F179-16

904.13 (IBC [F] 904.13), 904.13.1 (IBC [F] 904.13.1), 904.13.1.1 (New) (IBC [F] 904.13.1.1), 904.13.1.2 (New) (IBC [F] 904.13.1.2 (New)), 904.13.2, IBC [F] 904.13.2)

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Delete and substitute as 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 the *International Building Code*, 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.~~
Cooktops and ranges installed in the following occupancies shall be protected in accordance with Sections 904.13.1 through 904.13.2:

1. 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 of the *International Building Code*.

904.13.1 ~~Manual system operation and interconnection~~ Protection from fire. ~~Manual actuation and system interconnection for the hood suppression system shall be in accordance with Sections 904.12.1 and 904.12.2, respectively.~~
Cooktops and ranges shall be protected in accordance with Section 904.13.1.1 or 904.13.1.2.

Add new text as follows:

904.13.1.1 Automatic fire-extinguishing system. The domestic cooking hood provided over the cooktop or range shall be equipped with an approved automatic fire-extinguishing system complying with the following:

1. The automatic fire-extinguishing system shall be of a type recognized for protection of domestic cooking equipment. Pre-engineered automatic fire-extinguishing systems shall be listed and labeled in accordance with UL 300A and installed in accordance with the manufacturer's instructions.
2. Manual actuation of the fire-extinguishing system shall be provided in accordance with Section 904.12.1.
3. Interconnection of the fuel and electric power supply shall be in accordance with Section 904.12.2.

904.13.1.2 Ignition prevention. Cooktops and ranges shall include burners that have been tested and listed to prevent ignition of cooking oil with burners turned on to their maximum heat settings and allowed to operate for 30 minutes.

Revise as follows:

904.13.2 Portable fire extinguishers ~~for domestic cooking equipment in Group I-2 Condition 1~~. *No change to text.*

Reason: This proposal was developed by a Fire Code Action Committee working group consisting of FCAC, industry and fire service representatives.
Group A code proposals G 105-15 and G 121-15 were approved as submitted. These proposals covered the use of domestic cooking systems in Group I-2, Condition 1 occupancies and Group R-2 college dormitories. The reason statements for both proposals references that changes were needed to IBC/IFC Section 904.13 to provide correlation. This proposal provides this correlation, and makes no substantive changes to the existing Section 904.13 requirements, which are shown below. Section 904.13.1.1 includes some of the automatic fire-extinguishing requirements that were previously located in IBC Section 407.2.6.

904.13.1.2 allows an option for cooktops and ranges with listed ignition resistant burners that do not allow cooking oils to ignite during testing to be provided in lieu of an automatic fire-extinguishing system. 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-research-foundation/reports-and-proceedings/other-research-topics/analytical-modeling-of-pan-and-oil-heating-on-an-electric-coil-cooktop. The UL 858 Standard for Safety for Household Electric Ranges was recently revised to include a new Section 60A Abnormal Operation - Coil Surface Unit Cooking Oil Ignition Test that evaluates the ability of burners to not ignite cooking oil.

Existing 2015 IFC text (for reference only):

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 the *International Building Code*, 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. Pre-engineered 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.

904.13.1 Manual system operation and interconnection. Manual actuation and system interconnection for the hood suppression system shall be 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 within a 30-foot (9144 mm) distance of travel from domestic cooking appliances.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This proposal provides correlation with new IBC requirements for the domestic cooktops used in non-household occupancies. The option to use cooktops with ignition resistant burners in lieu of an automatic extinguishing system has the potential to actually reduce the cost of construction in these occupancies.

F179-16 : 904.13-O'BRIAN10471

F196-16

907.2.10 (IBC [F] 907.2.10), 907.2.10.1 (IBC [F] 907.2.10.1), 907.2.10.2 (IBC [F] 907.2.10.2), 1103.1, 1103.7.7; IBC [F] 420.6

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

2015 International Fire Code

Delete without substitution:

~~**907.2.10 Group R-4.** Fire alarm systems and smoke alarms shall be installed in Group R-4 occupancies as required in Sections 907.2.10.1 through 907.2.10.3.~~

~~**907.2.10.1 Manual fire alarm system.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-4 occupancies.~~

~~**Exceptions:**~~

1. ~~A manual fire alarm system is not required in buildings not more than two stories in height where all individual *sleeping units* and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by not less than 1-hour *fire partitions* and each individual *sleeping unit* has an *exit* directly to a *public way*, *egress court* or yard.~~
2. ~~Manual fire alarm boxes are not required throughout the building where all of the following conditions are met:~~
    - 2.1. ~~The building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~
    - 2.2. ~~The notification appliances will activate upon sprinkler water flow.~~
    - 2.3. ~~Not fewer than one manual fire alarm box is installed at an *approved* location.~~
    - 2.4. ~~Manual fire alarm boxes in resident or patient sleeping areas shall not be required at *exits* where located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that the distances of travel required in Section 907.4.2.1 are not exceeded.~~

907.2.10.2 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in *corridors*, waiting areas open to *corridors* and *habitable spaces* other than *sleeping units* and kitchens.

Exceptions:

1. Smoke detection in *habitable spaces* is not required where the facility is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* and where each *sleeping unit* has a *means of egress* door opening directly to an *exit*or to an exterior *exit access* that leads directly to an exit.

TABLE 1103.1
OCCUPANCY AND USE REQUIREMENTS[a]

SECTION	USE			OCCUPANCY CLASSIFICATION																	
	High-rise	Atrium or covered mall	Under-ground building	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
1103.2	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1103.3	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1103.4.1	R	—	R	—	—	—	—	—	—	—	—	—	—	R	R	—	—	—	—	—	—	—
1103.4.2	R	—	R	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	—	R	R
1103.4.3	R	—	R	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	—	R	R
1103.4.4	—	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.4.5	—	—	—	—	R	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—
1103.4.6	—	—	—	R	—	R	R	R	R	R	R	R	R	R	R	R	—	R	R	R	R	R
1103.4.7	—	—	—	R	—	R	R	R	R	R	R	R	R	R	R	R	—	R	R	R	R	R
1103.4.8	R	—	R	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	R	R	R
1103.4.9	R	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—

SECTION	USE			OCCUPANCY CLASSIFICATION																	
	High-rise	Atrium or covered mall	Under-ground building	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
1103.5.1	—	—	—	R[c]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.5.2, 1103.5.3[b]	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.5.4	—	—	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1103.6.1	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	—	R	R
1103.6.2	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	—	R	R
1103.7.1	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.7.2	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—
1103.7.3	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.7.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—

1103.7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—
1103.7.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—
~~1103.7.7~~	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	~~R~~	—
1103.8	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	R	R	R	R	—
1103.9	R	—	—	—	—	—	—	—	—	—	—	—	R	R	—	R	—	R	R	R	R	—
1104	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1105	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1106	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—

a. Existing buildings shall comply with the sections identified as "Required" (R) based on occupancy classification or use, or both, whichever is applicable.

b. Only applies to Group I-2 Condition 2 as established by the adopting ordinance.

c. Only applies to Group A-2 occupancies.

R = The building is required to comply.

~~1103.7.7 Group R-4.~~ ~~A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-4 residential care/assisted living facilities in accordance with Section 907.2.10.1.~~

~~Exceptions:~~

1. ~~Where there are interconnected smoke alarms meeting the requirements of Section 907.2.11 and there is not less than one manual fire alarm box per floor arranged to continuously sound the smoke alarms.~~
2. ~~Other manually activated, continuously sounding alarms *approved* by the *fire code official.*~~

2015 International Building Code

Revise as follows:

[F] 420.6 Fire alarm systems and smoke alarms. Fire alarm systems and smoke alarms shall be provided in Group I-1, R-1~~,~~ and R-2~~ and R-4~~ occupancies in accordance with Sections 907.2.6, 907.2.8~~,~~ and 907.2.9~~ and 907.2.10~~, respectively. Single- or multiple-station smoke alarms shall be provided in Groups I-1, R-2, R-3 and R-4 in accordance with Section 907.2.11.

2015 International Existing Building Code

Delete without substitution:

~~804.4.1.7 Group R-4.~~ ~~A fire alarm system shall be installed in *work areas* of Group R-4 residential care/ assisted living facilities as required by the *International Fire Code* for existing Group R-4 occupancies.~~

Reason: The requirements for a manual fire alarm system and an automatic smoke detection system in a facility with 16 or fewer residents is unwarranted. Such a system would not be required in an apartment building until there were at least 16 apartments – which is potentially many more people. Group R-4 is required to have single- and multiple- smoke alarms. Some of the language 'nurse's control stations' and 'constantly attended staff locations' is not applicable to group homes of this small size.

This is not an attempt to remove the requirement for single- and multiple- station smoke alarms in Section 907.2.11.2. For correlation, the mandatory retrofit requirement for this system should also be deleted from the IFC Chapter 11 Construction Requirements for Existing Buildings and the reference to the same in the IEBC.
This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is a logical reduction in requirements.

F196-16 : 907.2.10-
BALDASSARRA12031

F199-16

907.2.6 (IBC [F] 907.2.6)

Proponent : Joe McElvaney, self, representing self (joemcelvaney@gmail.com)

2015 International Fire Code

Revise as follows:

907.2.6 Group I. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I occupancies. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2 and 907.2.6.3.3. Activation of the fire alarm system in Group I-2 or I-3 occupancies with more than two *smoke compartments* shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

Exceptions:

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

Reason: Group I-2 and I-3 occupancies that have more than two smoke compartments are using a defend in place approach. These occupancies need to have information on what to do during an event. Having only horn/storbes does not provide the required information. The use of an emergency voice/alarm communications system will provide the information needed for each smoke compartment. Please note that this code change will effect only non high-rise buildings with more than two smoke compartments.

Cost Impact: Will increase the cost of construction
Currently these non high-rise buildings may install only horn/strobe notification devices, with the installation of an emergency voice/alarm communications system, the fire department can now provide information and instructions to each smoke compartment.

F199-16 : 907.2.6-MCELVANEY10440

F205-16

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

Proponent : Daniel Nichols, representing State of New York (dnichols@dos.state.ny.us)

2015 International Fire Code

Add new text as follows:

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

Exceptions:

1. Audible alarm notification appliances are not required in critical care areas of Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
2. A visible alarm notification appliance installed in a nurses' control station or other continuously attended staff location in a Group I-2 Condition 2 suite shall be an acceptable alternative to the installation of audible alarm notification appliances throughout the suite in Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
3. Where provided, audible notification appliances located in each occupant evacuation elevator lobby in accordance with Section 3008.9.1 of the *International Building Code* shall be connected to a separate notification zone for manual paging only.
4. In areas of buildings serving persons with developmental disabilities, occupant notification systems are not required to be activated where private mode signaling installed in accordance with NFPA 72 is approved by the fire code official and staff evacuation responsibilities are included in the fire safety and evacuation plan required by Section 404.

907.5.2.3 Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3.

Exceptions:

1. Visible alarm notification appliances are not required in *alterations*, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in *exits* as defined in Chapter 2.
3. Visible alarm notification appliances shall not be required in elevator cars.
4. Visual alarm notification appliances are not required in critical care areas of Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
5. In areas of buildings serving persons with developmental disabilities, occupant notification systems are not required to be activated where private mode signaling installed in accordance with NFPA 72 is approved by the fire code official and staff evacuation responsibilities are included in the fire safety and evacuation plan required by Section 404.

Reason: Persons with developmental disabilities addresses a variety of conditions including cerebral palsy, autism, and other neurological impairments that cause mental and/or physical conditions.
The elevated sound pressure of audible notification devices and the strobing visual notification devices can cause

sensory overload to persons with developmental disabilities; causing such persons to become incapacitated or to be diminished in their ability to rationally respond to the activation. Many persons with developmental disabilities are able to self-evacuate or make decisions regarding their safety as long as their impairments are not adversely effected. The purpose of this code change proposal is to permit private mode signaling similar to that permitted in the healthcare requirements to address this need.

NFPA 72 18.4.4 permits the audible requirements to be reduced or eliminated when approved by the AHJ and visible notification is provided by Section 18.5. Section 18.5 also permits a private mode for visual notification that is based on an evaluation that is approved by rhe AHJ. Collectively, this proposal would require that any use of private mode signaling for either audible or visual notification is approved by the AHJ.

The proposal also adds the requirement for incorporation of the specific population served by the private mode signaling to be incorporated into the fire safety and evacuation plans.

The scope of the proposal is not to address one specific occupancy since persons with developmental disabilities reside in a variety of residential and institutional settings, as well as educational and work environments.

In our experience, a fire alarm notification system that does not take into account the needs of persons with developmental disabilities has a higher probability of further complicating the evacuation of occupants. The startling of patients can cause either physical incapacitation, hiding behavior, or irrational actions that make the increases the burden on staff in charge of building evacuation. Since the fire safety and evacuation plan is part of this proposal, staffing levels and responsibilities should be part of such plan.

Cost Impact: Will not increase the cost of construction
This proposal changes the sequence of operation of fire alarm systems in most cases.

F205-16 : 907.5.2.1-NICHOLS13078

F208-16

907.5.2.3.2 (IBC [F] 907.5.2.3.2)

Proponent : Thomas Daly, On behalf of the American Hotel & Lodging Association, representing American Hotel & Lodging Association (tom.daly@thehscg.com)

2015 International Fire Code

Revise as follows:

907.5.2.3.2 Groups I-1, R-1 and ~~R-1~~ R-2 dormitories. Group I-1, R-1 and ~~R-1~~ R-2 dormitories accessible*dwelling units* or *sleeping units* in accordance with Table 907.5.2.3.2 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system. Visible alarm notification appliances shall be installed to cover all habitable spaces.

Reason: The proposed code change clarifies the intent of the code to require a visible alarm notification appliance in each room of multi-room accessible accomodations in Group I-1, R-1 and R-2 dormitory facilities. The change would have a minor impact on newly constructed facilities in these occupancy groups.

Cost Impact: Will increase the cost of construction
The change would impose a minor increase on newly constructed faclities in these occupancy groups.

F208-16 : 907.5.2.3.2-DALY11693

F209-16

907.5.2.3.2 (IBC [F] 907.5.2.3.2)

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Add new text as follows:

907.5.2.3.2 Groups I-1 and R-1. Group I-1 and R-1 *dwelling units* or *sleeping units* in accordance with Table 907.5.2.3.2 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system. Such units shall be dispersed among the various classes of units. At least one unit is required to be an Accessible unit in accordance with Sections 1107.5.1.1 or 1107.6.1.1 of the *International Building Code* and shall also include a visible notification appliance. Not more than 10 percent of units required to be an Accessible unit shall be used to satisfy the minimum number of units required to provide visible alarm notification appliances.

TABLE 907.5.2.3.2
VISIBLE ALARMS

NUMBER OF SLEEPING UNITS	SLEEPING ACCOMMODATIONS WITH VISIBLE ALARMS
~~6~~2 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

Reason: The intent is coordination with 2010 ADA Section 224.5.
1) Dispersion - The rooms with visible alarms are required to be dispersed by the classes of units. The proposed language for dispersion matches that used in Section IBC 1107.5.1.1.
2) Overlap -The current language would allow all the Accessible rooms to meet the requirements for both wheelchair access and visible alarms. With the number required for Accessible rooms, this means that with the current language, approximately 50% of the visible alarm rooms could also be Accessible rooms. Since the visible alarms are intended to address the need of person with hearing impairments, there should not be such an overlap.
The proposed language is has the intent of the 2010 ADA, but using IBC terminology and references.
Below is the language from the 2010 ADA Standard.

F224.4/224.4 Guest Rooms with Communication Features. In transient lodging facilities, guest rooms with communication features complying with 806.3 shall be provided in accordance with Table F224.4.

F224.5/224.5 Dispersion. Guest rooms required to provide mobility features complying with 806.2 and guest rooms required to provide communication features complying with 806.3 shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. Where the minimum number of guest rooms required to comply with 806 is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds, and amenities. At least one guest room required to provide mobility features complying with 806.2 shall also provide communication features complying with 806.3. Not more than 10 percent of guest rooms required to provide mobility features complying with 806.2 shall be used to satisfy the minimum number of guest rooms required to provide communication features complying with 806.3.

Table F224.4/224.4 Guest Rooms with Communication Features

Total number of Guest rooms provided	Minimum Number of Required Guest Rooms with Communication features
2 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1000	5 percent of total
1001 and over	50, plus 3 for each 100 over 1000

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This is already required by the 2010 ADA Standard for Accessible Design.

F209-16 : 907.5.2.3.2-O'BRIAN13326

F210-16

907.5.2.3.2 (IBC [F] 907.5.2.3.2)

Proponent : Dominic Marinelli (dmarinelli@accessibility-services.com)

2015 International Fire Code

907.5.2.3 Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3.

Exceptions:

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

Add new text as follows:

907.5.2.3.2 Groups I-1 and R-1. Group I-1 and R-1 *dwelling units* or *sleeping units* in accordance with Table 907.5.2.3.2 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system. Such units shall be dispersed among the various classes of units. At least one unit required to be an Accessible unit in accordance with Sections 1107.5.1.1 or 1107.6.1.1 shall also include a visible notification appliance. Not more than 10 percent of units required to be an Accessible unit shall be used to satisfy the minimum number of units required to provide visible alarm notification appliances.

Revise as follows:

TABLE 907.5.2.3.2
VISIBLE ALARMS

NUMBER OF SLEEPING UNITS	SLEEPING ACCOMMODATIONS WITH VISIBLE ALARMS
2~~6~~ to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14

201 to 300	17
301 to 400	20
401 to 500	22
501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

Reason: The intent of this proposal is coordination with 2010 ADA Section 224.5.
1) Dispersion - The rooms with visible alarms are required to be dispersed by the classes of units. The proposed language for dispersion matches that used in Section IBC 1107.5.1.1.
2) Overlap -The current language would allow all the Accessible rooms to meet the requirements for both wheelchair access and visible alarms. With the number required for Accessible rooms, this means that with the current language, approximately 50% of the visible alarm rooms could also be Accessible rooms. Since the visible alarms are intended to address the need of person with hearing impairments, there should not be such an overlap. The proposed language is has the intent of the 2010 ADA, but using IBC terminology and references.

Cost Impact: Will not increase the cost of construction
This is not a change in requirements, just a change in dispersion. Therefore there are not changes to construction costs. In addition, this is coordination with federal regulations.

F210-16 : 907.5.2.3.2-MARINELLI12642

F211-16

907.5.2.3 (IBC [F] 907.5.2.3), 907.5.2.3.2 (IBC [F] 907.5.2.3.2)

Proponent : Dominic Marinelli (dmarinelli@accessibility-services.com)

2015 International Fire Code

907.5.2.3 Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3.

Exceptions:

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

Revise as follows:

907.5.2.3.2 Groups I-1, R-1 and ~~R-1~~ R-2. Dwelling units and sleeping units in Group I-1, R-1 and ~~R-1 *dwelling units* or *sleeping units*~~Group R-2 dormitory housing provided in ~~accordance with Table 907.5.2.3.2~~ places of education shall be provided with a visible alarm notification appliance in accordance with Table 907.5.2.3.2., Such visible alarm notification appliances shall be activated by both the in-room smoke alarm and the building fire alarm system.

Reason: The 2010 ADA standard considers dormitories in places of education as transient lodging, therefore, the ADA would require visible alarms and Accessible units within dormitories. Dormitories are required to have Accessible units in accordance with IBC Section 1107.6.2.3.1. The terminology used here for dorms is what is used in 2010 ADA and IBC Section 1107.4, Exception 4.

Cost Impact: Will not increase the cost of construction
This is a coordinatin with federal requirements, therefore there is no change in construction requirements.

F211-16 : 907.5.2.3.2-MARINELLI12651

F212-16

907.5.2.3.2 (IBC [F] 907.5.2.3.2)

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Revise as follows:

907.5.2.3.2 Groups I-1 and R-1. Habitable spaces in dwelling units and sleeping units in Group I-1 and R-1~~*dwelling units* or *sleeping units*~~ occupancies in accordance with Table 907.5.2.3.2 shall be provided with ~~a~~ visible alarm notification~~ appliance,~~ . Visible alarms shall be activated by~~ both~~ the in-room smoke alarm and the building fire alarm system. _

Reason: This proposal is an attempt to clarify specifically where the visible notification appliances shall be located in newly constructed Group R-1 and I-1 dwelling and sleeping units and make sure that visible alarm notification is provided such that timely notification to guests with hearing impairments will occur.
This requirement will only affect those rooms identified as accessible. Table 907.5.2 already identifies the number of rooms which must be provided with visual notification. This proposal does not affect that number, but rather clarifies that the habitable space must be covered when installing the notification appliances.

Neither the 2010 ADA nor the 2016 NFPA 72 standard specify where visible notification appliances are to be located. The current IFC/IBC text could be interpreted to require only one device in a unit that has multiple habitable rooms. This code change provides a specific requirement that all habitable spaces shall be provided with visible notification so that there is no time delay in notifying guests with hearing impairments of a fire threat. To clarify this the term "appliance" was removed which is sometimes interpreted as only needing one appliance where more than one may be necessary. The term "habitable space" is defined in the IBC as follows:

> "A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces."

This definition specifically excludes toilet rooms, closets, halls, and storage and utility spaces from the required areas. This proposal clarifies that the visible alarm notification devices must cover habitable areas In some cases, this could be accomplished with one visible notification device depending on the floor plan of the sleeping unit. It should be noted that the intent of this requirement is that the visible alarm notification device have the ability to indepdantly be initiated based upon the smoke alarm operation in the sleeping or dwelling unit or the building fire alarm.

Last code cycle a similar proposal (F172-13) was proposed but used the more ambiguous language "throughout the unit" instead of the specific language habitable spaces. This caused concern that all spaces including closets, halls and storage rooms could be considered required locations for installation of visible appliances. In response to that concern this revised language is proposed.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will increase the cost of construction
This provision has the potential to add an additional notification appliance however the intent was full visibility within the unit.

F212-16 : 907.5.2.3.2-O'BRIAN11011

F217-16

Part I:
IFC: 909.5.3, 909.5.3.1, 1103.3.2 (IBC [F] 909.5.3, [F] 909.5.3.1)
Part II:
IECC: C402.5.4.

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE FIRE CODE COMMITTEE. PART II WILL BE HEARD BY THE IECC-COMMERCIAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

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

Part I

2015 International Fire Code

909.5.3 Opening protection. Openings in *smoke barriers* shall be protected by automatic-closing devices actuated by the required controls for the mechanical smoke control system. Door openings shall be protected by fire door assemblies complying with Section ~~716.5.3~~ 716 of the *International Building Code.*

Exceptions:

1. Passive smoke control systems with automatic-closing devices actuated by spot-type smoke detectors *listed* for releasing service installed in accordance with Section 907.3.
2. Fixed openings between smoke zones that are protected utilizing the airflow method.
3. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, where a pair of opposite-swinging doors are installed across a corridor in accordance with Section 909.5.3.1, the doors shall not be required to be protected in accordance with Section 716 of the *International Building Code*. 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 and, where permitted by the door manufacturer's listing, positive-latching devices are not required.
4. In Group I-2 and ambulatory care facilities, where such doors are special-purpose horizontal sliding, accordion or folding door assemblies installed in accordance with Section 1010.1.4.3 and are automatic closing by smoke detection in accordance with Section ~~716.5.9.3~~ 716.2.6.5 of the *International Building Code*.
5. Group I-3.
6. Openings between smoke zones with clear ceiling heights of 14 feet (4267 mm) or greater and bank-down capacity of greater than 20 minutes as determined by the design fire size.

909.5.3.1 Group I-1 Condition 2, Group I-2 and ambulatory care facilities. In Group I-1 Condition 2, Group I-2 and *ambulatory care facilities*, where doors are installed across a *corridor*, the doors shall be automatic closing by smoke detection in accordance with Section ~~716.5.9.3~~ 716.2.6.5 of the *International Building Code* and shall have a vision panel with fire protection rated glazing materials in fire protection rated frames, the area of which shall not exceed that tested.

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

Exceptions:

1. Buildings without occupied floors located more than 55 feet (16 764 mm) above or 25 feet (7620 mm) below the lowest level of fire department vehicle access where protected at the elevator shaft openings with additional fire doors in accordance with Section ~~716.5~~ 716 of the *International Building Code* and where all of the following conditions are met:
    1.1. The doors shall be provided with vision panels of approved fire protection-rated glazing so located as to furnish clear vision of the approach to the elevator. Such glazing shall not exceed 100 square inches (0.065 m^2) in area.
    1.2. The doors shall be held open but be automatic-closing by activation of a fire alarm initiating device installed in accordance with the requirements of NFPA 72 as for Phase I Emergency Recall Operation, and shall be located at each floor served by the elevator; in the associated elevator machine room, control space, or control room; and in the elevator hoistway, where sprinklers are located in those hoistways.
    1.3. The doors, when closed, shall have signs visible from the approach area stating: WHEN THESE DOORS ARE CLOSED OR IN FIRE EMERGENCY, DO NOT USE ELEVATOR. USE EXIT STAIRWAYS.
2. Buildings without occupied floors located more than 55 feet (16 764 mm) above or 25 feet (7620 mm) below the lowest level of fire department vehicle access where provided with *automatic sprinkler systems* installed in accordance with Section 903.3.1.1 or 903.3.1.2.
3. Freight elevators in buildings provided with both *automatic sprinkler systems* installed in accordance with Section 903.3.1.1 or 903.3.1.2 and not less than one ASME 17.3-compliant elevator serving the same floors.

Elimination of previously installed Phase I emergency recall or Phase II emergency in-car systems shall not be permitted.

Part II

2015 International Energy Conservation Code

C402.5.4 Doors and access openings to shafts, chutes, stairways and elevator lobbies. Doors and access openings from conditioned space to shafts, chutes stairways and elevator lobbies not within the scope of the fenestration assemblies covered by Section C402.5.2 shall be gasketed, weatherstripped or sealed.

Exceptions:

1. Door openings required to comply with Section 716 ~~or 716.5~~ of the *International Building Code.*
2. Doors and door openings required to comply with UL 1784 by the *International Building Code*.

Reason: This proposal complements FS74-15 approved in 2015 which reviewed all Group A I-Code references that "point" to IBC Section 716 and / or to subsection(s) of IBC 716, and revised several of the pointers. With proposal FS101-15 approved last year which completely reorganized IBC Section 716, the pointers in Group B code sections need to be reviewed and several revised. In most locations, the references to a subsection of IBC 716 many need only an editorial update to the new location of the references requirements based on the reorganized text.

Cost Impact: Will not increase the cost of construction
There should be no cost increase. The proposed revisions should be consistent with the intent of the code.

F217-16 : 909.5.3-
WOESTMAN13399

F223-16

915.1.1, 915.2.3 (IBC[F] 915.1.1, 915.2.3)

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

2015 International Fire Code

Revise as follows:

915.1.1 Where required. Carbon monoxide detection shall be provided in Group I-1, I-2~~, I-4~~ and R occupancies , and in classrooms in Group E and I-4 occupancies in the locations specified in Section 915.2 where any of the conditions in Sections 915.1.2 through 915.1.6 exist.

915.2.3 Group E occupancies. Carbon monoxide detection shall be installed in classrooms in Group E or I-4 occupancies. Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed by school personnel.

> **Exception:** Carbon monoxide alarm signals shall not be required to be automatically transmitted to an on-site location that is staffed by school personnel in Group E or I-4 occupancies with an occupant load of 30 or less.

Reason: The intent of this proposal is to clarify where carbon monoxide detection is required in day care facilities. Day care facilities consist of classrooms or defined spaces, regardless if the children are over 2-1/2 years of age or under. The change of I-4 to Section 915.2.3 for locating detectors in classrooms rather than dwelling units or sleeping units (915.2.1 or 915.2.2) is clearer.
This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

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

F223-16 : 915.1.1-
BALDASSARRA12035

F227-16

105.7.19 (New), 202 (New), 902.1, 916 (New) (IBC [F] 202 (New), [F] 902.1, [F] 916 (New))

Proponent : Joe McElvaney, self, representing Self (joemcelvaney@gmail.com)

2015 International Fire Code

Add new text as follows:

105.7.19 Mass Notification System. A construction permit is required to install a Mass Notification System.

SECTION 202 DEFINITIONS

MASS NOTIFICATION SYSTEM. A system that provides information and instructions to people inside buildings, outdoors areas or other spaces.

902.1 Definitions. The following terms are defined in Chapter 2:

ALARM NOTIFICATION APPLIANCE.
ALARM SIGNAL.
ALARM VERIFICATION FEATURE.
ANNUNCIATOR.
AUDIBLE ALARM NOTIFICATION APPLIANCE.
AUTOMATIC.
AUTOMATIC FIRE-EXTINGUISHING SYSTEM.
AUTOMATIC SMOKE DETECTION SYSTEM.
AUTOMATIC SPRINKLER SYSTEM.
AUTOMATIC WATER MIST SYSTEM.
AVERAGE AMBIENT SOUND LEVEL.
CARBON DIOXIDE EXTINGUISHING SYSTEM.
CLEAN AGENT.
COMMERCIAL MOTOR VEHICLE.
CONSTANTLY ATTENDED LOCATION.
DELUGE SYSTEM.
DETECTOR, HEAT.
DRY-CHEMICAL EXTINGUISHING AGENT.
ELEVATOR GROUP.
EMERGENCY ALARM SYSTEM.
EMERGENCY VOICE/ALARM COMMUNICATIONS.
FIRE ALARM BOX, MANUAL.
FIRE ALARM CONTROL UNIT.
FIRE ALARM SIGNAL.
FIRE ALARM SYSTEM.
FIRE AREA.
FIRE DETECTOR, AUTOMATIC.
FIRE PROTECTION SYSTEM.
FIRE SAFETY FUNCTIONS.
FIXED BASE OPERATOR (FBO).
FOAM-EXTINGUISHING SYSTEM.
HALOGENATED EXTINGUISHING SYSTEM.
IMPAIRMENT COORDINATOR.

INITIATING DEVICE.
MANUAL FIRE ALARM BOX.
MASS NOTIFICATION SYSTEM.
MULTIPLE-STATION ALARM DEVICE.
MULTIPLE-STATION SMOKE ALARM.
NOTIFICATION ZONE.
NUISANCE ALARM.
PRIVATE GARAGE.
RECORD DRAWINGS.
SINGLE-STATION SMOKE ALARM.
SLEEPING UNIT.
SMOKE ALARM.
SMOKE DETECTOR.
STANDPIPE SYSTEM, CLASSES OF.
Class I system.
Class II system.
Class III system.
STANDPIPE, TYPES OF.
Automatic dry.
Automatic wet.
Manual dry.
Manual wet.
Semiautomatic dry.
SUPERVISING STATION.
SUPERVISORY SERVICE.
SUPERVISORY SIGNAL.
SUPERVISORY SIGNAL-INITIATING DEVICE.
TIRES, BULK STORAGE OF.
TRANSIENT AIRCRAFT.
TROUBLE SIGNAL.
VISIBLE ALARM NOTIFICATION APPLIANCE.
WET-CHEMICAL EXTINGUISHING AGENT.
WIRELESS PROTECTION SYSTEM.
ZONE.
ZONE, NOTIFICATION.

SECTION 916 MASS NOTIFICATION SYSTEM

916.1 General. Mass notification systems shall be installed, tested and maintained per NFPA 72.

Reason: Currently these systems are being installed in large complexes like hospitals, business campuses, and colleges to name a few. At this time the IFC does not require this type of system to be reviewed or approved by the AHJ. In order to design and install these systems the AHJ needs to be part of the design. The local AHJ, Police, Fire EMS will be responding to an event when this system in being used. Please note that this new code section does not require this system it will only require them to comply with NFPA 72.

Cost Impact: Will increase the cost of construction
The cost will increase due to the fact that now when a system is being installed the local AHJ will be reviewing the system to make sure that the system is installed per NFPA 72

F227-16 : 916 (NEW)-
MCELVANEY9966

F228-16

202, 202 (New),105.7.5 (New), 916 (New), 916.1 (New), 916.2 (New), 916.3 (New), 916.3.1 (New), 916.4 (New), 916.5 (New) (IBC [F] 202, [F] 916 (New), [F] 916.1 (New), [F] 916.2 (New), [F] 916.3 (New), [F] 916.3.1 (New), [F] 916.4 (New), [F] 916.5 (New))

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

SECTION 202 DEFINITIONS

EMERGENCY VOICE/ALARM COMMUNICATIONS. Dedicated manual or automatic facilities for originating and distributing voice instructions, as well as alert and evacuation signals pertaining to a fire emergency, to the occupants of a building.

Add new definition as follows:

EMERGENCY COMMUNICATION SYSTEM. A system for the protection of life and property by indicating the existence of an emergency situation and communicating information necessary to facilitate an appropriate response and action.

EMERGENCY RESPONSE PLAN. A documented set of actions to address the planning for, management of, and response to natural, technological, and man-made disasters and other emergencies. Examples include but not limited to fire safety, evacuation and lockdown plans.

105.7.5 Emergency communication system. A construction permit is required for installation of or modification to emergency communication systems and related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

SECTION 916 EMERGENCY COMMUNICATION SYSTEMS

916.1 Mass Notification An approved Emergency Communication System incorporating mass notification shall be provided for the following occupancies when required by a Risk Analysis prepared in accordance with 916.3. The emergency communication system shall comply with Sections 916.2 through 916.5.
Required Occupancies:

1. New Group E occupancies
2. New college-university Group B occupancies
3. New college-university Group A occupancies
4. New college-university Group R-2 occupancies operated by a college or university for student or staff housing

Exception: Occupancies with an occupant load of 100 or less.

916.2 Permit Construction permit shall be required to install emergency communication systems as set forth in Section 105.7.5.

916.3 Risk Analysis A risk analysis and the emergency communication provisions of mass notification and emergency response plan shall be in accordance with NFPA 72, Section

24.3.11.

916.3.1 Approval. A risk analysis shall be submitted to the Fire Code Official for approval.

916.4 System design. Emergency communication systems shall be selected and designed based upon the completed emergency response plan, and input provided by the school administration, law enforcement agencies responsible for the facility and the fire code official.

916.5 Installation, testing and maintenance. Emergency communication systems shall be installed, tested and maintained in accordance NFPA 72 and applicable requirements in this code.

Reason: The need for real-time effective emergency communications in the United States came into sharp focus in the 20th century in response to threats to homeland security and our educational occupancies. We have learned from the recent incidents that occurred in our college/university campuses and other buildings, and have created installation guidelines to be followed for Life Safety. [Aurora, CO. Theater 2012; Columbine 1999; Virginia Tech 2007; Sandy Hook 2012; Weather Tornadoes/Storms]]

There are no national code requirements for these systems. That is causing issues with owners that understand they need improved emergency communications to the masses, and are taking steps that they think may be of value, but in some cases are not due to lack of codes and standards enforcement.

This mission was presented to the FCAC by the CCFS Center for Campus Fire Safety; their survey and research of their national membership showed the need for codes in this area for educational/college/university applications. This is considered a very important first step in Life Safety in these areas.

This code change proposal provides a requirement that a Risk Analysis and an Emergency Response Plan be created for every new educational occupancy and every new A, B occupancy for colleges and universities and new R-2 -occupancies operated by a college or university for student or staff housing.

If the completed Risk Analysis indicates that an Emergency Communication System is warranted for the occupancy, this proposal then provides a process for obtaining a permit from the fire code official and refers to NFPA 72 for system installation and maintenance.

When a mass disaster event occurs, and they are occurring, the need for real time information communicated in a clear and concise method via various paths is very critical to Life Safety. The Risk Analysis and the Emergency Response Plan have been shown to be the needed steps to take in this complicated life safety concern today and in the future.

NFPA 72 National Fire Alarm and Signaling Code has a chapter dedicated to Emergency Communication Systems. The information/requirements for Risk Analysis and qualifications for those performing these services are within NFPA 72; they are matured and are in the 3rd cycle of revisions.

This is NOT intended to require a Mass Notification System in every educational occupancy. There are many elements contained within a Mass Notification System, the process of the Risk Analysis will outline what is needed based on Risk and engineering study for the occupancy. It will be the responsibility of the engineer/designer of the education occupancy to perform and then react to the Risk Analysis.

There are some new terms being introduced and the industry is evolving. The proposed definitions are intended to assist the reader and code enforcer. ECS-Emergency Communication Systems are the major/overall classification. It covers One Way, Two Way, Wide Area (outside) In-Building Mass Notification and Distributed Recipient (Cell phone, laptop) forms of communication. All of this is covered in detail in NFPA 72. Mass Notification is a subset of ECS for all hazards concerns. Another is EVACS which is the Em Voice Alarm Communication System which is defined for FIRE incidents, and now can be utilized for mass notification.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will increase the cost of construction
The cost for conducting a Risk Analysis would range from $5,000 to $15,000 per building depending on complexity.

**F228-16 : 916 (NEW)-
O'BRIAN10941**

F229-16

IFC: 1031.2.2 (New).

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Add new text as follows:

1031.2.2 Locking arrangements in educational occupancies In Group E occupancies, Group B educational occupancies and Group I-4 child day care occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:

1. The door shall be capable of being unlocked from outside the room with a key or other approved means.
2. The door shall be openable from within the room in accordance with Section 1010.1.9.
3. Modifications shall not be made to existing listed panic hardware, fire door hardware or door closers.
4. Modifications to fire door assemblies shall be in accordance with NFPA 80.

Reason: This proposal replicates the amendments adding IEBC Sections 403.2 and 704.2 (see EB23-15). It is being added to the International Fire Code in order to facilitate enforcement in the maintenance of egress routes in existing buildings.
In addition to the occupancies covered in EB23-15, this committee is proposing to add Group I-4 Child Day Care occupancies. The committee felt that child day care occupancies would have similar protection needs as Group E and Group B educational occupancies, and therefore should be added to this proposal. Should this version be adopted, the committee would ask ICC staff to update IEBC 403.2 and 704.2, for consistency.

The following justification is excerpted from the justification provided for EB23-15:

"Unfortunately active shooter incidents in schools are a threat in modern society that have resulted in the need to quickly secure classrooms and other occupied areas to keep unwanted intruders from entering.

Many unlisted devices are being used to secure the doors from being opened. Many of these devices have not been evaluated to insure they operate properly and do not impair door operation. These devices are being deployed in periodic lockdown drills, and present the potential for students or unauthorized personnel to secure the doors so the rooms cannot be entered.

This proposal allows key actuated deadbolts or other locks to be provided on classroom doors, where the teacher can choose to lock the door and provide shelter-in-place in the classroom. The proposed change also requires the door to be able to be unlocked from the opposite side in cases where the school administrator or responders wish to enter the room without having to make a forcible entry.

Door hardware is currently available that allows classroom to be provided with lockdown capabilities that comply with applicable IBC Chapter 10 requirements. However the costs of retrofitting doors with that hardware far exceed the cost of retrofitting with a simple deadbolt lock. This is a significant issue for school systems who are continually facing budget restrictions."

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire

safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This proposal allows an option for door hardware, and does not require any additional materials that are not already required in the codes.

F229-16 : 1031.2.2 (NEW)-
O'BRIAN10845

F233-16

IFC: 1103.1.

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

2015 International Fire Code

TABLE 1103.1
OCCUPANCY AND USE REQUIREMENTS[a]

SECTION	USE			OCCUPANCY CLASSIFICATION																	
	High-rise	Atrium or covered mall	Under-ground building	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
1103.2	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1103.3	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1103.4.1	R	—	R	—	—	—	—	—	—	—	—	—	—	R	R	—	—	—	—	—	—	—
1103.4.2	R	—	R	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	—	~~R~~	R
1103.4.3	R	—	R	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	—	~~R~~	R
1103.4.4	—	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.4.5	—	—	—	—	R	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—
1103.4.6	—	—	—	R	—	R	R	R	R	R	R	R	R	R	R	R	—	R	R	R	R	R
1103.4.7	—	—	—	R	—	R	R	R	R	R	R	R	R	R	R	R	—	R	R	R	R	R
1103.4.8	R	—	R	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	R	R	R
1103.4.9	R	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—

SECTION	USE			OCCUPANCY CLASSIFICATION																	
	High-rise	Atrium or covered mall	Under-ground building	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
1103.5.1	—	—	—	R[c]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.5.2, 1103.5.3 [b]	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.5.4	—	—	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

1103.6.1	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	~~R~~	R	R	R	—	~~R~~	R
1103.6.2	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	~~R~~	R	R	R	—	~~R~~	R
1103.7.1	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.7.2	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—
1103.7.3	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.7.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—
1103.7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—
1103.7.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—
1103.7.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—
1103.8	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	R	R	R	R	—
1103.9	R	—	—	—	—	—	—	—	—	—	—	—	R	R	—	R	—	R	R	R	R	—
1104	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1105	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1106	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—

a. Existing buildings shall comply with the sections identified as "Required" (R) based on occupancy classification or use, or both, whichever is applicable.

b. Only applies to Group I-2 Condition 2 as established by the adopting ordinance.

c. Only applies to Group A-2 occupancies.

R = The building is required to comply.

Reason: The intent of this proposal is to coordinate the table for the proper application of mandatory retrofits as applied to Groups I-1, I-2, I-4 and R-4.
These are all mandatory retrofits that need to be carefully considered. Most of the changes to the tables are applicable if the changes to the sections are approved. Group I-4 and R-4 buildings should not reference provisions for buildings over 50 feet and buildings with heliports on the roof (IFC Sections 1103.6.1 and 1103.6.2).

Group R-4 Condition 1 are permitted to have an NFPA13D sprinkler system. IFC Sections 1103.4.2, and 1104.3.3 are in conflicts with the current open stairway allowances in the IBC Section 1019.3 Item 4. This goes against the provisions that allow for existing facilities to remain as is.

This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is a clarification in the text, so there will be no change to construction costs.

F235-16

Table 1103.1, 1103.2, 1103.3

Proponent : Michael O'Brian, representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

TABLE 1103.1
OCCUPANCY AND USE REQUIREMENTS[a]

SECTION	USE				OCCUPANCY CLASSIFICATION																		
	High-rise	Atrium or covered mall	Under-ground building	Tire Storage	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
1103.2	R	R	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	~~R~~	~~R~~	R
1103.3	R	—	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	~~R~~	~~R~~	R
1103.4.1	R	—	R	—	—	—	—	—	—	—	—	—	—	—	R	R	—	—	—	—	—	—	—
1103.4.2	R	—	R	—	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	—	~~R~~	R
1103.4.3	R	—	R	—	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	—	~~R~~	R
1103.4.4	—	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.4.5	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—
1103.4.6	—	—	—	—	R	—	R	R	R	R	R	R	R	R	R	R	R	—	R	R	R	R	R
1103.4.7	—	—	—	—	R	—	R	R	R	R	R	R	R	R	R	R	R	—	R	R	R	R	R
1103.4.8	R	—	R	—	R	R	R	R	R	R	R	R	R	R	—	—	R	R	R	R	R	R	R
1103.4.9	R	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.4.10	—	—	—	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

SECTION	USE				OCCUPANCY CLASSIFICATION																		
	High-rise	Atrium or covered mall	Under-ground building	Tire Storage	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
1103.5.1	—	—	—	—	R[c]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.5.2 ~~Tr~~																							

~~1103.5.3~~[b]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.5.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R[b]	—	—	—	—	—	—	—	—
1103.5.4	—	—	—	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1103.6.1	R	—	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	—	~~R~~	R
1103.6.2	R	—	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	—	~~R~~	R
1103.7.1	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.7.2	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—
1103.7.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.7.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—
1103.7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—
1103.7.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—
1103.7.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—
1103.8	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	R	R	R	R	—
1103.9	R	—	—	—	—	—	—	—	—	—	—	—	—	R	R	—	R	—	R	R	R	R	—
1103.10	—	—	—	—	—	—	—	—	—	—	—	—	—	R	R	—	—	—	—	—	—	—	—
1104	R	R	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1106	—	—	—	R	—	—	—	—	—	—	—	—	—	—	~~R~~	—	—	—	—	—	—	—	—

a. Existing buildings shall comply with the sections identified as "Required" (R) based on occupancy classification or use, or both, whichever is applicable.

b. Only applies to Group I-2 Condition 2 as established by the adopting ordinance.

c. Only applies to Group A-2 occupancies.

R = The building is required to comply.

Revise as follows:

1103.2 Emergency responder radio coverage in existing buildings. Existing buildings , other than Group R-3, that do not have approved radio coverage for emergency responders within the building, based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building, shall be equipped with such coverage according to one of the following:

1. Where an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1.
2. Within a time frame established by the adopting authority.

   Exception: Where it is determined by the fire code official that the radio coverage system is not needed.

1103.3 Existing elevators. ~~Existing~~
In other than Group R-3, existing elevators, escalators and moving walks shall comply with the requirements of Sections 1103.3.1 and 1103.3.2.

Reason: Chapter 11 contains mandatory retroactive construction requirements that need to be carefully considered. This proposal intends to correlate Table 1103.1 with the requirements in Chapter 11 and changes that have occurred in recent code cycle and clarify its application.
Sections 1103.2 and 1103.3 are revised to specify that they do not apply to Group R-3 occupancies. Emergency responder radio coverage and Phase I elevator recall do not seem reasonable as retroactive requirements in a Group R-3.

The reference to Group R-4 is removed from Sections 1103.4.2 and 1103.4.3. IBC Section 310.6 specifies that Group R-4 occupancies can be constructed meeting the requirements for Group R-3 occupancies, with few exceptions. Group R-3 is not included in in these requirements, so Group R-4 should not be either.

Section 1103.4.10 is inserted into Table 1103.1 because it is currently not included.

Section 1103.5.3 is moved to a separate row to clarify that the footnote does not apply to Section 1103.5.2. Additionally, the footnote is moved to the cell for Group I-2 occupancies since it only applies to those facilities.

Group R-4 is removed from Sections 1103.6.1 and 1103.6.2 since the sections are not applicable to Group R-3 occupancies and standpipes are not required for the construction of a new Group R-4 based on the exception in Section 905.3.

Section 1103.10 is inserted into Table 1103.1 because it is currently not included.

Section 1106 is revised by adding a new 'Use' column identified as Tire Storage. The reference to Group I-2 is completely misplaced, since Section 1106 only applies to outdoor tire storage.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This is a clarification in the text, so there will be no change to construction costs.

**F235-16 : TABLE 1103.2-
O'BRIAN13185**

F237-16

IFC: 1103.4, 1103.4.1, 1103.4.10, 1103.4.2, 1103.4.3, 1103.4.4, 1103.4.5, 1103.4.6, 1103.4.7, 1103.4.8, 1103.4.9, 1103.4.9.1, 1103.4.9.2, 1103.4.9.2.1, 1103.4.9.2.2, 1103.4.9.3, 1103.4.9.4, 1103.4.9.5.

Proponent : Bryan Romney, representing self (bryan.romney@fm.utah.edu)

2015 International Fire Code

Revise as follows:

1103.4 Vertical openings. Interior vertical openings, including but not limited to *stairways*, elevator hoistways, service and utility shafts, that connect two or more stories of a building, shall be enclosed or protected as specified in ~~Sections 1103.4.1 through 1103.4.10.~~ Section 713 of the *International Building Code.*

Delete without substitution:

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

~~**Exceptions:**~~

~~1. In Group I-2, unenclosed vertical openings not exceeding two connected stories and not concealed within the building construction shall be permitted as follows:~~
   ~~1.1. The unenclosed vertical openings shall be separated from other unenclosed vertical openings serving other floors by a smoke barrier.~~
   ~~1.2. The unenclosed vertical openings shall be separated from corridors by smoke partitions.~~
   ~~1.3. The unenclosed vertical openings shall be separated from other fire or smoke compartments on the same floors by a smoke barrier.~~
   ~~1.4. On other than the lowest level, the unenclosed vertical openings shall not serve as a required means of egress.~~
~~2. In Group I-2, atriums connecting three or more stories shall not require 1-hour fire-resistance-rated construction where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3, and all of the following conditions are met:~~
   ~~2.1. For other than existing approved atriums with a smoke control system, where the atrium was constructed and is maintained in accordance with the code in effect at the time the atrium was created, the atrium shall have a smoke control system that is in compliance with Section 909.~~
   ~~2.2. Glass walls forming a smoke partition or a glass block wall assembly shall be permitted when in compliance with Condition 2.2.1 or 2.2.2.~~
      ~~3.1. Glass walls forming a smoke partition shall be permitted where all of the following conditions are met:~~
         ~~3.1.1. Automatic sprinklers are provided along both sides of the separation wall and doors, or on the room side only if there is~~

not a walkway or occupied space on the atrium side.

3.1.2. The sprinklers shall be not more than 12 inches (305 mm) away from the face of the glass and at intervals along the glass of not greater than 72 inches (1829 mm).

3.1.3. Windows in the glass wall shall be non-operating type.

3.1.4. The glass wall and windows shall be installed in a gasketed frame in a manner that the framing system deflects without breaking (loading) the glass before the sprinkler system operates.

3.1.5. The sprinkler system shall be designed so that the entire surface of the glass is wet upon activation of the sprinkler system with out obstruction.

3.2. A fire barrier is not required where a glass block wall assembly complying with Section 2110 of the *International Building Code* and having a $^{3}/_{4}$ hour fire protection rating is provided.

2.3. Where doors are provided in the glass wall, they shall be either self closing or automatic closing and shall be constructed to resist the passage of smoke.

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

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

Exceptions:

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

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

Exceptions:

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

1103.4.8.

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

Exceptions:

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

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

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

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

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

1. *Exit access stairways* and *ramps* that serve, or atmospherically communicate between, only two stories. Such interconnected stories shall not be open to other stories.
2. In Group R-1, R-2 or R-3 occupancies, *exit access stairways* and *ramps* connecting four stories or less serving and contained within an individual *dwelling unit* or *sleeping unit* or live/work unit.
3. *Exit access stairways* and *ramps* in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, where the area of the vertical opening between stories does not exceed twice the horizontal projected area of the stairway or ramp, and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13. In other than Group B and M occupancies, this provision is limited to openings that do not connect more than four stories.
4. *Exit access stairways* and *ramps* within an atrium complying with the provisions of Section 404 of the *International Building Code*.
5. *Exit access stairways* and *ramps* in open parking garages that serve only the parking garage.
6. *Exit access stairways* and *ramps* serving open-air seating complying with the exit access travel distance requirements of Section 1029.7 of the *International Building*

~~*Code*.~~

7. ~~*Exit access stairways* and *ramps* serving the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, places of religious worship, auditoriums and sports facilities.~~

~~**1103.4.9 Waste and linen chutes.** In Group I-2 occupancies, existing waste and linen chutes shall comply with Sections 1103.4.9.1 through 1103.4.9.5.~~

~~**1103.4.9.1 Enclosure.** Chutes shall be enclosed with 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than 1 hour.~~

~~**1103.4.9.2 Chute intakes.** Chute intakes shall comply with Section 1103.4.9.2.1 or 1103.4.9.2.2.~~

~~**1103.4.9.2.1 Chute intake direct from corridor.** Where intake to chutes is direct from a *corridor*, the intake opening shall be equipped with a chute intake door in accordance with Section 716 of the *International Building Code* and having a fire protection rating of not less than 1 hour.~~

~~**1103.4.9.2.2 Chute intake via a chute intake room.** Where the intake to chutes is accessed through a chute intake room, the room shall be enclosed with 1-hour fire-resistance-rated construction. Opening protectives for the intake room shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than $^{3}/_{4}$ hour. Opening protective for the chute enclosure shall be in accordance with Section 1103.4.9.1.~~

~~**1103.4.9.3 Automatic sprinkler system.** Chutes shall be equipped with an *approved automatic sprinkler system* in accordance with Section 903.2.11.2.~~

~~**1103.4.9.4 Chute discharge rooms.** Chutes shall terminate in a dedicated chute discharge room. Such rooms shall be separated from the remainder of the building by not less than 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than 1 hour.~~

~~**1103.4.9.5 Chute discharge protection.** Chute discharges shall be equipped with a self-closing or automatic-closing opening protective in accordance with Section 716 of the *International Building Code* and having a fire protection rating of not less than 1 hour.~~

~~**1103.4.10 Flue-fed incinerators.** Existing flue-fed incinerator rooms and associated flue shafts shall be protected with 1-hour fire-resistance-rated construction and shall not have other vertical openings connected with the space other than the associated flue. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than 1 hour.~~

Reason: Reason: The IFC has requirements for Shaft Enclosures in existing buildings which differ than the requirements for shaft enclosures in the IBC. The intent of IFC Section 1101 "*is to provide a minimum degree of fire and life safety to persons occupying existing buildings by providing minimum construction requirements where such existing buildings do not comply with the minimum requirements of the* ***International Building Code****."* The IFC continues with the next section thus: "*1101.3 Permits. Permits shall be required as set forth in Sections 105.6 and 105.7 and the* ***International Building Code***."

The disparity between the IFC and IBC is rather significant and the IFC requirements should correlate with the IBC requirements. The revisions as proposed in this code change to the IFC Section 1103.4 will correlate both codes. IFC Section 1101.3 Permits will require the building owner to apply for a permit with the Building Official. As such, the plans submitted for a permit with the Building Official would need to comply with the IBC. The provisions of IFC Section 1104 are not consistent with the IBC, ultimately puting the building and fire officials and the owner in a

conflicting position. Correlation between the IBC Section 713 and IFC 1103.4 obviously needs correlation in order to provide not only a safe environment but also to eliminate potential conflicts.

Cost Impact: Will increase the cost of construction
Cost Impact: Little to no cost impact. Since the IFC 1103.4 will require alterations to existing shafts, the construction cost to comply with the IBC Section 713 requirements represent little if no additional cost.

F237-16 : 1103.4-ROMNEY13319

F239-16
IFC: 1103.9.

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Revise as follows:

1103.9 Carbon monoxide alarms. ~~Existing Group I-1, I-2, I-4 and R occupancies~~ Carbon monoxide alarms shall be ~~equipped with carbon monoxide alarms~~ installed in ~~accordance with Section 915, except that~~ existing dwelling units and sleeping units when they include any of the conditions identified in Sections 915.1.2 through 915.1.6. The carbon monoxide alarms shall be ~~allowed to~~ installed in the locations specified in Section 915.2.1 and the installation shall be ~~solely battery operated.~~ in accordance with Section 915.4

Exceptions:

1. Carbon monoxide alarms are permitted to be solely battery operated where the code that was in effect at the time of construction did not require carbon monoxide detectors to be provided
2. Carbon monoxide alarms are permitted to be solely battery operated in dwelling units that are not served from a commercial power source.
3. A carbon monoxide detection system in accordance with Section 915.5 shall be an acceptable alternative to carbon monoxide alarms.

Reason: This proposal was developed by a Fire Code Action Committee working group consisting of FCAC, industry and fire service representatives.
Most carbon monoxide poisoning fatalities in buildings occur in dwelling units with fuel burning appliances or attached garages. Requiring carbon monoxide alarms in these existing dwellings address this problem, and allowing battery powered units to be provided is a relatively low cost solution. This proposal focuses on this problem, and removes requirements for CO alarms to be provided in other existing Group I and R occupancies where the statistical risk of CO poisoning is not as great.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
The proposal merely provides clarification on existing requirements.

F239-16 : 1103.9-O'BRIAN10539

F240-16
IFC: 1104.5.

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

2015 International Fire Code

Add new text as follows:

1104.5 Illumination emergency power. Where *means of egress* illumination is provided, the power supply for *means of egress* illumination shall normally be provided by the premises' electrical supply. In the event of power supply failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more *means of egress*:

1. Group A having 50 or more occupants.
   Exception: Assembly occupancies used exclusively as a place of worship and having an *occupant load* of less than 300.
2. Group B buildings three or more stories in height, buildings with 100 or more occupants above or below a *level of exit discharge* serving the occupants or buildings with 1,000 or more total occupants.
3. Group E in interior *exit access* and *exit stairways* and *ramps*, *corridors*, windowless areas with student occupancy, shops and laboratories.
4. Group F having more than 100 occupants.
   Exception: Buildings used only during daylight hours and that are provided with windows for natural light in accordance with the *International Building Code*.
5. Group I.
6. Group M.
   Exception: Buildings less than 3,000 square feet (279 m^2) in gross sales area on one story only, excluding mezzanines.
7. Group R-1.
   Exception: Where each *sleeping unit* has direct access to the outside of the building at grade.
8. Group R-2.
   Exception: Where each *dwelling unit* or *sleeping unit* has direct access to the outside of the building at grade.
9. ~~Group R-4.~~
   ~~**Exception:** Where each *sleeping unit* has direct access to the outside of the building at ground level.~~

Reason: IBC Section 1006.3.2 Item 4 allows Group R-4 one exit (and emergency escape windows). Item 9 should not be in this text since this is a requirement for a two exit building. Doors directly to the outside are a bad idea for group homes that have concerns over wandering or flight.
This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is a clarification in the text, so there will be no change to construction costs.

F240-16 : 1104.5-
BALDASSARRA12038

F241-16

1104.5, 1104.5.1, 1104.5.1 (New), 1104.5.2 (New)

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Revise as follows:

1104.5 Illumination ~~emergency power.~~ of means of egress. Where *means of egress* illumination is provided, the power supply for *means of egress* illumination shall normally be provided by the premises' electrical supply. irect access to the outside of the building at grade.

1104.5.1 Illumination emergency power. In the event of power supply failure, illumination shall be automatically provided from an emergency system for the portions of the *means of egress* indicated in Section 1104..5.2 for the following occupancies where such occupancies require two or more *means of egress*:

1. Group A ~~having 50 or more occupants~~.
   Exception: Assembly occupancies used exclusively as a place of worship and having an *occupant load* of less than 300.
2. Group B buildings that are three or more stories in height ~~building with~~, have 100 or more occupants above or below a *level of exit discharge* ~~serving the occupants~~ or ~~buildings with~~ have 1,000 or more total occupants.
3. Group E ~~in interior *exit access* and *exit stairways* and *ramps*, *corridors*, windowless areas with student occupancy, shops and laboratories.~~.
4. Group F having more than 100 occupants.
   Exception: Buildings used only during daylight hours and that are provided with windows for natural light in accordance with the *International Building Code*.
5. Group I.
6. Group M.
   Exception: Buildings less than 3,000 square feet (279 m^2in gross sales area on one story only, excluding mezzanines.
7. Group R-1.
   Exception: Where each *sleeping unit* has direct access to the outside of the building at grade.
8. Group R-2.
   Exception: Where each *dwelling unit* or *sleeping unit* has direct access to the outside of the building at grade.
9. Group R-4.
   Exception: Where each *sleeping unit* has direct access to the outside of the building at ground level.

Add new text as follows:

1104.5.2 Egress Illumination. Emergency power for *means of egress* illumination required in Section 1104.5.1 shall be provided in the following areas:

1. Aisles.
2. Corridors.

3. *Exit access stairways and ramps*.
4. Interior and exterior *exit stairways and ramps*.
5. *Exit passageways*.
6. Lobbies and vestibules on the level of discharge which are part of the means of egress.
7. For Group E, windowless areas with student occupancy, shops and laboratories in addition to Items 1 through 6.

Revise as follows:

~~1104.5.1~~ 1104.5.3 Emergency power duration and installation. ~~Emergency power for *means of egress* illumination shall be provided in accordance with Section 604.~~
In other than Group I-2, emergency power systems shall ~~be provided~~ provide power for a duration of not less than 60 minutes ~~for systems requiring emergency power~~. In Group I-2, ~~essential electrical~~ emergency power systems shall ~~comply~~ be provided in accordance with Sections 1105.5.1 and 1105.5.2. The installation of the emergency power system shall be in accordance with Section 604.

Reason: The provisions for general lighting for means of egress and emergency lighting for limited portions of the means of egress where separated in Chapter 10 of the IBC and IFC. The intent of this proposal is to coordinate with that separation and to eliminate conflicts between new requirements and the requirements in Section 1104 for application in existing buildings.
The provisions in Section 1104.5 where originally written for emergency lighting only. The section is split and Section 1104.5.1 clarifies which occupancies require retroactive emergency power with a reference to a new section that specifies where emergency power is required – not emergency lighting throughout the facility. The list of locations in Section 1104.5.2 consists of all the locations listed in Section 1008.3.1 and 1008.3.2, with the exception of exterior landings at exit doors. this requirement was new in the 2006 edition of the codes and should not need to be included as a retroactive requirement.

- Group A – the charging sentence states that you only get here when two or means of egress are required, so this is redundant.
- Group B – the definition for level of exit discharge allows for the elimination of the phrase "serving the occupants" as redundant text.
- Group E – the "interior exit access and exit stairways and ramps, corridors" is included in the list of areas required in Section 1104.5.2 so they are deleted. The "in windowless areas with student occupancy, shops and laboratories" is relocated as Item 7 in Section 1104.5.2.

Section 1104.5.3 is revised to match the format in Section 1008.3.4.

for Group I-2 in Section 1104.5.3, the term is changed from essential power to emergency power. This section is dealing with power for means of egress lighting which is not exactly the same as essential systems. The requirement for essential power systems is still in Section 1105.5.2.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This is a clarification and coordination of code requirements, so there is no change to construction requirements..

F242-16

IFC: 1104.5.1, 1105.5, 1105.5.1, 1105.5.2.

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

2015 International Fire Code

Revise as follows:

1104.5.1 Emergency power duration and installation. Emergency power for *means of egress* illumination shall be provided in accordance with Section 604. In other than Group I-2, emergency power shall be provided for not less than 60 minutes for systems requiring emergency power. ~~In Group I-2, essential electrical systems shall comply with Sections 1105.5.1 and 1105.5.2.~~

1105.5 Means of egress. In addition to the *means of egress* requirements in Section 1104, Group I-2 facilities shall meet the means of egress requirements in Section 1105.5.1 through ~~1105.5.8~~ 1105.5.6.

Delete without substitution:

~~**1105.5.1 Exit signs and emergency illumination.** The power system for exit signs and emergency illumination for the *means of egress* shall provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator.~~

~~**1105.5.2 Emergency power for operational needs.** The essential electrical system shall be capable of supplying services in accordance with NFPA 99.~~

Reason: The code change proposal is a correlation between change E-90-15 that was approved in the 2015 hearings. These sections are not needed, Section 604 of the fire code details requirements for exist signage power (Section 604.2.5) and the use of NFPA 99 (by reference 604.2.6). These requirements are duplicative and we recommend deleting them from the code.
This is a joint proposal submitted by the ICC Ad Hoc Committee on Healthcare (AHC) and the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 the ICC Ad Hoc Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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: AHC.
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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is elimination of a duplicative section, there is no technical change.

F243-16

IFC: 1104.7, K104.1.

Proponent : Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Revise as follows:

1104.7 Size of doors. The ~~minimum width~~ requried capacity of each door opening shall be sufficient for the *occupant load* thereof and shall provide a minimum clear opening width of ~~not less than~~ 28 inches (711 mm). The clear opening width of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear opening width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 28 inches (711 mm). In ambulatory care facilities, doors serving as *means of egress* from patient treatment rooms or patient sleeping rooms shall provide a minimum clear opening width of ~~not less than~~ 32 inches (813 mm). In Group I-2, *means of egress* doors where used for the movement of beds shall provide a minimum clear opening width ~~not less than~~ of 41 1/2 inches (1054 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The minimum clear opening height of ~~door openings~~ doorways shall be ~~not less than~~ 80 inches (2032 mm).

Exceptions:

1. The minimum and maximum width shall not apply to door openings that are not part of the required *means of egress* in occupancies in Groups R-2 and R-3 units that are not required to be an Accessible Type A unit or Type B unit.
2. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum clear opening width.
3. Width of door ~~leafs~~ leaves in revolving doors that comply with Section ~~1010.1.1~~ 1010.1.4.1 shall not be limited.
4. Door openings within a *dwelling unit* shall ~~be not less than~~ have a minimum clear opeing height of 78 inches (1981 mm) ~~in height~~.
5. ~~Exterior~~ In dwelling and sleeping units that are not required to be Accessible Type A or Type B units, exterior door openings ~~in *dwelling units*~~, other than the required *exit* door, shall ~~be not less than~~ have a minimum clear opeing height of 76 inches (1930 mm) ~~in height~~.
6. *Exit access* doors serving a room not larger than 70 square feet (6.5 m^2) shall ~~be not less than~~ have a minimum clear width opening of 24 inches (610 mm) ~~in door width~~.
7. The minimum clear opening width shall not apply to doors for non-accessible showers or saunas compartments.
8. The minimum clear opening width shall not apply to the doors for non-accessible toilet stalls.
9. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

K104.1 Size of doors. The ~~minimum width~~ required capacity of each door opening shall be sufficient for the *occupant load* thereof and shall provide a minimum clear opening width of ~~not less than~~ 28 inches (711 mm). Where this section requires a minimum clear opening width of 28

inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 28 inches (711 mm). In ambulatory care facilities, doors serving as *means of egress* from patient treatment rooms shall provide a minimum clear opening width of ~~not less than~~ 32 inches (813 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The minimum clear opening height of doors ~~openings~~ shall be ~~not less than~~ 80 inches (2032 mm).

Exceptions:

1. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum clear opening width.
2. Width of door leaves in revolving doors that comply with Section 1010.1.4.1 shall not be limited.
3. *Exitaccess* doors serving a room not larger than 70 square feet (6.5 m^2) shall ~~be not less than~~ have a minimum clear opening width of 24 inches (610 mm) ~~in door width~~.
4. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

Reason: Code Change E47-15 was Approved as Modified last cycle. The intent of that code change was to provide a consistent use of the terminology (e.g., minimum clear opening width/height) throughout this section.
This proposal provides correlation with between IFC Chapter 11 and Appendix Section K104.1 and the requirements in Chapter 10.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction
This is a correlation issue with the revised requirements in the IBC.

F243-16 : 1104.7-O'BRIAN11016

F244-16

IFC: 1104.7, 1104.7.1 (New), 1104.7.2 (New).

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

2015 International Fire Code

Revise as follows:

1104.7 Size of doors. The minimum width of each door opening shall be sufficient for the *occupant load* thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). ~~In ambulatory care facilities, doors serving as *means of egress* from patient treatment rooms or patient sleeping rooms shall provide a clear width of not less than 32 inches (813 mm). In Group I-2, *means of egress* doors where used for the movement of beds shall provide a clear width not less than 41 1/2 inches (1054 mm).~~ The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The height of door openings shall be not less than 80 inches (2032 mm).

Exceptions:

1. The minimum and maximum width shall not apply to door openings that are not part of the required *means of egress* in occupancies in Groups R-2 and R-3.
2. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum width.
3. Width of door leafs in revolving doors that comply with Section 1010.1.1 shall not be limited.
4. Door openings within a *dwelling unit* shall be not less than 78 inches (1981 mm) in height.
5. Exterior door openings in *dwelling units*, other than the required *exit* door, shall be not less than 76 inches (1930 mm) in height.
6. *Exit access* doors serving a room not larger than 70 square feet (6.5 m^2) shall be not less than 24 inches (610 mm) in door width.
7. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

Add new text as follows:

1104.7.1 Group I-2. In Group I-2, means of egress doors where used for the movement of beds shall provide a minimum clear opening width of 41-1/2 inches (1054 mm).

Exception: Doors serving as means of egress doors and not used for movement of beds shall provide a minimum clear opening width 32 inches (813 mm).

1104.7.2 Ambulatory Care. In ambulatory care facilities, doors serving as means of egress from patient treatment rooms shall provide a minimum clear opening width of 32 inches (813 mm).

Reason: Created separate sections to increase clarity. Exit access doors and exit doors used by health care occupants are of the swinging type and are at least 32 inches in clear width. Ambulatory Care does not have

sleeping rooms.
This is a joint proposal submitted by the ICC Ad Hoc Committee on Healthcare (AHC) and the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 the ICC Ad Hoc Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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: AHC.
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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This proposal is a coordination and clarification, therefore, there is no change in the cost of construction.

F244-16 : 1104.7-
WILLIAMS12001

F245-16

IFC: 1104.7, K104.1.

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

2015 International Fire Code

1104.7 Size of doors. The minimum width of each door opening shall be sufficient for the *occupant load* thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). In ambulatory care facilities, doors serving as *means of egress* from patient treatment rooms or patient sleeping rooms shall provide a clear width of not less than 32 inches (813 mm). In Group I-2, *means of egress* doors where used for the movement of beds shall provide a clear width not less than $41^1/_2$ inches (1054 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The height of door openings shall be not less than 80 inches (2032 mm).

Exceptions:

1. The minimum and maximum width shall not apply to door openings that are not part of the required *means of egress* in occupancies in Groups R-2 and R-3.
2. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum width.
3. ~~Width~~ The width of door leafs in revolving doors that comply with Section 1010.1.1 shall not be limited.
4. The maximum width of door leaves in power-operated doors that comply with Section 1010.1.4.2 shall not be limited.
5. Door openings within a *dwelling unit* shall be not less than 78 inches (1981 mm) in height.
6. Exterior door openings in *dwelling units*, other than the required *exit* door, shall be not less than 76 inches (1930 mm) in height.
7. *Exit access* doors serving a room not larger than 70 square feet (6.5 m^2) shall be not less than 24 inches (610 mm) in door width.
8. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

K104.1 Size of doors. The minimum width of each door opening shall be sufficient for the *occupant load* thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). In ambulatory care facilities, doors serving as *means of egress* from patient treatment rooms shall provide a clear width of not less than 32 inches (813 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The height of doors openings shall be not less than 80 inches (2032 mm).

Exceptions:

1. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum width.
2. ~~Width~~ The width of door leaves in revolving doors that comply with Section

1010.1.4.1 shall not be limited.

3. The maximum width of door leaves in power-operated doors that comply with Section 1010.1.4.2 shall not be limited.
4. *Exitaccess* doors serving a room not larger than 70 square feet (6.5 m^2) shall be not less than 24 inches (610 mm) in door width.
5. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

Reason: The proposed revisions add an exception to not limit the size of door leaves of power operated doors is consistent with revisions approved in 2015 for the 2018 IBC in E49-15.

Cost Impact: Will not increase the cost of construction
Recognizing the size of door leaves of power operated doors need not be limited will not increase the cost of construction.

F245-16 : 1104.7-
WOESTMAN13404

F247-16
1104.18, Table 1104.18

Proponent : Michael O'Brian, representing the Fire Code Action Committee (FCAC@iccsafe.org)

2015 International Fire Code

Revise as follows:

1104.18 ~~Dead end corridors~~ Dead-ends. Where more than one exit or exit access doorway is required, the *exit access* shall be arranged such that dead ends do not exceed the limits specified in Table 1104.18. ~~In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end *corridors* shall be in accordance with Section 1105.5.6.~~

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

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

OCCUPANCY	COMMON PATH OF EGRESS TRAVEL LIMIT		DEAD-END LIMIT		EXIT ACCESS TRAVEL DISTANCE LIMIT	
	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)
Group A	~~20~~/75~~a~~	~~20~~/75~~a~~	20~~b~~a	20~~b~~a	200	250
Group B~~b~~	75g	100	50	50	200	300
Group E	75	75	20	50	200	250
Group F-1, S-1~~d, h~~	75g	100	50	50	200c	250c, h
Group F-2, S-2~~d, h~~	75g	100	50	50	300	400
Group H-1	25	25	0	0	75	75
Group H-2	50	100	0	0	75	100

Group H-3	50	100	20	20	100	150
Group H-4	75	75	20	20	150	175
Group H-5	75	75	20	50	150	200
Group I-1	75	75	20	50	200	250
Group I-2	Notes d, ~~e, g~~	Notes d, ~~e, g~~	Note ~~f~~e	Note ~~f~~e	150	200~~e~~b
Group I-3	100	100	NR	NR	150~~e~~b	200~~e~~b
Group I-4 ~~(Day care centers)~~	NR	NR	20	20	200	250
~~Group M (Covered or open mall)~~	~~75~~	~~100~~	~~50~~	~~50~~	~~200~~	~~400~~
Group M ~~(Mercantile)~~	75	100	50	50	200	250i
Group R-1 ~~(Hotels)~~	75	75	50	50	200	250
Group R-2 ~~(Apartments)~~	75	125	50	50	200	250
Group R-3 ~~(One- and two-family)~~	NR	NR	NR	NR	NR	NR
Group R-4 ~~(Residential care/assisted living)~~	NR	NR	NR	NR	NR	NR
Group U~~h~~	75g	100	20	50	300	400

NR = No requirements.

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

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

~~b~~ a. See Section 1029.9.5 for dead-end aisles in Group A occupancies.

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

~~d~~ c. See Section 412.7 of the *International Building Code* for special requirements on spacing of doors in aircraft hangars.

~~e~~ d. ~~In Group I-2, separation~~ Separation of exit access doors within a care recipient sleeping room, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.5.7.

~~f~~ e. In ~~Group I-2, in~~ smoke compartments containing care recipient sleeping rooms and treatment rooms, dead-end corridors shall comply with Section 1105.5.6.

~~g~~ f. In Group I-2 Condition 2, care recipient sleeping rooms, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.6.

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

h. Where the building, or portion of the building, is limited to one story and the height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet or more, the exit access travel distance is increased to 400 feet.

i. For covered and open malls, the exit access travel distance is increased to 400 feet.

Reason: This proposal intends to clarify the requirements in Table 1104.18 and correlate the table with revisions that have occurred in recent code change cycles. All of the revisions proposed are editorial, there is no change in code requirements or code application. Revisions are as follows:
In Section 1104.18, the second sentence is deleted. This sentence is not needed since those provisions are already included in Table 1104.18 as Footnote f (which after revisions becomes Footnote e).

The header row in Table 1104.18 is revised to maintain consistency with the terms used throughout the code of "exit access travel distance" and "common path of egress travel".

The descriptors in the Occupancy column are deleted. These descriptors are unnecessary since they do not provide any limitation on the application of the requirements in table, other than for Group M. Group M (covered and open malls) and Group M (mercantile) have been combined into one row with a single listing as Group M. New Footnote i is added to correlate with IBC Section 402.8 which allows a travel distance of 400 feet in malls and includes the provisions that were in the deleted row.

Footnote a is deleted along with the deletion of the limitation of 20 feet in Group A for common path of egress travel. Table 1006.2.1 allows a common path of egress travel of 75 feet for new Group A occupancies. The limitation of 20 feet is retained as applicable to dead-end aisles and dead-end corridors.

Footnote d (new Footnote c) is relocated from the Occupancy column to the Exit Access Travel Distance column. Since Footnote d only applies to the exit access travel distance in aircraft hangars this is the appropriate location for the footnote. Aircraft hangars can be classified as either Group F-1 or S-1 in accordance with IBC Sections 306.2 and 311.2, so the footnote is not included in the column for Groups F-2 and S-2.

Footnotes e and f (new Footnotes d and e) are revised by deleting "In Group I-2". This is redundant since the footnotes are located in the row which only applies to Group I-2.

Footnote h (new Footnote g) is relocated from the Occupancy column to the Common Path of Egress Travel column. Since Footnote h only applies to common path of egress travel in nonsprinklered Group B, S and U occupancies, this is the appropriate location for the footnote.

New Footnote h is added to correlate with Section 1017.2.2 which allows a travel distance of 400 feet in Group F-1 and S-1 under certain conditions.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

To assist in reviewing this proposal, the table below shows the end result of all of the revisions.

OCCUPANCY	COMMON PATH OF EGRESS TRAVEL LIMIT		DEAD-END LIMIT		EXIT ACCESS TRAVEL DISTANCE LIMIT	
	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)
Group A	75	75	20[a]	20[a]	200	250
Group B	75[g]	100	50	50	200	300
Group E	75	75	20	50	200	250
Group F-1, S-1	75[g]	100	50	50	200[c]	250[c, h]
Group F-2, S-2	75[g]	100	50	50	300	400
Group H-1	25	25	0	0	75	75
Group H-2	50	100	0	0	75	100
Group H-3	50	100	20	20	100	150
Group H-4	75	75	20	20	150	175
Group H-5	75	75	20	50	150	200
Group I-1	75	75	20	50	200	250
Group I-2	Notes d, e	Notes d, e	Note e	Note e	150	200[b]
Group I-3	100	100	NR	NR	150[b]	200[b]
Group I-4	NR	NR	20	20	200	250
Group M	75	100	50	50	200	250[i]
Group R-1	75	75	50	50	200	250
Group R-2	75	125	50	50	200	250
Group R-3	NR	NR	NR	NR	NR	NR
Group R-4	NR	NR	NR	NR	NR	NR
Group U	75[g]	100	20	50	300	400

NR = No requirements.

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

a. See Section 1029.9.5 for dead-end aisles in Group A occupancies.

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

c. See Section 412.7 of the *International Building Code* for special requirements on spacing of doors in aircraft hangars.

d. Separation of exit access doors within a care recipient sleeping room, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.5.7.

e. In smoke compartments containing care recipient sleeping rooms and treatment rooms, dead-end corridors shall comply with Section 1105.5.6.

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

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

h. Where the building, or portion of the building, is limited to one story and the height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet or more, the exit access travel distance is increased to 400 feet.

i. For covered and open malls, the exit access travel distance is increased to 400 feet.

Cost Impact: Will not increase the cost of construction
This is clarification of the current code requirements.

F248-16

IFC: 1104.18.

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

2015 International Fire Code

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

OCCUPANCY	COMMON PATH LIMIT		DEAD-END LIMIT		TRAVEL DISTANCE LIMIT	
	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)
Group A	20/75[a]	20/75[a]	20[b]	20[b]	200	250
Group B[h]	75	100	50	50	200	300
Group E	75	75	20	50	200	250
Group F-1, S-1[d, h]	75	100	50	50	200	250
Group F-2, S-2[d, h]	75	100	50	50	300	400
Group H-1	25	25	0	0	75	75
Group H-2	50	100	0	0	75	100
Group H-3	50	100	20	20	100	150
Group H-4	75	75	20	20	150	175
Group H-5	75	75	20	50	150	200
Group I-1	75	75	20	50	200	250

Group I-2	Notes e, g	Notes e, g	Note f	Note f	150	200[c]
Group I-3	100	100	NR	NR	150[c]	200[c]
Group I-4 ~~(Day care centers)~~	NR	NR	20	20	200	250
Group M (Covered or open mall)	75	100	50	50	200	400
Group M (Mercantile)	75	100	50	50	200	250
Group R-1 (Hotels)	75	75	50	50	200	250
Group R-2 (Apartments)	75	125	50	50	200	250
Group R-3 ~~(One- and two-family)~~	NR	NR	NR	NR	NR	NR
Group R-4 ~~(Residential care/assisted living)~~	NR	NR	NR	NR	NR	NR
Group U[h]	75	100	20	50	300	400

NR = No requirements.

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

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

b. See Section 1029.9.5 for dead-end aisles in Group A occupancies.

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

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

e. In Group I-2, separation of exit access doors within a care recipient sleeping room, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.5.7.

f. In Group I-2, in smoke compartments containing care recipient sleeping rooms and treatment rooms, dead-end corridors shall comply with Section 1105.5.6.

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

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

Reason: The additional descriptions are only part of what each of these groups include. The descriptors should be deleted so that they are not perceived as limitations.
This proposal is submitted by the ICC Code Technology Committee (CTC). 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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This is a clarification in the text, so there will be no change to construction costs.

F248-16 : TABLE 1104.18-
BALDASSARRA12040

F250-16

1105.2 (New), 1105.8

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

2015 International Fire Code

SECTION 1105 CONSTRUCTION REQUIREMENTS FOR EXISTING GROUP I-2

1105.1 General. Existing Group I-2 shall meet all of the following requirements:

1. The minimum fire safety requirements in Section 1103.
2. The minimum mean of egress requirements in Section 1104.
3. The additional egress and construction requirements in Section 1105.

Where the provisions of this chapter conflict with the construction requirements that applied at the time of construction, the most restrictive provision shall apply.

Add new text as follows:

1105.2 Applicability. The provisions of Section 1105.3 through 1105.8, 1105.10 and 1105.11 shall apply to the existing Group I-2 fire area.

Revise as follows:

~~**1105.8**~~ **1105.9 Group I-2 automatic sprinkler system.** An ~~*automatic sprinkler system*~~automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout the floor containing existing the Group I-2 fire ~~areas~~ area. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in on all floors between the Group I-2 occupancy fire area and the ~~*level of exit discharge*~~nearest level of exit discharge, the level of exit discharge and all floors below the level of exit discharge.

Exception: Floors classified as an open parking garage are not required to be sprinklered.

Reason: This proposal addresses the federal requirement that a separation betw een I-2 occupancies that comply w ith the requirements in this section and those that do not. Since a building could be several different occupancies, it is reinforceing the need for separation betw een portion of the building that is compliant w ith chapter 11 for Group I-2, and other portions of the buildings. This w ould require a fire separation betw een the Group B portion of an existing building that does not comply w ith all of the minimum retroactive standards of this chapter.
The revision of Section 1105.8 w as to be consistent w ith the language in Section 1103.5.3 requiring retroactive sprinkler systems in Group I-2 division 2 occupancies. The intent is to increase the scope of the minimum sprinkler coverage to below the level of existing discharge. 1103.5.3 require coverage of the building by date certain.

This is a joint proposal submitted by the ICC Ad Hoc Committee on Healthcare (AHC) and the ICC Code Technology Committee (CTC). The AHC w as established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort betw een ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. In 2014 and 2015 the ICC Ad Hoc Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle w hich included members of the committees as w ell as any interested party to discuss and debate the proposed changes. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction w ith the AHC effort can be dow nloaded from the AHC w ebsite at: AHC.
The tw o remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle w hich included

members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will increase the cost of construction
The required separation is already a federal requirement. Retroactive sprinklering below the level of exit discharge is already required for nursing homes, per federal regulation. Sprinklering below the LED will be an impact for those hospitals that did not do this today.

F250-16 : 1105.2 (NEW)-
WILLIAMS11994

F251-16

IFC: 1105.4.2.

Proponent : Tony Crimi, International Firestop Council, representing International Firestop Council (tcrimi@sympatico.ca)

2015 International Fire Code

Delete and substitute as follows:

1105.4.2 Fire-resistance rating. ~~Unless required elsewhere in this code, corridor walls are not required to have a fire-resistance rating.~~

Corridor walls that were installed as fire-resistance rated assemblies in accordance with the applicable codes under which the building was constructed, remodeled, or altered shall be maintained.

Exception: Where approved by the code official, in buildings sprinklered in accordance with Section 903.3.1.1 of the *International Building Code,* the required fire resistance ratings of corridor walls shall be permitted to meet the requirements of the current building code. The building is also required to meet the other applicable requirements of the *International Building Code*. Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means of-egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

Reason: The existing language is problematic, in that this language assumes that the Group I-2 fire area is sprinklered, and therefore seeks to take advantage of sprinkler tradeoffs in the IBC, but does not mandate the installation of automatic sprinklers, nor mandate that the building was originally designed as a sprinklered building. It is also problematic in that the statement "Where permitted elsewhere in this code .." requires the Fire Code official and Building Owner to research the entire IFC to look for situations where this exception might be prohibited. This proposal modifies the section to tell users of the IFC what is required, what is permitted, and when. This clarity should aid both compliance and enforcement.

This proposals uses the same approach that was approved in Section 803.6 of the International Existing Building Code during the previous code development cycle, via code change EB26-13. The concept is that once a building without sprinkler protection has been sprinklered throughout, whether due to renovations or retroactive code application, the designer should be permitted to take advantage of some of the sprinkler trade-offs that are allowed for new construction, such as the allowance for healthcare corridors to be smoke partitions instead of needing to be fire partitions. Corridors in I-2 occupancies were required to be fire partitions for decades in non-sprinklered hospitals, and also in sprinklered hospitals built to one of the legacy codes. The issue that this code article needs to properly and accurately address is how to provide for that application of code and ensure a proper review by the building code official is performed to ensure there are no impediments to granting an approval that may result in the reduction of existing levels of protection to below the level of safety provided by the current building code.

This proposal attempts to provide a mechanism for that process by adding a new section to the IFC which is adapted, essentially verbatim, from Section 803.6 of the IEBC. The suggested language provides that once an existing building is sprinklered throughout and meets the other fire protection requirements of the IBC, plans, investigation and evaluation reports, and other data can be submitted seeking approval of the code official for the re-assignment of the original fire-resistance rating for corridors down to zero (i.e. smoke resistance only).

It should be noted that, according to the NFPA "Report on Fires in Health Care Facilities" published November 2012, between 2006 and 2010, Sprinklers were present in only 55% of reported health care fires[1]. Although those statistics for fires 5-10 years ago may not precisely gauge the exact proportion of healthcare facilities without sprinklers today, the fact remains that a substantial number of existing I-2 occupancies are not sprinklered throughout. Revising this code article to lay out a clear path for reducing the required fire resistance rating of

corridors can only assist in incentivizing older hospitals to have sprinklers retrofitted as soon as possible.

For reference, the language in 2015 IEBC is provided as follows[2]:

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

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

Bibliography: [1] Source: NFPA "Fires in Health Care Facilities" Author: Marty Ahrens Issued: November 2012, National Fire Protection Association Fire Analysis and Research Division

[2] 2015 International Existing Building Code®, INTERNATIONAL CODE COUNCIL, INC., Date of First Publication: May 30, 2014

Cost Impact: Will not increase the cost of construction
This proposal permits alternatives which are consistent with existing requirements of the IEBC, and the intent of the IFC with regards to maintenance of fire protection features of buildings.

F251-16 : 1105.4.2-CRIMI13123

F253-16

IFC: 1105.5.4 (New).

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

2015 International Fire Code

Add new text as follows:

1105.5.4 Group I-2 occupancies. In Group I-2, where a door serves as an opening protective in a fire barrier, smoke barrier or fire wall and where the door is equipped with a hold-open device, such door shall automatically close upon any of the following conditions:

1. Actuation of smoke detectors initiating the hold-open device;
2. Activation of the fire alarm system within the zone;
3. Activation of an automatic sprinkler system within the zone.

Reason: This addresses the concern that the IFC could be more restrictive than the IBC with regard to hold open devices. This proposal seeks to bring ambulatory care centers that receive Medicare / Medicaid funding into compliance with federal standards (specifically, with K-tag K21). This also addresses the concern that the IFC could be more restrictive than the IBC with regard to hold open devices, specifically allowing the hold-opens when designed with the proposed activation of smoke detectors, fire alarms and/or sprinkler system activation.
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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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
By federal standards, ambulatory healthcare facilities are already allowed this provision. Furthermore, allowance of the hold-open prevents damage to the door when a stretcher or supply cart moves through the barrier, providing significant operational savings by increasing the useful life of the rated door.

F254-16

IFC: 1105.6.3.

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

2015 International Fire Code

1105.6.3 Opening protectives. Openings in smoke barriers shall be protected in accordance with Section 716 of the *International Building Code*. Opening protectives shall have a minimum fire-protection-rating of $^{1}/_{3}$ hour.

~~Excpetion~~Exceptions:

1. Existing wired glass vision panels in doors shall be permitted to remail.
2. Existing non-labeled protection plates shall be permitted to remain.

Reason: This change is in correlation with a code change to IBC Section 709.5 that was part of Group A, FS44-15. Smoke barrier doors are typically installed across corridors and patient treatment areas. These doors see a very high volume of gurney and bed traffic, as well as carts, wheeled equipment and transport devices. As a result they are often damaged. This proposal would allow the installation of a non-labeled protective plate, usually made of steel or other resilient material, to be installed on these doors to protect them from excessive wear and damage. Due to the size of equipment being wheeled through, these protective plates need to be allowed to be greater than 48" high. Currently NFPA 80 would require that the protective plates on rated doors be limited to 48" and that they be labeled. The doors in smoke barriers do not function as true fire doors. This section contains many special directives and requirements exempting smoke barriers doors from meeting fire door requirements. This code change follows with the established intent of this section. Smoke barriers are intended to be substantial construction and providing protective plates provides additional protection to the doors keeping the original construction free from damage thus in a more substantial manner. They do not provide the same fire resistance rating as a true 1 hour fire barrier.

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Cost Impact: Will not increase the cost of construction
Allowing the use of non-labeled plates will allow for existing doors to not be replaced.

F254-16 : 1105.6.3-WILLIAMS12000

S75-16
IBC: 1604.5.

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

2015 International Building Code

Revise as follows:

TABLE 1604.5
RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

RISK CATEGORY	NATURE OF OCCUPANCY
I	Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to:
	• Agricultural facilities.
	• Certain temporary facilities.
	• Minor storage facilities.
II	Buildings and other structures except those listed in Risk Categories I, III and IV.
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:
	• Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300.
	• Buildings and other structures containing Group E occupancies with an occupant load greater than 250.
	• Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500.
	• Group I-2<u>, Condition 1</u> occupancies with ~~an occupant load of~~ 50 or more ~~resident~~ care recipients ~~but not having surgery or emergency treatment facilities.~~
	<u>Group I-2, Condition 2 occupancies but not having emergency surgery or emergency treatment</u>

	facilities.
	• Group I-3 occupancies.
	• Any other occupancy with an occupant load greater than 5,000.[a]
	• Power-generating stations, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV.
	• Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that:
	Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the *International Fire Code*; and
	Are sufficient to pose a threat to the public if released.[b]
IV	Buildings and other structures designated as essential facilities, including but not limited to:
	• Group I-2, Condition 2 occupancies having emergency surgery or emergency treatment facilities.
	Ambulatory care facilities having emergency surgery or emergency treatment facilities.
	• Fire, rescue, ambulance and police stations and emergency vehicle garages.
	• Designated earthquake, hurricane or other emergency shelters.
	• Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.
	• Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures.
	• Buildings and other structures containing quantities of highly toxic materials that:
	Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the *International Fire Code;* and
	Are sufficient to pose a threat to the public if released.[b]

	• Aviation control towers, air traffic control centers and emergency aircraft hangars.
	• Buildings and other structures having critical national defense functions.
	• Water storage facilities and pump structures required to maintain water pressure for fire suppression.

a. For purposes of occupant load calculation, occupancies required by Table 1004.1.2 to use gross floor area calculations shall be permitted to use net floor areas to determine the total occupant load.

b. Where approved by the building official, the classification of buildings and other structures as Risk Category III or IV based on their quantities of toxic, highly toxic or explosive materials is permitted to be reduced to Risk Category II, provided it can be demonstrated by a hazard assessment in accordance with Section 1.5.3 of ASCE 7 that a release of the toxic, highly toxic or explosive materials is not sufficient to pose a threat to the public.

Reason: Since Group I-2 has been split into two conditions in the 2015 I-Codes we are offering this clarification for which facilities this was intended to apply. Ambulatory care facilities or Group I-2 that only offer elective surgery should not be Category IV facilities. Category IV should be focused those occupancies that provide for emergency surgery and treatment of patients.
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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. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

Cost Impact: Will not increase the cost of construction
This code change does not affect the actual requirements, rather it update the language to reflect current terminology and occupancy classes.

S75-16 : TABLE 1604.5-
WILLIAMS11991