

EB3-13

301.1, 301.2, 302 (New), 302.1 (New), 302.1.1 (New), 303 (New), 705.1, Chapter 16

Proposed Change as Submitted

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

Revise as follows:

CHAPTER 3 COMPLIANCE METHODS, APPLICABILITY AND MINIMUM REQUIREMENTS

301.1 General. The *repair, alteration, change of occupancy, addition* or relocation of all *existing buildings* shall comply with one of the methods listed in Sections 301.1.1 through 301.1.3 as selected by the applicant in addition to complying with the minimum requirements in Sections 302 and 303. Application of a method shall be the sole basis for assessing the compliance of work performed under a single permit unless otherwise approved by the *code official*. Sections 301.1.1 through 301.1.3 shall not be applied in combination with each other. Where this code requires consideration of the seismic force-resisting system of an existing building subject to *repair, alteration, change of occupancy, addition* or relocation of *existing buildings*, the seismic evaluation and design shall be based on Section 301.1.4 regardless of which compliance method is used.

Exception: Subject to the approval of the *code official*, *alterations* complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code unless the building is undergoing more than a limited structural alteration as defined in Section 907.4.3. New structural members added as part of the *alteration* shall comply with the *International Building Code*. *Alterations of existing buildings in flood hazard areas* shall comply with Section 701.3.

SECTION 302 ADDITIONAL CODES AND REQUIREMENTS

301.2 ~~Additional codes~~ 302.1 General. *Alterations, repairs, additions and changes of occupancy* to, or relocation of, *existing buildings* and structures shall comply with the provisions for *alterations, repairs, additions and changes of occupancy* or relocation, respectively, in this code and the *International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International Residential Code* and NFPA 70. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

302.1.1 Accessibility. Level 1 alterations shall comply with the 2015 ANSI A117.1 to the extent of the altered element. Areas of an existing building that are outside the specific work area or otherwise unaffected by alterations Level 1, 2 or 3, that are required to be accessible by Chapter 7 shall comply with the 2003 ANSI A117.1.

Work performed under Level 2 and 3 alterations shall comply with the 2015 ANSI A117.1 and all spaces that change configuration as part of the alterations shall comply with the 2015 ANSI A117.1.

SECTION 303 EXISTING BUILDING MINIMUM REQUIREMENTS

303.1 Administration. Sections 303.1.1 through 303.1.4 shall set the scope, intent and administration of provisions related to minimum requirements that are applicable to existing buildings.

303.1.1 ([F] 1101.1) Scope. The provisions of this Section shall apply to existing buildings constructed prior to the adoption of this code.

303.1.2 ([F] 1101.2) Intent. The intent of this Section 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.

303.1.3 ([F] 1101.3) Permits. Permits for alterations necessary to conform with this Section shall be required as set forth in Sections 105.1.

303.1.4 ([F] 1101.4) Owner notification. When a building is found to be in noncompliance with this chapter, the code official shall duly notify the owner of the building. Upon receipt of such notice, the owner shall, subject to the following time limits, take necessary actions to comply with the provisions of this chapter.

303.1.4.1 ([F] 1101.4.1) Construction documents. Construction documents necessary to comply with this chapter shall be completed and submitted within a time schedule approved by the code official.

303.1.4.2 ([F] 1101.4.2) Completion of work. Work necessary to comply with this chapter shall be completed within a time schedule approved by the code official.

303.1.4.3 ([F] 1101.4.3) Extension of time. The code official is authorized to grant necessary extensions of time when it can be shown that the specified time periods are not physically practical or pose an undue hardship. The granting of an extension of time for compliance shall be based on the showing of good cause and subject to the filing of an acceptable systematic plan of correction with the code official.

303.2 ([F] SECTION 1103) Fire safety requirements for existing buildings. Minimum fire safety requirements for existing buildings shall be in provided in accordance with Sections 303.2.1 through 303.2.9.

SECTION	USE			OCCUPANCY CLASSIFICATION																			
	High rise	Atrium or covered mall	Under-ground building	A	B	E	F	H1	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	
301.3.5	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
301.3.6	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
301.3.7.1	R	-	R	-	-	-	-	-	-	-	-	-	R	R	R	R	-	-	-	-	-	-	-
301.3.7.2	R	-	R	R	R	R	R	R	R	R	R	R	-	-	-	-	R	R	R	-	R	R	R
301.3.7.3	R	-	R	R	R	R	R	R	R	R	R	R	-	-	-	-	R	R	R	-	R	R	R
301.3.7.4	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
301.3.7.5	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-
301.3.7.6	-	-	-	R	-	R	R	R	R	R	R	R	R	R	R	R	-	R	R	R	R	R	R
301.3.7.7	-	-	-	R	-	R	R	R	R	R	R	R	R	R	R	R	-	R	R	R	R	R	R
301.3.8.1	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
301.3.8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-
301.3.9.1	R	-	R	R	R	R	R	R	R	R	-	-	R	R	R	R	R	R	R	-	R	R	R
301.3.9.2	R	-	R	R	R	R	R	R	R	R	-	-	R	R	R	R	R	R	R	-	R	R	R
301.3.10.1	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
301.3.10.2	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-
301.3.10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-
301.3.10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-
301.3.10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-

301.3.10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-
301.3.10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-
301.3.10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	-
301.3.11	R	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	-	R	R	R	R	-
301.3.12.4.1	R	R	R	R	R	R	R	R	R	R	-	-	R	R	R	R	R	R	R	R	R	R

303.2.1 ([F] 1103.1) Required construction. Existing buildings shall comply with not less than the minimum provisions specified in Table 303.2.1 and as further enumerated in Sections 303.2.2 through 303.2.9.

The provisions of this chapter shall not be construed to allow the elimination of fire protection systems or a reduction in the level of fire safety provided in buildings constructed in accordance with previously adopted codes.

Exception: Group U occupancies.

**TABLE 303.2.1 ([F] TABLE 1103.1)
OCCUPANCY AND USE REQUIREMENTS^a**

a. Existing buildings shall comply with the Sections identified as "Required" (R) based on occupancy classification or use, or both, whichever is applicable.
R = The building is required to comply.

303.2.2 ([F] 1103.2) Emergency responder radio coverage in existing buildings. Existing buildings 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. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1 of the *International Fire Code*.
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.

303.2.3 ([F] 1103.3) Elevator 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.

303.2.4 ([F] 1103.4) Vertical openings. Interior vertical shafts, 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 303.2.4.1 through 303.2.4.7.

303.2.4.1 ([F] 1103.4.1) Group I occupancies. In Group I occupancies, interior vertical openings connecting two or more stories shall be protected with 1-hour fire-resistance-rated construction.

303.2.4.2 ([F] 1103.4.2) Three to five stories. In other than Group I 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 of the *International Building Code*.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.

3. Vertical opening protection for escalators shall be in accordance with Section 303.2.4.5, 303.2.4.6 or 303.2.4.7.

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

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.
3. Vertical opening protection for escalators shall be in accordance with Section 303.2.4.5, 303.2.4.6 or 303.2.4.7.

303.2.4.4 (IF) 1103.4.4 Atriums and covered malls. In other than Group I 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 of the *International Building Code*.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.

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

303.2.4.6 (IF) 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 of the *International Building Code* shall be installed throughout the building, and a draft curtain with closely spaced sprinklers shall be installed around the escalator opening.

303.2.4.7 (IF) 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.

303.2.5 (IF) 1103.5) Sprinkler systems. An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 303.2.5.1 and 303.2.5.2.

303.2.5.1 (IF) 1103.5.1 Pyroxylin plastics. An automatic sprinkler system shall be provided throughout existing buildings where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg). Vaults located within buildings for the storage of raw pyroxylin shall be protected with an approved automatic sprinkler system capable of discharging 1.66 gallons per minute per square foot (68 L/min/m²) over the area of the vault.

303.2.5.2 (IF) 1103.5.2) Group I-2. An automatic sprinkler system shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the level of exit discharge.

303.2.6 (IF) 1103.6) Standpipes. Where required by Sections 303.2.6.1 or 303.2.6.2, standpipes shall be installed in accordance with Section 905 of the *International Building Code*. The code official is authorized to approve the installation of manual standpipe systems to achieve compliance with this Section where the responding fire department is capable of providing the required hose flow at the highest standpipe outlet.

303.2.6.1 (IF) 1103.6.1 Existing multiple-story buildings. Existing buildings with occupied floors located more than 50 feet (15 240 mm) above the lowest level of fire department access or more than 50 feet (15 240 mm) below the highest level of fire department access shall be equipped with standpipes.

303.2.6.2 (IF) 1103.6.2 Existing helistops and heliports. Existing buildings with a rooftop helistop or heliport located more than 30 feet (9144 mm) above the lowest level of fire department access to the roof level on which the helistop or heliport is located shall be equipped with standpipes in accordance with Section 905.3.6 of the *International Building Code*.

303.2.7 (IF) 1103.7) Fire alarm systems. An approved fire alarm system shall be installed in existing buildings and structures where required by Sections 303.2.7.1 through 303.2.7.7 and provide occupant notification in accordance with Section 907.6 of the *International Building Code* unless other requirements are provided by other Sections of this code.

Exception: Occupancies with an existing, previously approved fire alarm system.

303.2.7.1 (IF) 1103.7.1) Group E. A fire alarm system shall be installed in existing Group E occupancies in accordance with Section 907.2.3.

Exceptions:

1. A manual fire alarm system is not required in a building with a maximum area of 1,000 square feet (93 m²) that contains a single classroom and is located no closer than 50 feet (15 240 mm) from another building.
2. A manual fire alarm system is not required in Group E occupancies with an occupant load less than 50.

303.2.7.2 (IF) 1103.7.2) Group I-1. An automatic fire alarm system shall be installed in existing Group I-1 residential care/assisted living facilities in accordance with Section 907.2.6.1 of the *International Building Code*.

Exceptions:

1. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.5.2 of the *International Building Code* are not exceeded.
2. Where each sleeping room has a means of egress door opening directly to an exterior egress balcony that leads directly to the exits in accordance with Section 1019 of the *International Building Code*, and the building is not more than three stories in height.

303.2.7.3 (IF) 1103.7.3) Group I-2. An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with Section 907.2.6.2 of the *International Building Code*.

Exception: Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.5.2.1 of the *International Building Code* are not exceeded.

303.2.7.4 (IF) 1103.7.4) Group I-3. An automatic and manual fire alarm system shall be installed in existing Group I-3 occupancies in accordance with Section 907.2.6.3 of the *International Building Code*.

303.2.7.5 (IF) 1103.7.5) Group R-1. A fire alarm system and smoke alarms shall be installed in existing Group R-1 occupancies in accordance with Sections 303.2.7.5.1 through 303.2.7.5.2.1.

303.2.7.5.1 (IF) 1103.7.5.1) Group R-1 hotel and motel manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the

International Building Code shall be installed in existing Group R-1 hotels and motels more than three stories or with more than 20 sleeping units.

Exceptions:

1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.
2. Manual fire alarm boxes are not required throughout the building when 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 of the *International Building Code*;
 - 2.2. The notification appliances will activate upon sprinkler water flow; and
 - 2.3. At least one manual fire alarm box is installed at an approved location.

303.2.7.5.1.1 ([F] 1103.7.5.1.1) Group R-1 hotel and motel automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-1 hotels and motels throughout all interior corridors serving sleeping rooms not equipped with an approved, supervised sprinkler system installed in accordance with Section 903 of the *International Building Code*.

Exception: 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.

303.2.7.5.2 ([F] 1103.7.5.2) Group R-1 boarding and rooming houses manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-1 boarding and rooming houses.

Exception: Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.

303.2.7.5.2.1 ([F] 1103.7.5.2.1) Group R-1 boarding and rooming houses automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-1 boarding and rooming houses throughout all interior corridors serving sleeping units not equipped with an approved, supervised sprinkler system installed in accordance with Section 903 of the *International Building Code*.

Exception: Buildings equipped with single-station smoke alarms meeting or exceeding the requirements of Section 907.2.11.1 of the *International Building Code* and where the fire alarm system includes at least one manual fire alarm box per floor arranged to initiate the alarm.

303.2.7.6 ([F] 1103.7.6) Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling or sleeping units.

Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than 0.75 hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* and having a local alarm to notify all occupants.

3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code*, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception 4 of the *International Building Code*.

303.2.7.7 (IF 1103.7.7) Group R-4. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-4 residential care/assisted living facilities in accordance with Section 907.2.10.1 of the *International Building Code*.

Exceptions:

1. Where there are interconnected smoke alarms meeting the requirements of Section 907.2.11 of the *International Building Code* and there is at least one manual fire alarm box per floor arranged to continuously sound the smoke alarms.
2. Other manually activated, continuously sounding alarms approved by the code official.

303.2.8 (IF 1103.8) Single- and multiple-station smoke alarms. Single- and multiple-station smoke alarms shall be installed in existing Group I-1 and R occupancies in accordance with Sections 303.2.8.1 through 303.2.8.3.

303.2.8.1 (IF 1103.8.1) Where required. Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with Section 907.2.11 of the *International Building Code*, except as provided in Sections 303.2.8.2 or 303.2.8.3.

Exceptions:

1. Where the code that was in effect at the time of construction required smoke alarms and smoke alarms complying with those requirements are already provided.
2. Where smoke alarms have been installed in occupancies and dwellings that were not required to have them at the time of construction, additional smoke alarms shall not be required provided that the existing smoke alarms comply with requirements that were in effect at the time of installation.
3. Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

303.2.8.2 (IF 1103.8.2) Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

303.2.8.3 (IF 1103.8.3) Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the

batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

1. Smoke alarms are permitted to be solely battery operated in existing buildings where no construction is taking place.
2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.
3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

303.2.9 (IF 1103.9) Carbon monoxide alarms. Existing Group I or R occupancies located in a building containing a fuel-burning appliance or a building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034, and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in the International Building Code, or an enclosed parking garage ventilated in accordance with Section 404 of the *International Mechanical Code* shall not be deemed to be an attached garage.

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

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

303.3 (IF 1104.1). Means of egress. Means of egress in existing buildings shall comply with the minimum egress requirements when specified in Table 303.2.1 as further enumerated in Sections 303.3.1 through 303.3.23, and the building code that applied at the time of construction. Where the provisions of this chapter conflict with the building code that applied at the time of construction, the most restrictive provision shall apply. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements when specified in Table 303.2.1 as further enumerated in Sections 303.3.1 through 303.3.23.

303.3.1 (IF 1104.2) Elevators, escalators and moving walks. Elevators, escalators and moving walks shall not be used as a component of a required means of egress.

Exceptions:

1. Elevators used as an accessible means of egress where allowed by Section 1007.4 of the *International Building Code*.
2. Previously approved escalators and moving walks in existing buildings.

303.3.2 (IF 1104.3) Exit sign illumination. Exit signs shall be internally or externally illuminated. The face of an exit sign illuminated from an external source shall have an intensity of not less than 5 footcandles (54 lux). Internally illuminated signs shall provide equivalent luminance and be listed for the purpose.

Exception: Approved self-luminous signs that provide evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts (0.21 cd/m²).

303.3.3 ([F] 1104.4) Power source. here emergency illumination is required in Section 303.3.4, exit signs shall be visible under emergency illumination conditions.

Exception: Approved signs that provide continuous illumination independent of external power sources are not required to be connected to an emergency electrical system.

303.3.4 ([F] 1104.5) Illumination emergency power. The power supply 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 stairs, corridors, windowless areas with student occupancy, shops and laboratories.

4. Group F having more than 100 occupants.

Exception: Buildings used only during daylight hours which 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 m²) 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.

303.3.4.1 ([F] 1104.5.1) Emergency power duration and installation. In other than Group I-2, the emergency power system shall provide power for not less than 60 minutes and consist of storage batteries, unit equipment or an on-site generator. In Group I-2, the emergency power system shall provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 1006.3 of the *international Building Code*.

303.3.5 ([F] 1104.6) Guards. Guards complying with this Section shall be provided at the open sides of means of egress that are more than 30 inches (762 mm) above the floor or grade below.

303.3.5.1 (IF] 1104.6.1) Height of guards. Guards shall form a protective barrier not less than 42 inches (1067 mm) high.

Exceptions:

1. Existing guards on the open side of stairs shall be not less than 30 inches (760 mm) high.
2. Existing guards within dwelling units shall be not less than 36 inches (910 mm) high.
3. Existing guards in assembly seating areas.

303.3.5.2 (IF] 1104.6.2) Opening limitations. Open guards shall have balusters or ornamental patterns such that a 6-inch-diameter (152 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm).

Exceptions:

1. At elevated walking surfaces for access to, and use of, electrical, mechanical or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.
2. In occupancies in Group I-3, F, H or S, the clear distance between intermediate rails measured at right angles to the rails shall not exceed 21 inches (533 mm).
3. Approved existing open guards.

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

Exceptions:

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

303.3.7 (IF] 1104.8) Opening force for doors. The opening force for interior side-swinging doors without closers shall not exceed a 5-pound (22 N) force. For other side-swinging, sliding and folding doors, the door latch shall release when subjected to a force of not more than 15 pounds (66 N). The door shall be set in motion when subjected to a force not exceeding 30 pounds (133 N). The door shall swing to a full-open position when subjected to a force of not more than 50 pounds (222 N). Forces shall be applied to the latch side.

303.3.8 (IF] 1104.9) Revolving doors. Revolving doors shall comply with the following:

1. A revolving door shall not be located within 10 feet (3048 mm) of the foot or top of stairs or escalators. A dispersal area shall be provided between the stairs or escalators and the revolving doors.
2. The revolutions per minute for a revolving door shall not exceed those shown in Table 303.3.8.
3. Each revolving door shall have a conforming side-hinged swinging door in the same wall as the revolving door and within 10 feet (3048 mm).

Exceptions:

1. A revolving door is permitted to be used without an adjacent swinging door for street-floor elevator lobbies provided a stairway, escalator or door from other parts of the building does not discharge through the lobby and the lobby does not have any occupancy or use other than as a means of travel between elevators and a street.
2. Existing revolving doors are permitted where the number of revolving doors does not exceed the number of swinging doors within 20 feet (6096 mm).

**303.3.8 TABLE (IF 1104.9)
REVOLVING DOOR SPEEDS**

INSIDE DIAMETER (feet-inches)	POWER-DRIVEN-TYPE SPEED CONTROL (rpm)	MANUAL-TYPE SPEED CONTROL (rpm)
6-6	11	12
7-0	10	11
7-6	9	11
8-0	9	10
8-6	8	9
9-0	8	9
9-6	7	8
10-0	7	8

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

303.3.8.1 (IF 1104.9.1) Egress component. A revolving door used as a component of a means of egress shall comply with Section 1104.9 and all of the following conditions:

1. Revolving doors shall not be given credit for more than 50 percent of the required egress capacity.
2. Each revolving door shall be credited with not more than a 50-person capacity.
3. Revolving doors shall be capable of being collapsed when a force of not more than 130 pounds (578 N) is applied within 3 inches (76 mm) of the outer edge of a wing.

303.3.9 (IF 1104.10) Stair dimensions for existing stairs. Existing stairs in buildings shall be permitted to remain if the rise does not exceed 8 1/4 inches (210 mm) and the run is not less than 9 inches (229 mm). Existing stairs can be rebuilt.

Exception: Other stairs approved by the code official.

303.3.9.1 (IF 1104.10.1) Dimensions for replacement stairs. The replacement of an existing *stairway* in a structure shall not be required to comply with the new *stairway* requirements of [Section 1009](#) of the International Building Code where the existing space and construction will not allow a reduction in pitch or slope.

303.3.10 (IF 1104.11) Winders. Existing winders shall be allowed to remain in use if they have a minimum tread depth of 6 inches (152 mm) and a minimum tread depth of 9 inches (229 mm) at a point 12 inches (305 mm) from the narrowest edge.

303.3.11 (IF 1104.12) Circular stairways. Existing circular stairs shall be allowed to continue in use provided the minimum depth of tread is 10 inches (254 mm) and the smallest radius shall not be less than twice the width of the stairway.

303.3.12 (IF 1104.13) Stairway handrails. Stairways shall have handrails on at least one side. Handrails shall be located so that all portions of the stairway width required for egress capacity are within 44 inches (1118 mm) of a handrail.

Exception: Aisle stairs provided with a center handrail are not required to have additional handrails.

303.3.12.1 (IF) 1104.13.1 Height. Handrail height, measured above stair tread nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 42 inches (1067 mm).

303.3.13 (IF) 1104.14 Slope of ramps. Ramp runs utilized as part of a means of egress shall have a running slope not steeper than one unit vertical in 10 units horizontal (10-percent slope). The slope of other ramps shall not be steeper than one unit vertical in eight units horizontal (12.5-percent slope).

303.3.14 (IF) 1104.15 Width of ramps. Existing ramps are permitted to have a minimum width of 30 inches (762 mm) but not less than the width required for the number of occupants served as determined by the *International Building Code*.

303.3.15 (IF) 1104.16 Fire escape stairs. Fire escape stairs shall comply with Sections 303.3.15.1 through 303.15.7.

303.3.15.1 (IF) 1104.16.1 Existing means of egress. Fire escape stairs shall be permitted in existing buildings but shall not constitute more than 50 percent of the required *exit* capacity.

303.3.15.2 (IF) 1104.16.2 Protection of openings. Openings within 10 feet (3048 mm) of fire escape stairs shall be protected by opening protectives having a minimum $\frac{3}{4}$ -hour fire protection rating.

Exception: In buildings equipped throughout with an approved automatic sprinkler system, opening protection is not required.

303.3.15.3 (IF) 1104.16.3 Dimensions. Fire escape stairs shall meet the minimum width, capacity, riser height and tread depth as specified in Section 303.3.9.

303.3.15.4 (IF) 1104.16.4 Access. Access to a fire escape stair from a corridor shall not be through an intervening room. Access to a fire escape stair shall be from a door or window meeting the criteria of Section 1005.1 of the *International Building Code*. Access to a fire escape stair shall be directly to a balcony, landing or platform. These shall be no higher than the floor or window sill level and no lower than 8 inches (203 mm) below the floor level or 18 inches (457 mm) below the window sill.

303.3.15.5 (IF) 1104.16.5 Materials and strength. Components of fire escape stairs shall be constructed of noncombustible materials. Fire escape stairs and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m²). Fire escape stairs and balconies shall be provided with a top and intermediate handrail on each side.

303.3.15.5.1 (IF) 1104.16.5.1 Examination. Fire escape stairs and balconies shall be examined for structural adequacy and safety in accordance with Section 303.15.5 by a registered design professional or others acceptable to the *fire code official* every five years, or as required by the *fire code official*. An inspection report shall be submitted to the *fire code official* after such examination.

303.3.15.6 (IF) 1104.16.6 Termination. The lowest balcony shall not be more than 18 feet (5486 mm) from the ground. Fire escape stairs shall extend to the ground or be provided with counterbalanced stairs reaching the ground.

Exception: For fire escape stairs serving 10 or fewer occupants, an *approved* fire escape ladder is allowed to serve as the termination.

303.3.15.7 (IF) 1104.16.7 Maintenance. Fire escapes shall be kept clear and unobstructed at all times and shall be maintained in good working order.

303.3.16 (IF) 1104.17 Corridors. Corridors serving an occupant load greater than 30 and the openings therein shall provide an effective barrier to resist the movement of smoke. Transoms, louvers, doors and other openings shall be kept closed or self-closing.

Exceptions:

1. Corridors in occupancies other than in Group H, which are equipped throughout with an approved automatic sprinkler system.
2. Patient room doors in corridors in occupancies in Group I-2 where smoke barriers are provided in accordance with the *International Building Code*.
3. Corridors in occupancies in Group E where each room utilized for instruction or assembly has at least one-half of the required means of egress doors opening directly to the exterior of the building at ground level.
4. Corridors that are in accordance with the *International Building Code*.

303.3.16.1 (IF) 1104.17.1) Corridor openings. Openings in corridor walls shall comply with the requirements of the International Building Code.

Exceptions:

1. Where 20-minute fire door assemblies are required, solid wood doors at least 1.75 inches (44 mm) thick or insulated steel doors are allowed.
2. Openings protected with fixed wire glass set in steel frames.
3. Openings covered with 0.5-inch (12.7 mm) gypsum wallboard or 0.75-inch (19.1 mm) plywood on the room side.
4. Opening protection is not required when the building is equipped throughout with an approved automatic sprinkler system.

303.3.16.2 (IF) 1104.17.2) 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 303.16.2.

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.

**303.3.16.2 TABLE (IF) 1104.17.2)
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 ⁱ	75	100	50	50	200	300
Group E	75	100	50	50	200	300
Group F-1, S-1 ^{dl}	75	100	50	50	200	250
Group F-2, S-2 ^{dl}	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 (Health care)	NR ^e	NR ^e	NR	NR	150	200 ^c
Group I-3 (Detention and correctional – Use Conditions II, III, IV, V)	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	75	125	50	50	200	250

(Apartments)						
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	75	100	20	50	300	400

NR = No requirements.

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

- a. 20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.
- b. See Section 1028.9.5 for dead-end aisles in Group A occupancies.
- c. This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter.
- d. See the International Building Code for special requirements on spacing of doors in aircraft hangars.
- e. Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors.
- f. 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.

303.3.17 ([F] 1104.18) Exit access travel distance. Exits shall be located so that the maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed path of egress travel, does not exceed the distances given in Table 301.3.12.15.2.

303.3.18 ([F] 1104.19) Common path of egress travel. The common path of egress travel shall not exceed the distances given in Table 301.3.12.15.2.

303.3.19 ([F] 1104.20) Stairway discharge identification. An interior exit stairway or ramp which continues below its level of exit discharge shall be arranged and marked to make the direction of egress to a public way readily identifiable.

Exception: Stairs that continue one-half story beyond their levels of exit discharge need not be provided with barriers where the exit discharge is obvious.

303.3.20 ([F] 1104.21) Exterior stairway protection. Exterior exit stairs shall be separated from the interior of the building as required in Section 1026.6 of the *International Building Code*. Openings shall be limited to those necessary for egress from normally occupied spaces.

Exceptions:

1. Separation from the interior of the building is not required for buildings that are two stories or less above grade where the level of exit discharge serving such occupancies is the first story above grade.
2. Separation from the interior of the building is not required where the exterior stairway is served by an exterior balcony that connects two remote exterior stairways or other approved exits, with a perimeter that is not less than 50 percent open. To be considered open, the opening shall be a minimum of 50 percent of the height of the enclosing wall, with the top of the opening not less than 7 feet (2134 mm) above the top of the balcony.
3. Separation from the interior of the building is not required for an exterior stairway located in a building or structure that is permitted to have unenclosed interior stairways in accordance with Section 1022 of the *International Building Code*.
4. Separation from the interior of the building is not required for exterior stairways connected to open-ended corridors, provided that:
 - 4.1. The building, including corridors and stairs, is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code*.
 - 4.2. The open-ended corridors comply with Section 1018.2 of the *International Building Code*.

- 4.3. The open-ended corridors are connected on each end to an exterior exit stairway complying with Section 1026 of the *International Building Code*.
- 4.4. At any location in an open-ended corridor where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3 m²) or an exterior stairway shall be provided. Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases.

303.3.21 ([F] 1104.22) Minimum aisle width. The minimum clear width of aisles shall be:

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

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

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

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

- 3. Twenty inches (508 mm) between a stepped aisle handrail or guard and seating when the aisle is subdivided by the handrail.

- 4. Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.

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

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

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

- 6. Twenty-three inches (584 mm) between a stepped stair handrail and seating where an aisle does not serve more than five rows on one side.

303.3.22 ([F] 1104.23) Stairway floor number signs. Existing stairs shall be marked in accordance with Section 1022.8 of the *International Building Code*.

303.3.23 ([F] 1104.24) Egress path markings. Existing high-rise buildings of Group A, B, E, I, M and R-1 occupancies shall be provided with luminous egress path markings in accordance with Section 1024 of the *International Building Code*.

Exception: Open, unenclosed stairwells in historic buildings designated as historic under a state or local historic preservation program.

303.4 ([F] 1105) Requirements for outdoor operations. Outdoor operations shall be in accordance with Section 303.4.1 through 303.4.1.2.

303.4.1 ([F] 1105.1) Tire storage yards. Existing tire storage yards shall be provided with fire apparatus access roads in accordance with Sections 1105.1.1 and 1105.1.2 of the *International Building Code*.

303.4.1.1 ([F] 1105.1.1) Access to piles. Access roadways shall be within 150 feet (45 720 mm) of any point in the storage yard where storage piles are located, at least 20 feet (6096 mm) from any storage pile.

303.4.1.2 ([F] 1105.1.2) Location within piles. Fire apparatus access roads shall be located within all pile clearances identified in Section 3405.4 and within all fire breaks required in Section 3405.5 of the *International Fire Code*.

705.1 General. An area being altered within a facility that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the International Building Code unless it is technically infeasible. Where compliance with this Section is technically infeasible, the alteration shall provide access to the maximum extent that is technically feasible. Accessibility for existing buildings shall be determined as required by Section 302.1.1.

Add new standards to Chapter 16 as follows:

NFPA National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

NFPA 720-09 Standard for the installation of carbon monoxide(co) detection and warning equipment

UL Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096

UL 2034-08 Single and Multiple Station Carbon Monoxide Alarms with revisions through February 2009

Reason: This proposal does several things which include the following:

1. Revises the chapter title to more clearly reflect the content of the chapter
2. Restructures the requirements to more clearly point out the additional code requirements and make room for the existing minimum requirements
3. Adds some clarity on the applicable accessibility provisions
4. Places the minimum existing requirements from the fire code in the IEBC.

Title Change. The new title will make it more clear that the chapter both explains applicability and provides minimum requirements that apply to all methods of compliance.

Restructuring. Currently the additional code reference is lost at the end of the chapter. This will provide more visibility to this requirement. This also provides a better structure for future requirements such as those proposed for accessibility. In addition, it is felt that the provisions from Chapter 11 of the IFC which represent minimum existing requirements for all buildings, as applicable, should be stand alone for clarity.

Accessibility. Significant changes are being developed in the 2015 Edition of ANSI A117.1 Standard. No existing buildings have been designed to meet these standards and would be considered inaccessible under the new standard despite having complied with the 2003 standard. For example, Section 705.1.1 provides an exception for bringing an entrance into compliance if there is an accessible entrance elsewhere. A fully complying entrance under the older A117.1 would no longer be considered accessible under the new standard. Similarly, 705.2 requires the accessible route to conform where alterations are made to a primary function. Fully compliant access routes under the 2003 standard will not conform to the 2011 standard because of the changes to the minimum clearances reflecting the changed clear floor space.

With this change those elements that were compliant with the 2009 standard would continue to be considered compliant after the 2015 standard is made mandatory. This philosophy has been used with the changes in the new 2010 ADA Standard. Any existing building that conformed to the older standard is considered compliant under the new standard.

Existing requirements from IFC. Currently the IEBC only includes requirements for when an existing building is being repaired, altered or is undergoing a change of occupancy. The IFC includes minimum requirements for existing buildings in Chapter 11 that are applicable to all buildings. This change duplicates those requirements and moves them into the requirements for compliance in Chapter 3 of the IEBC so that owners and designers are aware of the additional minimums that may be imposed on an existing building beyond those required for the work anticipated. The intent is that these changes remain under the purview of the IFC Code Development Committee and are simply placed here to provide clarity to the code user that additional requirements may apply to the building if these minimums are not already met.

Changes from the IFC are only due to duplicate provisions that are already a part of the IEBC. For reference only we have included the original IFC Section number parenthetically.

- Fire code official has been revised to code official to address the fact that the authority enforcing this code may not be a fire code official.
- New Section 303.1.3 is based on IFC Section [F] 1101.3 that indicates that permits must be obtained per Sections 105.6 and 105.7 of the IFC and the IBC. The two referenced IFC Sections are not requiring permits for alterations necessary to conform, but for occupancies or systems in a building. A correction is made in this change to reference the IEBC permit requirements and a companion change is being submitted to make the same change to the IFC.

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

Analysis: The proposed referenced standards are already referenced in the *International Building Code*.

301.1-EB-COLLINS.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee felt that the IEBC is a construction code and adding operational requirements as found in the IFC Chapter 11 was inappropriate. Generally, the proposal was seen as too extensive and beyond the current scope and intent of the IEBC. There was some preference to the concept to instead provide a link to chapter 11 of the IFC to indicate the retroactive requirements.

Staff Analysis: This code change proposal goes beyond the scope of the IEBC by adding retroactive requirements to the code. If a public comment for approval as submitted or approval as modified is successful during the public comment hearings the result will be limited to an advisory recommendation to the ICC Board of Directors who will determine the final disposition on this proposed change.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment 1:

Name: David S. Collins, The Preview Group, representing The American Institute of Architects and Robert J. Davidson, Davidson Code Concepts, LLC request Approval as Modified by this Public Comment.

Replace the proposal as follows:

CHAPTER 3 COMPLIANCE METHODS, APPLICABILITY AND MINIMUM REQUIREMENTS

301.1 General. The *repair, alteration, change of occupancy, addition* or relocation of all *existing buildings* shall comply with one of the methods listed in Sections 301.1.1 through 301.1.3 as selected by the applicant in addition to complying with the minimum requirements in Sections 302 and 303. Application of a method shall be the sole basis for assessing the compliance of work performed under a single permit unless otherwise approved by the *code official*. Sections 301.1.1 through 301.1.3 shall not be applied in combination with each other. Where this code requires consideration of the seismic force-resisting system of an existing building subject to *repair, alteration, change of occupancy, addition* or relocation of *existing buildings*, the seismic evaluation and design shall be based on Section 301.1.4 regardless of which compliance method is used.

Exception: Subject to the approval of the *code official*, *alterations* complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code unless the building is undergoing more than a limited structural alteration as defined in Section 907.4.3. New structural members added as part of the *alteration* shall comply with the *International Building Code*. *Alterations of existing buildings in flood hazard areas* shall comply with Section 701.3.

SECTION 302 ADDITIONAL CODES AND REQUIREMENTS

301.2 Additional-codes 302.1 General. *Alterations, repairs, additions and changes of occupancy* to, or relocation of, *existing buildings* and structures shall comply with the provisions for *alterations, repairs, additions and changes of occupancy* or relocation, respectively, in this code and the *International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International Residential Code* and NFPA 70. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

SECTION 303 FIRE SAFETY AND MEANS OF EGRESS REQUIREMENTS FOR EXISTING BUILDINGS

303.1 (IF) SECTION 1103) Fire safety requirements for existing buildings. Minimum fire safety requirements for existing buildings shall be in provided in accordance with Sections 303.2 through 303.10.20.

303.2 (IF) 1103.1) Required construction. Existing buildings shall comply with not less than the minimum provisions specified in Table 303.2 and as further enumerated in Sections 303.3 through 303.9.

The provisions of this chapter shall not be construed to allow the elimination of fire protection systems or a reduction in the level of fire safety provided in buildings constructed in accordance with previously adopted codes.

Exception: Group U occupancies.

**TABLE 303.2 (IF) TABLE 1103.1)
OCCUPANCY AND USE REQUIREMENTS^a**

SECTION	USE			OCCUPANCY CLASSIFICATION																			
	High rise	Atrium or covered mall	Underground building	A	B	E	F	H1	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	
302.7.5	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
302.7.6	R	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
302.7.7.1	R	-	R	-	-	-	-	-	-	-	-	-	R	R	R	R	-	-	-	-	-	-	-
302.7.7.2	R	-	R	R	R	R	R	R	R	R	R	R	-	-	-	-	R	R	R	-	R	R	R
302.7.7.3	R	-	R	R	R	R	R	R	R	R	R	R	-	-	-	-	R	R	R	-	R	R	R
302.7.7.4	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
302.7.7.5	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-
302.7.7.6	-	-	-	R	-	R	R	R	R	R	R	R	R	R	R	R	-	R	R	R	R	R	R
302.7.7.7	-	-	-	R	-	R	R	R	R	R	R	R	R	R	R	R	-	R	R	R	R	R	R
302.7.8.1	-	-	-	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
302.7.8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-
302.7.9.1	R	-	R	R	R	R	R	R	R	R	-	-	R	R	R	R	R	R	R	-	R	R	R
302.7.9.2	R	-	R	R	R	R	R	R	R	R	-	-	R	R	R	R	R	R	R	-	R	R	R
302.7.10.1	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
302.7.10.2	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-
302.7.10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-
302.7.10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-
302.7.10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-
302.7.10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-
302.7.10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-
302.7.10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	-
302.7.11	R	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	-	R	R	R	R	R	-
302.7.12.4	R	R	R	R	R	R	R	R	R	R	-	-	R	R	R	R	R	R	R	R	R	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.

R = The building is required to comply.

303.3 (IF) 1103.2) Emergency responder radio coverage in existing buildings. Existing buildings 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. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1 of the *International Fire Code*.
2. Within a time frame established by the adopting authority.

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

303.4 (IF) 1103.3) Elevator 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.

303.5 (IF 1103.4) Vertical openings. Interior vertical shafts, 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 303.5.1 through 303.5.7.

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

303.5.2 (IF 1103.4.2) Three to five stories. In other than Group I 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 of the *International Building Code*.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.
3. Vertical opening protection for escalators shall be in accordance with Section 303.5.5, 303.5.6 or 303.5.7.

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

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.
3. Vertical opening protection for escalators shall be in accordance with Section 303.5.5, 303.5.6 or 303.5.7.

303.5.4 (IF 1103.4.4) Atriums and covered malls. In other than Group I 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 of the *International Building Code*.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.

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

303.5.6 (IF 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 of the *International Building Code* shall be installed throughout the building, and a draft curtain with closely spaced sprinklers shall be installed around the escalator opening.

303.5.7 (IF 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.

303.6 (IF 1103.5) Sprinkler systems. An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 303.6.1 and 303.6.2.

303.6.1 (IF 1103.5.1) Pyroxylin plastics. An automatic sprinkler system shall be provided throughout existing buildings where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg). Vaults located within buildings for the storage of raw pyroxylin shall be protected with an approved automatic sprinkler system capable of discharging 1.66 gallons per minute per square foot (68 L/min/m²) over the area of the vault.

303.6.2 (IF 1103.5.2) Group I-2. An automatic sprinkler system shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the level of exit discharge.

303.7 (IF 1103.6) Standpipes. Where required by Sections 303.7.1 or 303.7.2, standpipes shall be installed in accordance with Section 905 of the *International Building Code*. The code official is authorized to approve the installation of manual standpipe systems to achieve compliance with this section where the responding fire department is capable of providing the required hose flow at the highest standpipe outlet.

303.7.1 (IF 1103.6.1) Existing multiple-story buildings. Existing buildings with occupied floors located more than 50 feet (15 240 mm) above the lowest level of fire department access or more than 50 feet (15 240 mm) below the highest level of fire department access shall be equipped with standpipes.

303.7.2 (IF 1103.6.2) Existing helistops and heliports. Existing buildings with a rooftop helistop or heliport located more than 30 feet (9144 mm) above the lowest level of fire department access to the roof level on which the helistop or heliport is located shall be equipped with standpipes in accordance with Section 905.3.6 of the *International Building Code*.

303.8 (IF 1103.7) Fire alarm systems. An approved fire alarm system shall be installed in existing buildings and structures where required by Sections 303.8.1 through 303.8.7 and provide occupant notification in accordance with Section 907.6 of the *International Building Code* unless other requirements are provided by other sections of this code.

Exception: Occupancies with an existing, previously approved fire alarm system.

303.8.1 (IF 1103.7.1) Group E. A fire alarm system shall be installed in existing Group E occupancies in accordance with Section 907.2.3.

Exceptions:

1. A manual fire alarm system is not required in a building with a maximum area of 1,000 square feet (93 m²) that contains a single classroom and is located no closer than 50 feet (15 240 mm) from another building.
2. A manual fire alarm system is not required in Group E occupancies with an occupant load less than 50.

303.8.2 (IF 1103.7.2) Group I-1. An automatic fire alarm system shall be installed in existing Group I-1 residential care/assisted living facilities in accordance with Section 907.2.6.1 of the *International Building Code*.

Exceptions:

1. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.5.2 of the *International Building Code* are not exceeded.
2. Where each sleeping room has a means of egress door opening directly to an exterior egress balcony that leads directly to the exits in accordance with Section 1019 of the *International Building Code*, and the building is not more than three stories in height.

303.8.3 (IF 1103.7.3) Group I-2. An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with Section 907.2.6.2 of the *International Building Code*.

Exception: Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.5.2.1 of the *International Building Code* are not exceeded.

303.8.4 (IF 1103.7.4) Group I-3. An automatic and manual fire alarm system shall be installed in existing Group I-3 occupancies in accordance with Section 907.2.6.3 of the *International Building Code*.

303.8.5 (IF 1103.7.5) Group R-1. A fire alarm system and smoke alarms shall be installed in existing Group R-1 occupancies in accordance with Sections 303.8.5.1 through 303.8.5.2.1.

303.8.5.1 (IF 1103.7.5.1) Group R-1 hotel and motel manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-1 hotels and motels more than three stories or with more than 20 sleeping units.

Exceptions:

1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.
2. Manual fire alarm boxes are not required throughout the building when 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 of the *International Building Code*;
 - 2.2. The notification appliances will activate upon sprinkler water flow; and
 - 2.3. At least one manual fire alarm box is installed at an approved location.

303.8.5.1.1 (IF 1103.7.5.1.1) Group R-1 hotel and motel automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-1 hotels and motels throughout all interior corridors serving sleeping rooms not equipped with an approved, supervised sprinkler system installed in accordance with Section 903 of the *International Building Code*.

Exception: 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.

303.8.5.2 (IF 1103.7.5.2) Group R-1 boarding and rooming houses manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-1 boarding and rooming houses.

Exception: Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.

303.8.5.2.1 (IF 1103.7.5.2.1) Group R-1 boarding and rooming houses automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-1 boarding and rooming houses throughout all interior corridors serving sleeping units not equipped with an approved, supervised sprinkler system installed in accordance with Section 903 of the *International Building Code*.

Exception: Buildings equipped with single-station smoke alarms meeting or exceeding the requirements of Section 907.2.11.1 of the *International Building Code* and where the fire alarm system includes at least one manual fire alarm box per floor arranged to initiate the alarm.

303.8.6 (IF 1103.7.6) Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling or sleeping units.

Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than 0.75 hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code* and having a local alarm to notify all occupants.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code*, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception 4 of the *International Building Code*.

303.8.7 (IF 1103.7.7) Group R-4. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 of the *International Building Code* shall be installed in existing Group R-4 residential care/assisted living facilities in accordance with Section 907.2.10.1 of the *International Building Code*.

Exceptions:

1. Where there are interconnected smoke alarms meeting the requirements of Section 907.2.11 of the *International Building Code* and there is at least one manual fire alarm box per floor arranged to continuously sound the smoke alarms.
2. Other manually activated, continuously sounding alarms approved by the code official.

303.8.8 (IF 1103.8) Single- and multiple-station smoke alarms. Single- and multiple-station smoke alarms shall be installed in existing Group I-1 and R occupancies in accordance with Sections 303.8.8.1 through 303.8.8.3.

303.8.8.1 (IF 1103.8.1) Where required. Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with Section 907.2.11 of the *International Building Code*, except as provided in Sections 303.8.8.2 or 303.8.8.3.

Exceptions:

1. Where the code that was in effect at the time of construction required smoke alarms and smoke alarms complying with those requirements are already provided.
2. Where smoke alarms have been installed in occupancies and dwellings that were not required to have them at the time of construction, additional smoke alarms shall not be required provided that the existing smoke alarms comply with requirements that were in effect at the time of installation.
3. Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

303.8.8.2 (IF 1103.8.2) Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.

2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

303.8.8.3 (IF) 1103.8.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

1. Smoke alarms are permitted to be solely battery operated in existing buildings where no construction is taking place.
2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.
3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

303.9 (IF) 1103.9 Carbon monoxide alarms. Existing Group I or R occupancies located in a building containing a fuel-burning appliance or a building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034, and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in the International Building Code, or an enclosed parking garage ventilated in accordance with Section 404 of the *International Mechanical Code* shall not be deemed to be an attached garage.

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

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

303.10 (IF) 1104.1 Means of egress for existing buildings. Means of egress in existing buildings shall comply with the minimum egress requirements when specified in Table 303.2 as further enumerated in Sections 303.10.1 through 303.10.20, and the building code that applied at the time of construction. Where the provisions of this chapter conflict with the building code that applied at the time of construction, the most restrictive provision shall apply. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements when specified in Table 303.2 as further enumerated in Sections 303.10.1 through 303.10.20.

303.10.1 (IF) 1104.2 Elevators, escalators and moving walks. Elevators, escalators and moving walks shall not be used as a component of a required means of egress.

Exceptions:

1. Elevators used as an accessible means of egress where allowed by Section 1007.4 of the *International Building Code*.
2. Previously approved escalators and moving walks in existing buildings.

303.10.2 (IF) 1104.3 Exit sign illumination. Exit signs shall be internally or externally illuminated. The face of an exit sign illuminated from an external source shall have an intensity of not less than 5 footcandles (54 lux). Internally illuminated signs shall provide equivalent luminance and be listed for the purpose.

Exception: Approved self-luminous signs that provide evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts (0.21 cd/m²).

303.10.3 (IF) 1104.5 Illumination emergency power. The power supply 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 stairs, corridors, windowless areas with student occupancy, shops and laboratories.

4. Group F having more than 100 occupants.

Exception: Buildings used only during daylight hours which 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 m²) 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.

303.10.3.1 (IF 1104.4) Power source. Where emergency illumination is required in Section 303.10.3, exit signs shall be visible under emergency illumination conditions.

Exception: Approved signs that provide continuous illumination independent of external power sources are not required to be connected to an emergency electrical system.

303.10.3.2 (IF 1104.5.1) Emergency power duration and installation. In other than Group I-2, the emergency power system shall provide power for not less than 60 minutes and consist of storage batteries, unit equipment or an on-site generator. In Group I-2, the emergency power system shall provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 1006.3 of the *International Building Code*.

303.10.4(IF 1104.6) Guards. Guards complying with this section shall be provided at the open sides of means of egress that are more than 30 inches (762 mm) above the floor or grade below.

303.10.4.1 (IF 1104.6.1) Height of guards. Guards shall form a protective barrier not less than 42 inches (1067 mm) high.

Exceptions:

1. Existing guards on the open side of stairs shall be not less than 30 inches (760 mm) high.
2. Existing guards within dwelling units shall be not less than 36 inches (910 mm) high.
3. Existing guards in assembly seating areas.

303.10.4.2 (IF 1104.6.2) Opening limitations. Open guards shall have balusters or ornamental patterns such that a 6-inch-diameter (152 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm).

Exceptions:

1. At elevated walking surfaces for access to, and use of, electrical, mechanical or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.
2. In occupancies in Group I-3, F, H or S, the clear distance between intermediate rails measured at right angles to the rails shall not exceed 21 inches (533 mm).
3. Approved existing open guards.

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

Exceptions:

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

303.10.5.1 (IF 1104.8) Opening force for doors. The opening force for interior side-swinging doors without closers shall not exceed a 5-pound (22 N) force. For other side-swinging, sliding and folding doors, the door latch shall release when subjected to a force of not more than 15 pounds (66 N). The door shall be set in motion when subjected to a force not exceeding 30 pounds (133 N). The door shall swing to a full-open position when subjected to a force of not more than 50 pounds (222 N). Forces shall be applied to the latch side.

303.10.5.2 (IF 1104.9) Revolving doors. Revolving doors shall comply with the following:

1. A revolving door shall not be located within 10 feet (3048 mm) of the foot or top of stairs or escalators. A dispersal area shall be provided between the stairs or escalators and the revolving doors.
2. The revolutions per minute for a revolving door shall not exceed those shown in Table 303.10.5.2.
3. Each revolving door shall have a conforming side-hinged swinging door in the same wall as the revolving door and within 10 feet (3048 mm).

Exceptions:

1. A revolving door is permitted to be used without an adjacent swinging door for street-floor elevator lobbies provided a stairway, escalator or door from other parts of the building does not discharge through the lobby and the lobby does not have any occupancy or use other than as a means of travel between elevators and a street.
2. Existing revolving doors are permitted where the number of revolving doors does not exceed the number of swinging doors within 20 feet (6096 mm).

**303.10.5.2 TABLE (IF 1104.9)
REVOLVING DOOR SPEEDS**

INSIDE DIAMETER (feet-inches)	POWER-DRIVEN-TYPE SPEED CONTROL (rpm)	MANUAL-TYPE SPEED CONTROL (rpm)
6-6	11	12
7-0	10	11
7-6	9	11
8-0	9	10
8-6	8	9
9-0	8	9
9-6	7	8
10-0	7	8

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

303.10.5.2.1 (IF 1104.9.1) Egress component. A revolving door used as a component of a means of egress shall comply with Section 303.10.5.2 and all of the following conditions:

1. Revolving doors shall not be given credit for more than 50 percent of the required egress capacity.
2. Each revolving door shall be credited with not more than a 50-person capacity.
3. Revolving doors shall be capable of being collapsed when a force of not more than 130 pounds (578 N) is applied within 3 inches (76 mm) of the outer edge of a wing.

303.10.6 (IF 1104.10) Stair dimensions for existing stairs. Existing stairs in buildings shall be permitted to remain if the rise does not exceed 8 1/4 inches (210 mm) and the run is not less than 9 inches (229 mm). Existing stairs can be rebuilt.

Exception: Other stairs approved by the code official.

303.10.7 (IF 1104.11) Winders. Existing winders shall be allowed to remain in use if they have a minimum tread depth of 6 inches (152 mm) and a minimum tread depth of 9 inches (229 mm) at a point 12 inches (305 mm) from the narrowest edge.

303.10.8 (IF 1104.12) Circular stairways. Existing circular stairs shall be allowed to continue in use provided the minimum depth of tread is 10 inches (254 mm) and the smallest radius shall not be less than twice the width of the stairway.

303.10.9 (IF 1104.13) Stairway handrails. Stairways shall have handrails on at least one side. Handrails shall be located so that all portions of the stairway width required for egress capacity are within 44 inches (1118 mm) of a handrail.

Exception: Aisle stairs provided with a center handrail are not required to have additional handrails.

303.10.9.1 (IF) 1104.13.1 Height. Handrail height, measured above stair tread nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 42 inches (1067 mm).

303.10.10 (IF) 1104.14 Slope of ramps. Ramp runs utilized as part of a means of egress shall have a running slope not steeper than one unit vertical in 10 units horizontal (10-percent slope). The slope of other ramps shall not be steeper than one unit vertical in eight units horizontal (12.5-percent slope).

303.10.11 (IF) 1104.15 Width of ramps. Existing ramps are permitted to have a minimum width of 30 inches (762 mm) but not less than the width required for the number of occupants served as determined by the *International Building Code*.

303.10.12 (IF) 1104.16 Fire escape stairs. Fire escape stairs shall comply with Sections 805.3.1.2.

303.10.13 (IF) 1104.17 Corridors. Corridors serving an occupant load greater than 30 and the openings therein shall provide an effective barrier to resist the movement of smoke. Transoms, louvers, doors and other openings shall be kept closed or self-closing.

Exceptions:

1. Corridors in occupancies other than in Group H, which are equipped throughout with an approved automatic sprinkler system.
2. Patient room doors in corridors in occupancies in Group I-2 where smoke barriers are provided in accordance with the *International Building Code*.
3. Corridors in occupancies in Group E where each room utilized for instruction or assembly has at least one-half of the required means of egress doors opening directly to the exterior of the building at ground level.
4. Corridors that are in accordance with the *International Building Code*.

303.10.13.1 (IF) 1104.17.1 Corridor openings. Openings in corridor walls shall comply with the requirements of the *International Building Code*.

Exceptions:

1. Where 20-minute fire door assemblies are required, solid wood doors at least 1.75 inches (44 mm) thick or insulated steel doors are allowed.
2. Openings protected with fixed wire glass set in steel frames.
3. Openings covered with 0.5-inch (12.7 mm) gypsum wallboard or 0.75-inch (19.1 mm) plywood on the room side.
4. Opening protection is not required when the building is equipped throughout with an approved automatic sprinkler system.

303.10.13.2 (IF) 1104.17.2 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 303.10.13.2.

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.

**303.10.13.2 TABLE (IF) 1104.17.2)
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 ¹	75	100	50	50	200	300
Group E	75	100	50	50	200	300
Group F-1, S-1 ⁴¹	75	100	50	50	200	250
Group F-2, S-2 ⁴¹	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 (Health care)	NR ^e	NR ^e	NR	NR	150	200 ^c
Group I-3 (Detention and correctional – Use Conditions II, III, IV, V)	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	75	100	20	50	300	400

NR = No requirements.

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

- a. 20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.
- b. See Section 1028.9.5 for dead-end aisles in Group A occupancies.
- c. This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter.
- d. See the International Building Code for special requirements on spacing of doors in aircraft hangars.
- e. Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors.
- f. 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.

303.10.14 F] 1104.18) Exit access travel distance. Exits shall be located so that the maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed path of egress travel, does not exceed the distances given in Table 303.10.13.2.

303.10.15 (IF] 1104.19) Common path of egress travel. The common path of egress travel shall not exceed the distances given in Table 303.10.13.2.

303.10.16 (IF] 1104.20) Stairway discharge identification. An interior exit stairway or ramp which continues below its level of exit discharge shall be arranged and marked to make the direction of egress to a public way readily identifiable.

Exception: Stairs that continue one-half story beyond their levels of exit discharge need not be provided with barriers where the exit discharge is obvious.

303.10.17 (IF] 1104.21) Exterior stairway protection. Exterior exit stairs shall be separated from the interior of the building as required in Section 1026.6 of the *International Building Code*. Openings shall be limited to those necessary for egress from normally occupied spaces.

Exceptions:

1. Separation from the interior of the building is not required for buildings that are two stories or less above grade where the level of exit discharge serving such occupancies is the first story above grade.
2. Separation from the interior of the building is not required where the exterior stairway is served by an exterior balcony that connects two remote exterior stairways or other approved exits, with a perimeter that is not less than 50 percent open. To be considered open, the opening shall be a minimum of 50 percent of the height of the enclosing wall, with the top of the opening not less than 7 feet (2134 mm) above the top of the balcony.
3. Separation from the interior of the building is not required for an exterior stairway located in a building or structure that is permitted to have unenclosed interior stairways in accordance with Section 1022 of the *International Building Code*.
4. Separation from the interior of the building is not required for exterior stairways connected to open-ended corridors, provided that:
 - 4.1. The building, including corridors and stairs, is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code*.
 - 4.2. The open-ended corridors comply with Section 1018.2 of the *International Building Code*.
 - 4.3. The open-ended corridors are connected on each end to an exterior exit stairway complying with Section 1026 of the *International Building Code*.
 - 4.4. At any location in an open-ended corridor where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3 m²) or an exterior stairway shall be provided.

Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases.

303.10.18 (IF) 1104.22 Minimum aisle width. The minimum clear width of aisles shall be:

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

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

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

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

3. Twenty inches (508 mm) between a stepped aisle handrail or guard and seating when the aisle is subdivided by the handrail.

4. Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.

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

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

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

6. Twenty-three inches (584 mm) between a stepped stair handrail and seating where an aisle does not serve more than five rows on one side.

303.10.19 (IF) 1104.23 Stairway floor number signs. Existing stairs shall be marked in accordance with Section 1022.8 of the International Building Code.

303.10.20 (IF) 1104.24 Egress path markings. Existing high-rise buildings of Group A, B, E, I, M and R-1 occupancies shall be provided with luminous egress path markings in accordance with Section 1024 of the International Building Code.

Exception: Open, unenclosed stairwells in historic buildings designated as historic under a state or local historic preservation program.

Commenter's Reason: (Collins-Davidson) During testimony at the hearings in Dallas it was indicated that these provisions included requirements that weren't necessary because the reference to the IFC covered these provisions. Similar to other provisions that are found in multiple codes, these minimum requirements for existing buildings should be obvious to anyone using the code, whether they are found in the IFC or the IEBC. Users of codes should not be subject to "gotcha" provisions found in other codes that will have a significant impact on the design and use of these buildings. Worse, the application of these provisions may not occur until after the project has been permitted and or even occupied.

Also, with the modification of the ADM provision to update the A117.1 to keep the reference to the 2009 edition, the changes that the 2015 edition would have imposed on existing buildings will not have to be addressed until the 2018 edition.

Public Comment 2:

Maureen Traxler, City of Seattle Department of Planning & Development, representing Washington Association of Building Officials Technical Code Development Committee, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

SECTION 302 **EXISTING BUILDING MINIMUM REQUIREMENTS**

302.1 Required construction. Buildings undergoing repairs, alterations, changes of occupancy, additions and relocations shall comply with Chapter 11 of the International Fire Code in addition to the requirements of this Code.

Commenter's Reason: The original proposal dealt with 2 issues: accessibility and IFC Chapter 11 retroactive requirements. This public comment only addresses the second of those issues. The original proposal brought all of IFC Chapter 11 into the IEBC. However, Chapter 11's provisions are retroactive and apply even when a building is not undergoing repair, alteration, addition, change of occupancy or relocation. All of those provisions are outside the scope of the IEBC. IEBC Section 101.2 states "**101.2 Scope.** The provisions of the International Existing Building Code **shall apply to the repair, alteration, change of occupancy, addition and relocation** of existing buildings." (emphasis added)

The proponents of this code change proposal raised an important point—IFC Chapter 11 applies to all buildings, regardless of whether any work or change of occupancy is being proposed for the building. Building owners and designers may not be aware of Chapter 11, especially in jurisdictions where it is not actively enforced, but they are still obligated by law to comply with it. This

proposal states that Chapter 11 provides minimum standards that apply to work within the scope of the IEBC without introducing retroactive requirements into the IEBC. This proposal would enhance enforcement of IFC Chapter 11 without exceeding the scope of the IEBC.

EB3-13

Final Action:

AS

AM

AMPC_____

D

EB5-13

504.1.1 (NEW)

Proposed Change as Submitted

Proponent: David S. Collins, FAIA, The Preview Group, Inc., representing The American Institute of Architects

Add new text as follows:

504.1 Scope. Level 2 *alterations* include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

504.1.1 Except where aisles required in Groups B and M, table seating per Sections 1017.3 and 1017.4 of the *International Building Code* or assembly seating per Section 1028 of the *International Building Code*, are reconfigured, the movement, addition or removal of furniture, movable partitions less than 5 feet 9 inches in height, or fixtures within a space shall not be considered reconfiguration of space.

Reason: Reconfiguration of a space can occur simply by movement of furniture. It isn't the intent of the IEBC to require that furniture rearrangement be included as an alteration, except where the IBC specifically limits aisles, table seating or assembly seating. By this change the rearrangement of furniture is not a trigger for application of the requirement for Level 2 Alterations.

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

504.1.1 (NEW)-EB-COLLINS.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The lead in language was confusing and the terms "shall not" were not appropriate. In addition, there was concern with the high fire hazard furniture being addressed in this exception.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

David S. Collins, FAIA, The Preview Group, Inc, representing The American Institute of Architects requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

~~504.1.1 Except where Aisles required in Groups B and M, table seating per Sections 1017.3 and 1017.4 of the *International Building Code* or assembly seating per Section 1028 of the *International Building Code*, are reconfigured, the movement, addition or removal of furniture, movable partitions less than 5 feet 9 inches in height, or fixtures within a space shall not be considered reconfiguration of space.~~

The movement, addition or removal of furniture, movable partitions that are less than 5 feet 9 inches tall, measured from the floor, or where fixtures within a space are moved, shall not be considered reconfiguration of space.

Movement, addition or removal of furniture and partitions shall not obstruct the minimum aisles required by the *International Building Code* in Groups B or M occupancies. Table seating shall be in accordance with Sections 1017.3 and 1017.4 of the *International Building Code* and assembly seating shall be in accordance with Section 1028 of the *International Building Code* .

Commenter's Reason: The committee felt that the language was not clear. In my zeal to not create exceptions it was difficult to understand what was intended. Hopefully, this revision will clear up the confusion, and clarify the code for users to be aware when furnishings can cause a problem that would be considered reconfiguration of space.

EB5-13

Final Action: AS AM AMPC_____ D

EB6-13 505.1

Proposed Change as Submitted

Proponent: Charles S. Bajnai, Chesterfield County, VA, ICC Building Code Action Committee

Revise as follows:

505.1 Scope. Level 3 *alterations* apply where the *work area* exceeds 50 percent of the aggregate ~~area of the building~~ *building area* of all stories in the building.

Reason: This proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 6 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: <http://www.iccsafe.org/cs/BCAC/Pages/default.aspx>.

This is the BCAC's attempt to clarify the scoping provisions for level 3 alterations. Some code users claim that the differing phrases used relative to area within the IEBC is confusing when those phrases are not one of the defined phrases. The BCAC believes that concern can best be addressed by referring to the defined term/phrase "building area" instead of the currently used phrase "aggregate area of the building". Because the phrase "building area" is already defined, by embedding that phrase in the modified text, the concerns of confusion and lack of consistency will be eliminated without changing the original intent. The BCAC is also aware that the current language located within IEBC Sections 410.4, 410.6, and 410.8.9 would benefit from a change to mimic the language being proposed by this code change, but cannot propose those changes at this time because those sections are located within the Group A changes. It is the intent of the BCAC to propose corresponding changes to those sections in the next code change cycle.

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

505.1-EB-BAJNAI-BCAC.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The proposal clarifies that all stories of the building are included when determining whether the alteration is considered level 3. Building area is a defined term.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment 1:

David Bonowitz, S.E, representing NCSEA Code Advisory Committee, Existing Buildings Subcommittee requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

505.1 Scope. Level 3 *alterations* apply where the *work area* exceeds 50 percent of the ~~aggregate building area of all stories in the building.~~

Commenter's Reason: Here is what the proposers said in their original reason statement: "The BCAC believes that concern can best be addressed by referring to the defined term/phrase 'building area' instead of the currently used phrase 'aggregate area of the building'."

That reasoning was completely right: The code text should use the defined term. Unfortunately, the proposal as submitted does exactly the opposite of what it intends. It both fails to fix the problem of potential confusion and actually obfuscates further by using a defined term – *building area* – together with unnecessary and misleading modifiers.

First, the term *building area* is already defined in the IBC, and hence in the IEBC as well, as follows: “The area included within surrounding *exterior walls* (or *exterior walls* and *fire walls*) exclusive of vent *shafts* and *courts*. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above.”

Is it not clear that this *already* means the whole building? There is no reason to think otherwise. If EB 6 is approved as submitted, the rational user will read “aggregate building area of all stories in the building” and will wonder, “Is that different from *building area*? It must be, or else they would have just said *building area* here in 505.1.” Hence, confusion. In fact, the intended meaning of “aggregate building area of all stories in the building” is precisely the same as the already defined meaning of *building area*. There is no value or purpose to the extra words, and they should be deleted.

Second, if it is not sufficiently clear that the current definition of *building area* already means the whole building, one need only note that the IBC also already defines *floor area* as a similar term that can be applied to portions of a building.

Third, a quibble: There is no such thing as “story area” or “area of a story.” Thus, there is no such thing as the “aggregate building area of all stories.”

The code has defined terms. We should use them. Not to do so – or worse, to use them in a squishy way – negates the whole point of defining them in the first place. If *building area*, already defined, is not clear enough, then make a proposal to revise the definition, but don’t undo the definition with sloppy usage.

Public Comment 2:

David S. Collins, FAIA, The Preview Group, Inc, representing The American Institute of Architects, requests Disapproval.

Commenter’s Reason: The wording of the section is confusing. The aggregate area of stories doesn't exist in code requirements. In the IBC, the area of a story has no application, and is not defined. The aggregate area of a building includes the “building area per story,” or the allowable area multiplied by the number of stories.

Several questions would arise for users of the code by this language regarding whether the area includes light wells, shafts, etc. which have no floor, but by definition are included in the area of a building per the IBC.

EB6-13

Final Action: AS AM AMPC_____ D

EB7-13
505.1

Proposed Change as Submitted

Proponent: David S. Collins, FAIA, The Preview Group, Inc., representing The American Institute of Architects

Revise as follows:

505.1 Scope. Level 3 *alterations* ~~apply~~ include the reconfiguration of space, where the ~~work~~ reconfigured area exceeds 50 percent of the aggregate area of the building, ~~and shall include the reconfiguration or extension of any system that serves more than 50 percent of the aggregate area of the building.~~

Reason: In a separate change the definition of “work area” is being removed from the IEBC because it’s lack of specificity and the confusion it causes when used in this section. We have submitted a series of changes to provide the type of direction needed to make the code more effective. This language is proposed to provide the needed guidance in Section 505.1 for what is within the scope of a Level 3 alteration.

Cost Impact: There is no cost impact associated with this change.

505.1-EB-COLLINS.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee agreed with the concept of clarifying level 3 alterations but the last portion of the proposed language seemed more extensive than intended. For instance, if a plumbing fixture such as a sink serves more than 50% of the building the movement of the sink would be considered a level 3 alteration by this revised language.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

David S. Collins, FAIA, The Preview Group, Inc, representing The American Institute of Architects requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

505.1 Scope. Level 3 *alterations* include the reconfiguration of space, where the reconfigured area exceeds 50 percent of the aggregate area of the building, ~~and shall include the reconfiguration or extension of any system that serves more than 50 percent of the aggregate area of the building.~~

Commenter’s Reason: The committee felt that the last portion of the change was too expansive and perhaps wasn’t what was originally intended. This change limits the scope to the portion of the building where reconfiguration exceeds 50 percent of the aggregate area of the building.

EB7-13

Final Action:

AS

AM

AMPC_____

D

EB8-13
602.3 (NEW)

Proposed Change as Submitted

Proponent: Rebecca Morley, National Center for Healthy Housing

Add new text as follows:

602.3 Moisture and Mold. Surfaces such as but not limited to wood, textiles, paint, cellulose insulation, and paper, including paper-faced gypsum board, shall have no signs of excessive moisture after the material has been repaired. Materials that are discolored or deteriorated by mold or mildew shall be cleaned, dried and repaired and the underlying cause shall be determined and corrected. If the material is structurally unsound it shall be removed and replaced and the underlying cause shall be determined and corrected.

Reason: Mold typically grows in buildings affected by water damage. According to the Institute of Medicine of the National Academies' *Damp Indoor Spaces and Health* (2004), mold and damp indoor environments are associated with asthma symptoms in sensitized persons, coughing, wheezing, and upper respiratory tract symptoms. See www.nap.edu/books/0309091934/html/

In December 2007, the National Center for Healthy Housing (NCHH) and the U.S. Centers for Disease Control and Prevention (CDC) convened an Expert Panel consistent with National Institute of Health guidelines to assess the effectiveness of various interventions to make homes healthier and safer. NCHH and CDC published the report of the experts in January 2009. See www.nchh.org/LinkClick.aspx?fileticket=2lvaEDNBldU%3d&tabid=229 for the full report.

The Expert Panel reviewed five peer-reviewed research studies on the issue of mold and allergens and concluded that "when implemented together, eliminating moisture intrusion and leaks and removal of moldy items were found to be effective in reducing asthma triggers and reducing exposures." Other provisions of the IPMC address eliminating moisture intrusion. But no provisions require action on building materials with chronic moisture issues including those materials that have failed beyond repair.

This proposal implements the Expert Panel's recommendation while providing flexibility in response to actual conditions – repair for reparable material, replacement for failed material. To ensure the health of the building's occupants, mitigation of moisture problems must be a part of the code.

Cost Impact: This code change proposal will increase the cost of maintenance.

602.1-EB-MORLEY.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The term "excessive" was felt unenforceable. There was concern with what would be considered "clean." These types of provisions were felt more appropriate for the IPMC. If the requirements were felt appropriate for the IEBC they would be better located in Chapter 3.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Jane Malone, National Center for Healthy Housing, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

**SECTION 602
BUILDING ELEMENTS AND MATERIALS**

602.1 Existing building materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *code official* to render the building or structure unsafe or *dangerous* as defined in Chapter 2. Carpet, paper-faced gypsum board, and other porous material that is discolored or deteriorated by persistent moisture shall be dried and repaired, and the underlying cause of the moisture shall be corrected. If deteriorated material has decayed or failed beyond repair, it shall be removed and replaced.

602.3 Moisture and Mold. ~~Surfaces such as but not limited to wood, textiles, paint, cellulose insulation, and paper, including paper-faced gypsum board, shall have no signs of excessive moisture after the material has been repaired. Materials that are discolored or deteriorated by mold or mildew shall be cleaned, dried and repaired and the underlying cause shall be determined and corrected. If the material is structurally unsound it shall be removed and replaced and the underlying cause shall be determined and corrected.~~

Commenter's Reason: Elimination of moisture problems in building materials is important to ensuring the health of the building's occupants. Requiring attention to these problems when a building undergoes repair work should be a part of the code. The trigger is the repair work.

We addressed the committee's concerns by deleting the words "cleaned" and "excessive."

EB8-13

Final Action: AS AM AMPC_____ D

EB10-13

603.1, 604.1, 605.1, 703.1, 704.1

Proposed Change as Submitted

Proponent: Charles S. Bajnai, Chesterfield County, VA, ICC Building Code Action Committee

Revise as follows:

603.1 General. Repairs shall be done in a manner that maintains the level of fire protection provided before the repair was undertaken.

604.1 General. Repairs shall be done in a manner that maintains the level of protection provided for the means of egress before the repair was undertaken.

605.1 General. Repairs shall be done in a manner that maintains the level of accessibility provided before the repair was undertaken.

703.1 General. Alterations shall be done in a manner that maintains the level of fire protection provided before the alteration was undertaken.

704.1 General. Alterations shall be done in a manner that maintains the level of protection provided for the means of egress before the alteration was undertaken.

Reason: This proposal is submitted by the ICC Building Code Action Committee (BCAC) The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 6 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: <http://www.iccsafe.org/cs/BCAC/Pages/default.aspx>.

The current text is missing the language that tells users of the code to what level the various subjects are to be maintained. The intent that a modification should not make a condition worse than before the work started is clear. That concept is stated in IEBC sections 603.1, 604.1, 605.1, 703.1 and 704.1. By adding the proposed text to each section, that original intent is not only made clearer, it is done so in a consistent manner.

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

603.1-EB-BAJNAI-BCAC.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: This proposal clarifies the language to denote to what extent to maintain the level of safety or accessibility when a repair or alteration is undertaken.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

David Bonowitz, S.E., representing NCSEA Code Advisory Committee, Existing Buildings Subcommittee, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

603.1 General. Repairs shall be done in a manner that maintains the level of fire protection provided before the occurrence of the damage that is being repaired ~~repair was undertaken~~.

604.1 General. Repairs shall be done in a manner that maintains the level of protection provided for the means of egress before the occurrence of the damage that is being repaired ~~repair was undertaken~~.

605.1 General. Repairs shall be done in a manner that maintains the level of accessibility provided before the occurrence of the damage that is being repaired ~~repair was undertaken~~.

(Portions of code change proposal not shown remain unchanged)

Commenter's Reason: The modification corrects the unintended meaning of the approved wording. The approved wording talks about the condition "before the repair was undertaken." But when you think about it, the condition "before the repair was undertaken" means the condition with the damage in place. The intent of the proposal is obviously to restore the condition that existed before the damage occurred, not before the repair was started. The proposed modification thus makes more sense and better reflects the intent of the proposal.

EB10-13

Final Action: AS AM AMPC____ D

EB12-13
608.3(New), 708(New)

Proposed Change as Submitted

Proponent: Andrew Scott Jones, President, A Better Deal Heating and Air Conditioning, Inc., a Texas Corporation, representing self

Add new text as follows:

608.3 Cleanouts. Where new condensate drain lines are installed as a result of the repair, such condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut.

SECTION 708
MECHANICAL

708.1 Cleanouts. Where new condensate drain lines are installed as a result of a level 1 alteration, such condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut.

Reason: This language is identical to the language of M 32-12 which was recently adopted In Portland, Oregon. We are advised by JB Engineering that this language will be in the IMC and IPC for 2015.

Similar language has been submitted to the IRC.

Cost Impact: The code change will increase the cost of construction, totaling an estimated \$15.00 per unit.

XXX-EB-JONES.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee disapproved the code change as the provisions were very specific and felt unnecessary. The concern is that adding such specific requirements would lead to a laundry list of specific requirements which was not the intent of the IEBC. Additionally, Section 301.2, which references other I-codes, currently addresses this issue.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Andrew Scott Jones, A Better Deal Heating and Air Conditioning, Inc, requests Approval as Submitted.

Commenter's Reason: The Committee Stated in response to EB12-13 that "...the provisions were very specific and felt unnecessary. ..." There is a real problem with cutting clogged drain lines, as water can leak all over insulation, not to mention the time consumed in cutting, clearing the drain and repairing the cut with a collar. Eventually, the line will have to be replaced itself. Drain line stoppages in evaporative coils drain pan drain lines are unavoidable and common occurrences requiring clearing the drain line. Clearing these lines almost always involves cutting the drain line itself, causing water to leak into the attic or closet where the drain is located, possibly collected in a bucket or soaked up with rags or paper towels. Then the technician blows compressed air through the drain line in both directions from the cut. The cut must be repaired by resealing the drain line with a PVC coupling and solvent.

This process exposes the surrounding area to water leakage and spilling with the risk of damage, mold, spilling, as well as, the extra time and effort of carrying extra equipment, parts and flammable solvent. The process takes extra time and costs the homeowner more money.

With a device that permits the introduction of compressed air or nitrogen directly into the drain system, permitting clearing in both directions, there is no spillage of water, no cost for the couplings or solvent and no risk of water damage or mold. The entire process requires less than ten minutes.

Typically the cost of clearing a drain equipped with such a device is at least 50% less to the homeowner than the cost of clearing a blockage through the common method of cutting the pipe, attempting to collect the condensate water and repairing the cut in the drain line.

Each time a drain line is cleared through the cutting/repair process, the repair could be accomplished by installing a \$15.00 line clearing device rather than a simple coupling. Drain lines can also be plumbed without installing a device at the time of installation.

Also, if clearing the drain lines were part of regular maintenance, line blockages could largely be prevented in the first place.

EB12-13

Final Action:

AS

AM

AMPC____

D

EB15-13

702.4 (NEW), 702.5 (NEW)

Proposed Change as Submitted

Proponent: Jeff Inks, Window & Door Manufacturers Association (jinks@wdma.com)

Revise as follows:

702.1 Interior finishes. All newly installed interior wall and ceiling finishes shall comply with Chapter 8 of the *International Building Code*.

702.2 Interior floor finish. New interior floor finish, including new carpeting used as an interior floor finish material, shall comply with Section 804 of the *International Building Code*.

702.3 Interior trim. All newly installed interior trim materials shall comply with Section 806 of the *International Building Code*.

702.4 Window opening control devices. In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all the following apply to the replacement window:

1. The window is operable;
2. The window replacement includes replacement of the sash and the frame;
3. The top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor;
4. The window will permit openings that will allow passage of a 4-inch diameter (102 mm) sphere when the window is in its largest opened position; and
5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by the International Building Code.

Exceptions:

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22.86 m) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F 2006.
2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.

702.5 Emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, replacement windows shall be exempt from the requirements of Sections 1029.2, 1029.3 and 1029.5 of the *International Building Code* and Sections R310.1.1, R310.1.2, R310.1.3 and R310.2 of the *International Residential Code* accordingly provided the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

2. The replacement of the window is not part of a change of occupancy.

Window opening control devices complying with ASTM F 2090 shall be permitted for use on windows required to provide *emergency escape and rescue openings*.

Reason: The intent of this proposal is to ensure window replacements meet the requirements for new construction for window fall protection and emergency escape and rescue openings when practical and avoid discouraging or preventing the replacement of windows when it is not -- provided there is no reduction in existing safety.

With respect to the proposed provisions for window opening control devices on replacement windows, they are intended to ensure window fall protection is provided where required for new construction when windows, including sash and frame, are replaced. The proposed WOCD provisions have already been approved for Chap. 4 of the IEBC (during the Group A proceedings) and are also being proposed for IRC Appendix J by us and the ICC CTC.

With respect to the proposed emergency escape and rescue opening provisions, they are based on Minnesota's residential code which actually (and effectively) incorporates them into the main body of the code in Chapter 3, under Section 310.1. The same provisions have also already been approved for Chap. 4 of the IEBC (during the Group A proceedings) and we, as well as the ICC CTC are also proposing the same provisions for IRC Appendix J (in addition to this proposal for the IEBC). Most importantly, it's important to note that the provisions do not allow for any decrease in safety and will help ensure improvements in safety can be made.

More specifically, the intent of this proposal is to ensure that the IRC does not discourage or prevent improvements in emergency escape and rescue openings, especially for fire safety, in older residential occupancies by requiring replacement windows to meet all of the provisions of Section 310 when doing so can only be accomplished by increasing the size of the rough opening or altering the interior wall.

Because many of these older buildings were constructed under codes that did not include the same emergency escape and rescue opening provisions that the IBC or IRC now require for new construction, the only way to fully meet all of the requirements of IBC Section 1029 or IRC Section 310 for new construction if required when windows are replaced, is to enlarge the rough opening and/or make significant alterations to the interior wall in order to accommodate any increase in window size or lowering of a sill.

At the very least, the significant cost and design challenges of altering the rough opening or interior wall can discourage or prevent window replacement and at worst can discourage or prevent the replacement of older windows that are harder to operate or inoperable all together because of their age or poor maintenance and, that are significantly less energy efficient. When that happens, improvements to safety as well as to energy efficiency are needlessly compromised.

Furthermore and on the whole, while some bedroom windows in older homes may not provide the full clear opening that is required for new construction or may have a sill height above 44 inches, they nonetheless still provide a viable emergency and escape rescue opening which is the primary intent of the code. Replacement of these windows with the same type of operating window or other type that can provide an equal or greater clear opening than the existing window -- even if they do not fully meet the clear opening or sill height requirements of IBC Section 1029 or IRC Section 310 accordingly -- is always an improvement in safety, especially when a replacement opening can provide a larger clear opening than the existing window. Such improvements in safety should not be discouraged or prevented by overly onerous requirements for replacement windows.

This proposal will help ensure that doesn't happen by providing limited exceptions to the requirements of IBC Section 1029 and IRC Section 310 accordingly that can only be applied when certain conditions are met and that as already noted, will not result in a decrease in safety.

The requirements for new construction that emergency escape and rescue openings be provided as well as the operational requirements of IBC Section 1029 and IRC Section 310 respectively are maintained and still applicable to replacement windows.

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

702.4 (NEW)-EB-INKS.doc

Committee Action Hearing Results

Committee Action:

Approved as Modified

Modify the proposal as follows:

702.4 Window opening control devices. In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all the following apply to the replacement window:

1. The window is operable;
2. The window replacement includes replacement of the sash and the frame;
3. In Group R-2 or R-3 buildings containing dwelling units, the top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor, or in one- and two-family dwellings and townhouses regulated by the *International Residential Code*, the top of the sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor;
4. The window will permit openings that will allow passage of a 4-inch diameter (102 mm) sphere when the window is in its largest opened position; and
5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by the *International Building Code*.

Exceptions:

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22.86 m) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F 2006.
2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.

702.5 Emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, replacement windows shall be exempt from the requirements of Sections 1029.2, 1029.3 and 1029.5 of the *International Building Code* and Sections R310.1.1, R310.1.2, R310.1.3 and R310.2 of the *International Residential Code* accordingly provided the replacement window meets the following conditions: 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
~~2. The replacement of the window is not part of a change of occupancy.~~

Window opening control devices complying with ASTM F 2090 shall be permitted for use on windows required to provide *emergency escape and rescue openings*.

Committee Reason: The proposal was preferred to EB9-13. The provisions were seen necessary to address the replacement windows with regard to fall safety and emergency escape and rescue openings in existing buildings. The proposal was similar to EB9-13 but did not add revisions to Section 602.3 or one and two family dwelling. One and two family dwellings can be addressed by the IEBC. The modification adds clarification that the window opening control device requirement has a different applicability to one and two family dwellings than Group R-2 or R-3 buildings. One and two family dwellings are permitted to have a window opening as low as 24 inches above the finished floor versus 36 inches. This is more consistent with the IRC as a trigger for window opening control devices.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Maureen Traxler, City of Seattle Department of Planning & Development, requests Approval as Modified by this Public Comment.

Further modify the proposal as follows:

702.4 Window opening control devices. In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all the following apply to the replacement window:

1. The window is operable;
2. The window replacement includes replacement of the sash and the frame;
3. One of the following applies:
 - 3.1. In Group R-2 or R-3 buildings containing dwelling units regulated by the *International Building Code*, the top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor, or
 - 3.2. In one- and two-family dwellings and townhouses regulated by the *International Residential Code*, the top of the sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor;
4. The window will permit openings that will allow passage of a 4-inch diameter (102 mm) sphere when the window is in its largest opened position; and
5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by the *International Building Code*.

Exceptions:

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22.86 m) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F 2006.
2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.

Commenter's Reason: This is an editorial change to make item 3 clearer and easier to read.

EB15-13

Final Action: AS AM AMPC_____ D

EB16-13
705 (NEW)

Proposed Change as Submitted

Proponent: Rebecca Morley, National Center for Healthy Housing

Add new text as follows:

SECTION 705
CARBON MONOXIDE ALARMS

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

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

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

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

705 (NEW)-EB-MORLEY.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal requiring CO in Group I and R occupancies was felt to be excessive with Level 1 Alteration requirements. There was also concern that this particular requirement to add CO alarms retroactively may not be applicable in all states. Note that it was pointed out that if Chapter 11 of the IFC is adopted these requirements would be applicable regardless of whether an alteration is undertaken.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Jane Malone, National Center for Healthy Housing, requests Approval as Submitted.

Commenter's Reason: While not needed in jurisdictions that have adopted the *International Fire Code*, the requirement is needed for Level 1 Alterations where the IFC is not in effect.

EB16-13

Final Action: AS AM AMPC____ D

EB17-13

705.1, 905.1, 905.4 (NEW), 905.4.1 (NEW), 1005.2 (NEW), 1105 (NEW)

Proposed Change as Submitted

Proponent: Gene Boecker, Code Consultants, Inc., representing self

705.1 General. A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible. A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy. A facility shall not be altered such that the existing accessible means of egress is reduced.

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.
2. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be ~~added~~ provided in existing buildings undergoing less than a level 3 alteration.
3. Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing *facilities* undergoing less than a Level 3 *alteration*.
4. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall meet the provisions for Type B dwelling units.

905.1 General. The means of egress shall comply with the requirements of Section 805 except as specifically required in Sections 905.2 ~~and 905.3~~ through 905.4.

905.4 Accessible means of egress. Not less than one accessible means of egress shall be provided in accordance with Section 905.4.1 and Section 1007 of the International Building Code in alterations affecting an area containing a primary function and in additions.

Exceptions:

1. Level 1 and Level 2 alterations.
2. Historic buildings.
3. Accessible means of egress is not required to exceed 20 percent of the costs of the alterations including any costs associated with compliance for Section 410.7. Where the costs to provide accessibility cannot accommodate compliance with both this Section and Section 410.7, Section 410.7 shall take precedence.
4. Alterations limited solely to windows, hardware, operating controls, electrical outlets and signs.
5. Alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials.
6. Alterations undertaken for the primary purpose of increasing the accessibility of a facility.
7. Altered areas limited to Type B dwelling and sleeping units

905.4.1 Means of egress through an existing building. Where the accessible means of egress from an portion of a building being alteration or addition requires occupants to egress through portions of existing building, compliance with Section 1007 of the *International Building Code* is required through the existing building, unless technically infeasible. Where compliance with this provision is technically infeasible, the accessible means of egress through the existing building shall provide access to the maximum extent technically feasible.

1105.2 Accessible means of egress. Where a change of occupancy includes a Level 3 Alteration to an area containing a primary function, at least one accessible means of egress shall be provided in compliance with Section 905.

SECTION 1105 **MEANS OF EGRESS**

1105.1 General. The means of egress shall comply with the requirements of Section 905.4.1 and Chapter 10 of the *International Building Code*.

Reason: During last code change cycle, a proposal similar to this was presented. The committee felt it was too confusing and that it did not address the concept of disproportionate cost effectively. This proposal seeks to address those issues more clearly. Where possible the language was changed to be uniform among the various codes and sections.

Common sense should dictate that where major alterations occur consideration for at least one accessible means of egress should be provided. Additionally, the simple idea that an accessible means of egress should be intentionally denied to a segment of the population does not seem appropriate. As the codes now stand, a building can be completely gutted with only the facades remaining and no accessible means of egress must be provided.

It is important to remember that the new construction requirements in the IBC only require a maximum of two accessible means of egress as noted in Section 1007.1 (assuming travel distance compliance is accommodated).

With the deletion of Chapter 34 from the IBC it is incumbent on the IEBC to address these issues.

705.1: A change was made to the second exception to indicate that means of egress requirements for existing building are not required for lesser alterations, similar to exception #3.

905.1: A change is made to address the added section.

905.4: A new section is added to specifically address accessible means of egress. Rather than the blanket statement in Section 1007.1 of the building code, this section will address the scope and extent of work necessary to address accessible means of egress for existing buildings. It directs the code user to Section 1007 for the technical requirements when an accessible means of egress is necessary as well as clearly delineate that when an alteration occurs affecting an area containing a primary function, an accessible means of egress must be provided. The threshold is limited to alterations affecting a primary function because that threshold relates to the importance of changes to an area and is understood due to its relationship with the Federal accessibility regulations for the past 20 years. The intent is to provide at least one accessible means of egress.

905.4, exception #1: Alterations with some magnitude should address accessible means of egress; if the alteration is relatively small then there is reason to limit the requirement. Even if the accessible means of egress would not be a disproportionate cost (exception #2), in small alterations the area required to create the accessible means of egress may be disproportionate to the space allowed for the alteration. If so, it may "steal" too much space from an otherwise small area and would not be appropriate.

905.4, exception #2: The exception makes it clear that an accessible means of egress is not required for alterations to historic buildings. To do so, may alter the historic character. While an accessible means of egress should be provided wherever possible, the exception recognizes that in historic buildings the ability to make the necessary changes to comply may be detrimental to the historic integrity.

905.4, exception #3: Existing buildings come in all shapes and sizes and the work proposed for creating an accessible means of egress can be a small part or major portion of the effort. This exception identifies that and uses the same 20% rule for the accessible route relative to the primary use area. The exception also clarifies that where funds cannot provide the accessible route *and* an accessible means of egress, it is more important to provide the accessible route. This maintains consistency with the Federal requirements for alterations affecting an area containing a primary function.

905.4, exceptions #4, #5, #6, #7: These are the same as exceptions #2, #3, #4 and #5 in Section 705.2 for alterations affecting an area containing a primary function. These are included here for consistency.

905.4.1: If an addition is designed such that the means of egress must enter the existing building then the general rule is that the egress design in the existing building must meet the requirements for egress as it passes through the existing building. This is simply the continuation of the means of egress from the addition for egress width, panic hardware (as applicable) and similar concerns. The same should be true for the design of the accessible means of egress. If one of the accessible egress paths leads through the existing building, it too needs to meet/continue the level of protection as designed in the addition. The limitation to this is that if the effort to make the existing means of egress accessible is "technically infeasible" then work should be done to what is possible. One example of this may be making sure that the slopes along the egress path in the existing building's corridor are proper even if the width cannot be altered to allow the proper maneuverability approach to the exit door.

1005.2: A change of occupancy by itself is not sufficient to trigger the requirement for an accessible means of egress. However, if a change in occupancy also includes a Level 3 Alteration, then it should be subject to the same requirements as any other Level 3 Alteration. This provision is added as a clarification to that effect.

1105.1: Chapter 11 (Additions) does not address means of egress specifically. A reference to compliance with the means of egress provisions in Chapter 10 of the IBC is included. This is similar to the first sentence in Section 402.1 which requires additions to comply with the requirements of the IBC for new construction but more specific as is done for the "non-prescriptive" methods. The added language is inserted before the accessibility section to make it consistent with its placement in other chapters.

The codes identify the minimums necessary for life safety. These proposed changes provide the disabled community with similar levels of life safety to the general public and still sets reasonable thresholds based on the extent of work for the project. With the adoption of the new 2010 ADA Standards for Accessible Design, it is clear that the IBC will set the standard for accessible means of egress. This organization has a responsibility to act in the best interests of the general public in all its diversity. Where major

changes are proposed to an existing building due to a large alteration or an addition, it should be the desire of the ICC to incorporate appropriate accessible means of egress where possible.

Cost Impact: The code change proposal will increase the cost of construction in many situations but may have no effect in others.

Cost Impact Discussion: It is not easy to address what costs could be affecting this due to the myriad possible configurations for a building. A building that is a single story at grade may have no additional cost. Because an accessible entrance would be required, it would function as the accessible means of egress. Hence, a single story building with a total internal renovation may be unaffected cost-wise by this proposal.

The main costs are those involving an elevator of adequate size on emergency standby power and a two-way communications system. If the elevator is too small, the costs to alter that would be disproportionate and it would not be required according to IEBC Section 905.4, exception #3.

At the opposite end of the spectrum could be a nine story high-rise building that is being gutted on five floors. It would be required to have an accessible route to the upper floors. The IFC would require the emergency power for fire fighter operation so that cost for that part of the accessible means of egress is covered. In that situation only the two-way communication systems costs would apply.

Buildings without elevators would likely similarly fall into the category of disproportionate costs since the addition of an elevator can be costly. Moreover, the accessible means of egress is tied into alterations that affect an area containing a primary function. This already has accessibility requirements for access such as toilet room and accessible route renovations. If the costs to add an elevator are within the 20 percent cap but the cost to add emergency standby power would be beyond the 20 percent, the exceptions in IEBC Section 905.4, exception #3 make it clear that the costs for access take precedence over the costs for egress and that combined they are not required to exceed the 20 percent figure.

In many cases the 20 percent cap will be met by the required access features and there may be no funds remaining for an accessible egress. The important thing is that we should recognize the need to provide a means of egress for all of the occupants within the building to the greatest extent possible. No definitive numbers can be provided because the variations are so many. This discussion attempts to address only the possibilities.

1007.1 #1-E-BOECKER.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: A similar proposal failed to be adopted in Group A and by approving this proposal would make the IBC inconsistent with the IEBC. In addition, there was concern that these provisions would be more restrictive than federal requirements. The verbiage in Section 905.4.2 is in need of editorial corrections. Also the committee felt it to be inappropriate to have level 3 alterations included in exception 2 of Section 705.1. Chapter 7 deals with level 1 alterations.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment 1:

Gene Boecker, Code Consultants, Inc, representing self, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

705.1 General. A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible. A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy. A facility shall not be altered such that the existing accessible means of egress is reduced.

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.
2. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be provided in existing buildings.
3. Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing *facilities* undergoing less than a Level 3 *alteration*.

4. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall meet the provisions for Type B dwelling units.

Commenter's Reason: This is an important aspect of the proposal and did not receive any negative comments. It is reasonable to require existing facilities with accessible means of egress to maintain the accessible means of egress just like it is currently required to maintain all other aspects of the means of egress. This requires no correlation with the IBC since it is simply stating not to reduce or eliminate what is currently in place.

Public Comment 2:

Gene Boecker, Code Consultants, Inc, representing self, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

705.1 General. A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible. A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy. ~~A facility shall not be altered such that the existing accessible means of egress is reduced.~~

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.
2. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be added to in existing buildings undergoing less than a level 3 alteration.
3. Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing *facilities* undergoig less than a Level 3 *alteration*.

The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall meet the provisions for Type B dwelling units.

905.1 General. The means of egress shall comply with the requirements of Section 805 except as specifically required in Sections 905.2 through 905.4.

905.4 Accessible means of egress. Not less than one accessible means of egress shall be provided in accordance with Section 905.4.1 and Section 1007 of the *International Building Code* in alterations affecting an area containing a primary function and in additions.

Exceptions:

1. Level 1 and Level 2 alterations.
2. Historic buildings.
3. Costs to provide the accessible means of egress is are not required to exceed 20 percent of the costs of the alterations including any costs associated with compliance with Section 410.7. Where the costs to provide accessibility cannot accommodate compliance with both this Section and Section 410.7, Section 410.7 shall take precedence.
4. Alterations limited solely to windows, hardware, operating controls, electrical outlets and signs.
5. Alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials.
6. Alterations undertaken for the primary purpose of increasing the accessibility of a facility.
7. Altered areas limited to Type B dwelling and sleeping units

905.4.1 Means of egress through an existing building. Where the accessible means of egress from a portion of a building being alteration or addition requires occupants to egress through portions of an existing building, compliance with Section 1007 of the *International Building Code* is required through an the existing building for the continuation of the accessible means of egress, unless technically infeasible. Where compliance with this provision is technically infeasible, the accessible means of egress through the existing building shall provide access to the maximum extent technically feasible.

Exception: An accessible means of egress is not required from an addition through the existing building where at least one accessible means of egress is provided from the addition that is independent of the existing building.

1005.2 Accessible means of egress. Where a change of occupancy includes a Level 3 Alteration to an area containing a primary function, at least one accessible means of egress shall be provided in compliance with Section 905 905.4.

SECTION 1105 MEANS OF EGRESS

1105.1 General. The means of egress shall comply with the requirements of Section 905.4.1 and Chapter 10 of the *International Building Code*.

Commenter's Reason: The committee and testimony raised several questions regarding the proposal. The following responds those comments and what changes have been made to the text to address those committee and testimony statements.

Group A Activity. The fact that a similar proposal failed in Group A is irrelevant to the actions by the IEBC committee (and ultimately the ICC membership). The Group A actions eventually resulted in the deletion of the technical provisions within Chapter 34 in their entirety (G201-12), deferring to the IEBC. The ICC Board of Directors has approved this action. Therefore, the reasons for disapproval of proposals in the Group A hearings are moot. It is clear that it is now entirely up to the actions within the IEBC code change activity to address issues relative to existing buildings. Therefore, the proposal must be viewed on its own merit.

IBC coordination. I have been informed by ICC staff that the provisions of exception #1 to Section 1007.1 of the IBC would be changed through a correlation committee; referring to the IEBC for direction on what to do about accessible means of egress in existing buildings. The specific language would be determined by the correlation committee.

Federal requirements for accessible means of egress. There are no technical federal requirements on this subject. The US Department of Justice, in its adoption of the 2010 ADA Standards for Accessible Design includes language that refers to the IBC for the method to address accessible means of egress. The text reads:

207.1 General. Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

EXCEPTIONS: 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.

2. Areas of refuge shall not be required in detention and correctional facilities.

Therefore, it is this body, the ICC, which bears the responsibility to determine what is necessary for means of egress for the disabled. No conflict would occur for two reasons. First, the federal requirements refer to older editions of the IBC. Second providing additional egress (stricter requirements) does not reduce the minimum of the federal provisions. As it stands, the existing federal requirements would not require accessible means of egress in existing facilities due to the reference to the older codes. The proposed change could include a requirement for accessible egress, providing added safety to those in the disabled community. In future adoptions/updates by the US DoJ they can decide whether or not to include the requirement as they have done for areas of refuge in detention and correctional facilities.

705.1, Exception #3. The committee noted that they felt it inappropriate to mention level 3 alterations in exception #2 of Section 705.1. The current exception #3 already includes reference to Level 3 alterations. It is necessary to modify the language in Chapter 7 to address the language about Level 3 alterations because the text in Section 906.1 refers back to Section 705 as the basis for what to do about accessibility. Without the reference in Chapter 7, any language in Chapter 9 to provide an accessible means of egress would be referring back to a section that would state that an accessible means of egress is not required.

905.4, Exception #3. Exception #3 is a very important one. It piggybacks onto the intent to spend up to 20% on accessibility when there is an alteration affecting a Primary Function Area. The proposal seeks to use that same 20% factor but states that it includes the costs for the accessible route. The maximum is 20%. If the accessible route in requires an expenditure of 20% then no additional funds would be needed to make an effort to provide an accessible means of egress. The obligation is met. If, 15% of the cost satisfies the need to provide a route in, then 5 percent would be available to provide an accessible means of egress. Eventually, as alterations continue, the accessible route in will require an ever-decreasing portion of the construction costs and the percentage available for the accessible means of egress will be greater. It is important to start somewhere. Even if 5% of the alteration costs would not provide an entire accessible egress route, including tactile exit signage and a two-way communications system at the elevator lobby would go a long way to increasing safety without having to add areas of refuge or revising stairways. Something is better than nothing and nothing is what we have now.

905.4.1. Language in the proposed Section 905.4.1 has been revised to address the committee's concern about grammar errors.

905.4.1 Exception. An exception was added based on feedback from public testimony. The exception clarifies the intent for a single accessible means of egress in existing buildings.

1005.2. The requirement for an accessible means of egress would not be triggered unless the change included an extensive renovation - a Level 3 Alteration. This text has not changed from the original proposal.

1105.1. The added notation makes it clear that the intent was to insert this new language and not supplant the existing text for accessibility in Additions. Other Chapters of the IEBC are organized in similar fashion. This Chapter did not include any specific reference to Means of Egress so the Section was added.

Conclusion: It is time that the ICC acts to address this condition. The provisions of building accessibility have been required on a federal level for over two decades and have been included in the legacy codes long before that. Accessible means of egress for new construction has been in the ICC for new construction since its inception and, before that, in the legacy codes. If we, as an organization, wish to address safety issues for existing buildings, we should address safety issues for all its potential occupants and not ignore that portion of the population with disabilities.

EB17-13

Final Action: AS AM AMPC _____ D

EB21-13

705.1, 705.1.15 (NEW)

Proposed Change as Submitted

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

Revise as follows:

705.1 General. A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through ~~705.1.14~~ 705.1.15, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible.

A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy.

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.
2. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be provided in existing *facilities*.
3. Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing *facilities* undergoing less than a Level 3 *alteration*.
4. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall meet the provisions for Type B dwelling units.

705.1.15 Amusement rides. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in the International Building Code, Section 1110.4.7.

Reason: The accessibility requirements for new construction for Amusement rides have been proposed to the IBC as part of a coordination effort with the 2010 ADA Standard for Accessible Design and 2009 ICC A117.1 Chapter 11, Recreation. The overall intent is to provide access to recreational facilities so that persons with mobility impairments can participate to the best of their ability. The requirements are not intended to change any essential aspects of that recreational activity.

The intent of this public comment is to match the provisions for existing amusement rides proposed and approved for IBC Chapter 34 and IEBC Chapter 4. This way the provisions for existing buildings will be consistent between Chapter 4 and 7 of the IEBC. Technical criteria can be found in the 2009 edition of the ICC A117.1, Section 1102 and includes accessible routes, load and unload areas, wheelchair spaces on rides, seats for transfer, and transfer devices.

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

Cost Impact: This code change proposal will not increase the cost of construction. This will be required by the 2010 ADA Standard for Accessible Design.

705.1-EB-BALDASSARRA-CTC.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: There was concern that this was not appropriate for level 1 alterations. Concerns were raised that the IEBC would begin to regulate outdoor amusement rides. Generally, there was concern that adopting these requirements for amusement rides increases the scope of the IEBC beyond that intended.

Individual Consideration Agenda

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

Public Comment:

Carl Baldassarra, ICC Code Technologies Committee, requests Approval as Submitted

Commenter’s Reason: There was an objection at the hearings that we do not address outdoor amusement rides. Permanent amusement rides are now scoped specifically in IBC Chapter 11 (E208 -12). This includes both indoor and outdoor permanent rides; there is no distinction made in the code. Portable amusement rides are specifically exempt.

The committee was concerned over this exception being in Level I. The accessibility provisions in Level I, II and III build on each other. The text in the proposed 705.1.15 will address when the application is appropriate. Below is the IBC text for amusement rides.

1110.4.8 Amusement rides. Amusement rides that moves persons through a fixed course within a defined area shall comply with Section 1110.4.8.1 through 1110.4.8.3.

Exception: Mobile or portable amusement rides shall not be required to be accessible.

1110.4.8.1 Load and unload areas. Load and unload areas serving amusement rides shall be accessible and be on an accessible route. Where load and unload areas have more than one loading or unloading position, at least one loading and unloading position shall be on an accessible route.

1110.4.8.1.1 Wheelchair spaces, ride seats designed for transfer, and transfer devices. Where amusement rides are in the load and unload position, the position serving a wheelchair spaces, amusement ride seats designed for transfer and transfer devices shall be on an accessible route.

1110.4.8.2 Minimum number. Amusement rides shall provide at least one wheelchair space, amusement ride seat designed for transfer, or transfer device.

Exceptions:

1. Amusement rides that are controlled or operated by the rider are not required to comply with this section.
2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, are not required to comply with this section.
3. Amusement rides that do not provide seats that are built-in or mechanically fastened shall not be required to comply with this section.

The proposed exception is already approved in Chapter 4 of the IEBC (section 410.8.1.5).

3411.8.15 (IEBC [B] 410.8.15) Amusement rides. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in Section 1110.4.8.

Not having this in Chapter 7, would result in a conflict between chapters. The proposed text is effectively an exception that would allow one method to have a break that the other did not.

EB21-13

Final Action:	AS	AM	AMPC_____	D
---------------	----	----	-----------	---

EB24-13

803.1

Proposed Change as Submitted

Proponent: David S. Collins, FAIA, The Preview Group, Inc., representing The American Institute of Architects

Revise as follows:

803.1 Scope. The requirements of this section are limited to ~~work areas in which Level 2 alterations are being performed, and shall apply beyond the work area where specified.~~ alterations per Section 504.1.

Reason: Section 504.1 describes the scope of Level 2 alterations. Chapter 8 simply enumerates the items required for such alterations to conform to the code, and isn't required to restate what is included. The entire section should be eliminated, but for simplicity we are only referencing Section 504.1 for a scope, removing any conflict or confusion in the code.

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

803.1-EB-COLLINS.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: This proposal clears up redundant and potentially confusing language already addressed in Chapter 5. The proposal still provides a clear link to the scope of level 2 alterations.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

David Bonowitz, S.E., representing NCSEA Code Advisory Committee, Existing Buildings Subcommittee, requests Disapproval.

Commenter's Reason: The proposal as submitted would change the triggered scope of Level 2 alterations. Instead of applying in a careful way to both the intended alteration itself and other relevant areas, any triggered work would apply only to the alteration area itself.

The proposal should be disapproved for three reasons:

1. The committee's reason for approval is plainly false. It reads, in part, "This proposal clears up redundant and potentially confusing language already addressed in Chapter 5." Actually, there is no redundancy, because Chapter 5 merely defines the Level 2 Alteration but does not set the triggered scope of work. More important, the proposal doesn't "clear up" anything. One needs only to look at the next section to see why: "**803.2.2 Supplemental shaft and floor opening enclosure requirements.** Where the *work area* on any floor exceeds 50 percent of that floor area, the enclosure requirements of Section 803.2 shall apply to vertical openings other than stairways throughout the floor."

The provision clearly requires work "throughout the floor" – that is, even in areas *beyond the work area*. The 2012 language clearly contemplates this and gets it right. The proposal would miss this and would introduce confusion.

2. Disapproval of EB 24 is consistent with disapproval of related proposals EB 7 and EB 45. These three proposals were intended to be coordinated with the (ill-advised) removal of the key term *work area*, but they were found not to achieve their purpose. EB 24 was the first one heard at the Dallas hearings. Once EB 7 and EB 45 were disapproved, it became clear that EB 24 should have been disapproved as well.

3. EB 24 (like EB 7 and EB 45) misses the essential point of having different Alteration levels. The purpose of the levels is to allow different intended scopes of work to trigger appropriate levels of work *outside* the intended work area. The example in reason 1 above is just one of many cases where an intended alteration triggers appropriate work outside the alteration work area. Even Level 1 Alterations follow this basic IEBC philosophy (see, for example, the structural mitigation measures in section 706.) Thus, the key language that EB 24 would remove – “shall apply beyond the work area” – is vital to the *work area* concept and to the Work Area method.

EB24-13

Final Action: AS AM AMPC____ D

EB26-13 803.6 (NEW)

Proposed Change as Submitted

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

Add new text as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the *International Building 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 fire protection requirements of Chapter 9 of the *International Building Code*.

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

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

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

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

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

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

803.6 (NEW)-EB-DAVIDSON.doc

Committee Action Hearing Results

Committee Action:

Approved as Modified

Modify the proposal as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building 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 fire protection requirements of Chapter 9 of the *International Building Code*.

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

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

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment 1:

Tony Crimi, A.C. Consulting Solutions Inc, representing International Firestop Council (IFC), requests Approval as Modified by this Public Comment.

Further modify the proposal as follows:

803.6 Fire-resistance ratings. Where approved by the building 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 provided, the building is ~~required to meet~~ also complies with the other applicable fire protection requirements of Chapter 9 and Chapter 10 of the *International Building Code*.

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

Commenter's Reason: This modification adds a critical element that is lacking in the current proposal. The proponents have indicated, the proposed change is intended to add minimum requirements for existing hospitals (Group 1-2, Condition 2) into Chapter 11. However, as a revision to Chapter 8 of the IEBC, this proposal will in fact apply to all buildings undergoing Level 2 alterations.

The current proposal as modified by the Committee would permit all of the sprinkler tradeoffs permitted for new construction in the IBC, even though the means of egress of the existing building have not been evaluated. If a building falls short of the IBC's requirements for means of egress (IBC Chapter 10), allowing that building to then take all of the IBC's sprinkler trade-offs and cease maintenance of fire safety features that would be traded away for sprinklers will result in reducing the level of fire safety of that existing building well below its current levels, and well below the level envisioned by the IBC. The minimum requirements of the IBC for means of egress are clearly stipulated in Chapter 10. These minimums are assumed to be in place and thus required before the sprinkler tradeoff provisions are permitted in other sections of the Code. The IBC goes as far as to state the following:

"1001.2 Minimum requirements. It shall be unlawful to alter a building or structure in a manner that will reduce the number of *exits* or the capacity of the *means of egress* to less than required by this code."

By attempting to take advantage of all of the permitted reductions in fire-resistance ratings permitted by the IBC under these assumptions, this proposal needs to ensure that the base level of fire safety is also maintained. A fully adequate (safe) means of egress is an absolute bare minimum requirement. With a building already having egress deficiencies as compared to the current IBC, there should not be a possibility to further reduce fire safety features in that building.

As just one example, if an existing building had egress stairs that were narrower than the current IBC would allow, then allowing existing fire-rated egress corridors to lose their fire resistance rating could be a very detrimental loss of an essential fire safety feature for the evacuating occupants, who could be forced to wait much longer in the corridors before being able to enter the stairway.

An additional part of this Code Change Comment clarifies that the responsibility for reviewing these evaluations, which are based solely on the new construction requirements of the IBC, rests with the Building Official rather than the Fire Code Official. It is the building officials that have the training and experience to review a building for compliance to the IBC. It cannot be assumed that all Fire Official have the required knowledge of the IBC to critically evaluate a building against IBC requirements.

Public Comment 2:

William E. Koffel, P.E., Koffel Associates, Inc. representing Firestop Contractors International Association (FCIA), requests Approval as Modified by this Public Comment.

Further modify the proposal as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building 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 fire protection requirements of Chapter 9 of the *International Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features 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.

Commenter's Reason: Referring solely to Chapter 9 is problematic in that in one sense it is limiting and can infer that other provisions of the IBC need not be considered. In a similar manner, there may be requirements in Chapter 9 that are not relevant to the construction feature being evaluated. In lieu of creating a laundry list of code requirements to be met, the proposed language relies on the evaluation report addressing the issues to be considered and evaluated.

With respect to fire code deficiencies, the IEBC requires compliance with the IFC. However, as an existing building there may be some deficiencies that are existing but part of plan for correction. These should be included in the evaluation reports.

Public Comment 3:

Vickie Lovell, InterCode Inc, representing Fire Safe North America, formerly known as Alliance for Fire and Smoke Containment and Control requests Approval as Modified by this Public Comment.

Further modify the proposal as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building 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 fire and smoke features in Chapter 7, the fire protection requirements of Chapter 9, and the means of egress requirements in Chapter 10 of the *International Building Code* as determined by a registered design professional.

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

Commenter's Reason: The current proposal as modified by the committee is very limited as to how the requirements of Chapter 9 are to be applied, and very non-specific about who decides which requirements of Chapter 9 are to be applied. This modification clarifies that neither the owner nor a code or fire official can arbitrarily determine what provisions of the code should apply, but that a design professional should make the determination. The code official approves the design. It also requires that the relevant information in Chapter 7 for fire and smoke containment features and also the essential components of the means of egress in chapter 10 be considered. It is not intended to require that ALL requirements in these chapter should apply; only what is appropriate and applicable as determine by a design professional.

Public Comment 4:

Maureen Traxler, City of Seattle Department of Planning & Development, requests Approval as Modified by this Public Comment.

Further modify the proposal as follows:

301.3 803.6 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 fire protection requirements of Chapter 9 of the *International Building Code*.

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

Commenter's Reason: This modification would move the language of the proposal to Chapter 3 where it would apply to all three of the IEBC's compliance methods. The rationale for the proposal is not specific to the work area method, and we can see no reason it should not apply to the prescriptive and performance methods.

Public Comment 5:

John Williams, ICC Ad Hoc Committee on Health Care, requests Approval as Modified by this Public Comment.

Further modify the proposal as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building 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 fire protection requirements of Chapter 9 of the *International Building Code*.~~

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

Reason: While the AdHoc Healthcare (AHC) committee supports this change, The AHC believes the language in the 1st paragraph needs clarification. Fire protection is addressed in IEBC Section 804. IEBC Section 803 deals with building elements and materials, a reference to Chapter 9 may be out of place here. A reference to IBC Chapter 9 could be interpreted to require pressurized stairways, fire command centers, or smoke control in other parts of the building – which have little or no effect on the fire-resistance ratings of building elements. The plans, investigation and evaluation reports required in the second in the second paragraph will provide the code official with the information needed to determine where it is reasonable to consider the requirements of the new building code.

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

Public Comment 6:

Thomas S. Zaremba, Roetzel & Andress, representing Alliance of Primary Fire Rated Glazing Manufacturers, requests Approval as Modified by this Public Comment.

Further modify the proposal as follows:

803.6 Fire-resistance ratings. Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building 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 fire protection requirements of Chapter 9 of the *International Building Code* and such other provisions of the current building code as required by the code official.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, conditions of occupancy, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted. Such evaluation reports shall be submitted by the applicant and the code official is authorized, without charge to the jurisdiction, to require such evaluation reports to be prepared by, or adopted by, and bear the stamp of, a registered design professional.

Commenter's Reason: Three modifications to the proposal are being added to the modification made by the Committee in order to provide the code official with greater flexibility and control over the outcome of alterations involving sprinkler retrofits of existing buildings.

The first change, simply, adds the word "Code" in the first paragraph since it appears to have been inadvertently left out in the original proposal.

Second, while the original proposal provides that the "building is required to meet "the other applicable fire protection requirements of Chapter 9 of the *International Building Code*," there are provisions in other Chapters of the current building code that the code official may want the building to comply with as a condition of allowing fire-resistance ratings to meet current code. For example, although sprinklered throughout, the existing building may not be in compliance with a variety of means of egress requirements found in Chapter 10 of the current code. Without including the additional language proposed in paragraph 1, the code official would have no basis to require compliance with provisions of Chapter 10.

Third, the second paragraph of the proposal requires supporting "plans, investigation and evaluation reports and other data" to be submitted to the code official. The code official should have the option, under this paragraph, to require those supporting evaluation reports to be prepared or adopted by a registered design professional. Otherwise, the code official is tasked with verifying the accuracy and quality of the supporting evaluation reports. While there may be cases where the code official is willing to do that, the proposed modification provides the code official with the option of requiring the involvement of a registered design professional in the application process. (References to the use of registered design professionals in connection with evaluation reports such as these can be found throughout the International Codes. For example, see sections 104.2.1.1 and 106.1 of the *International Existing Building Code*; section 104.7.2 of the *International Fire Code*; and section 107.3.4 of the *International Building Code*).

I urge you to vote against the standing motion to approve as modified by the Committee, and to vote in favor of approving this proposal as modified by this Public Comment.

EB26-13

Final Action: AS AM AMPC_____ D

EB29-13

804.2.2

Proposed Change as Submitted

Proponent: Dave Frable, U.S. General Services Administration Public Buildings Service
(dave.frable@gsa.gov)

Revise as follows:

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

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

Exceptions:

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

Reason: The intent of this code change is to attempt to address a concern that the municipal water supply must be available at the floor where the work area is located without the installation of a new fire pump. This code change revises the subject text such that if a municipal water supply is available at the building site, and the work area exceeds 50% of the floor area, the installation of a new fire pump if needed to supplement the necessary flow and pressure for the sprinkler system should not be the deciding factor to address the need to increase the current degree of public safety in existing buildings.

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

804.2.2-EB-FRABLE.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The current allowance that would not require automatic sprinkler installation if a pump was required was felt inappropriate. Instead it was felt that the requirement for the installation of automatic sprinklers should be based upon the availability of onsite water.

Assembly Action:

Disapproved

Individual Consideration Agenda

This code change proposal is on the agenda for individual consideration because the proposal received a successful assembly action of Disapproved and a public comment was submitted.

Public Comment:

Steven Orlowski, National Association of Home Builders, requests Disapproval.

Commenter's Reason: We disagree with the committee's action to remove the long standing exception that dates back to the 2000 IEBC. There has always been an understanding that there needs to be a sense of rational in applying new construction requirements to existing building, especially code provisions which would have a significant impact on the reuse or cost of altering an existing building. To now require level II alterations where the work area exceeds 50% of a floor to install a suppressions system and possibly an additional water lateral, emergency power source, fire pump and the protection of the fire pump is disproportional to the type of alteration taking place. In many cases, to sprinkler what could amount to be a very small portion of a building is regressive in that the added cost imposed by this modification may well become disproportionate to the protection provided and to the value of the building. We encourage the assembly to overturn the committee's action and reinstate the exception.

EB29-13

Final Action: AS AM AMPC____ D

EB30-13
804.2.3

Proposed Change as Submitted

Proponent: Dave Frable, U.S. General Services Administration, Public Buildings Service
(dave.frable@gsa.gov)

Revise as follows:

804.2.3 Windowless stories. Work located in a windowless story, as determined in accordance with the *International Building Code*, shall be sprinklered where the *work area* is required to be sprinklered under the provisions of the *International Building Code* for newly constructed buildings and the building has a sufficient municipal water supply ~~without installation of a new fire pump~~ for design and installation of a fire sprinkler system available at the site.

Reason: The intent of this code change is to attempt to address a concern that the municipal water supply must be available at the floor where the work area is located without the installation of a new fire pump. This code change revises the subject text such that if a municipal water supply is available at the building site, and the work area exceeds 50% of the floor area, the installation of a new fire pump if needed to supplement the necessary flow and pressure for the sprinkler system should not be the deciding factor to address the need to increase the current degree of public safety in existing windowless buildings.

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

804.2.3-EB-FRABLE.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The committee approved this proposal based upon the action taken on EB29-12.

Assembly Action:

Disapproved

Individual Consideration Agenda

This code change proposal is on the agenda for individual consideration because the proposal received a successful assembly action of Disapproved.

EB32-13

804.2.4

Proposed Change as Submitted

Proponent: Dave Frable, U.S. General Services Administration Public Buildings Service
(dave.frable@gsa.gov)

Revise as follows:

804.2.4 Other required automatic sprinkler systems. In buildings and areas listed in Table 903.2.11.6 of the *International Building Code*, *work areas* that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with an automatic sprinkler system under the following conditions:

1. The *work area* is required to be provided with an automatic sprinkler system in accordance with the *International Building Code* applicable to new construction; and
2. The building has sufficient municipal water supply for design and installation of an automatic sprinkler system available ~~to the floor without installation of a new fire pump.~~ at the site.

Reason: The intent of this code change is to attempt to address a concern that the municipal water supply must be available at the floor where the work area is located without the installation of a new fire pump. This code change revises the subject text such that if a municipal water supply is available at the building site, and the work area exceeds 50% of the floor area, the installation of a new fire pump if needed to supplement the necessary flow and pressure for the sprinkler system should not be the deciding factor to address the need to increase the current degree of public safety in existing buildings.

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

804.2.4-EB-FRABLE.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The committee approved this proposal based upon the action taken on EB29-12.

Assembly Action:

Disapproved

Individual Consideration Agenda

This code change proposal is on the agenda for individual consideration because the proposal received a successful assembly action of Disapproved.

EB33-13

804.4.1.3

Proposed Change as Submitted

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Healthcare (John.Williams@DOH.WA.GOV) and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (cbaldassarra@rjagroup.com)

Revise as follows:

804.4.1 Occupancy requirements. A fire alarm system shall be installed in accordance with Sections 804.4.1.1 through 804.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the *work area* shall be provided and automatically activated.

Exceptions:

1. Occupancies with an existing, previously approved fire alarm system.
2. Where selective notification is permitted, alarm notification appliances shall be automatically activated in the areas selected.

804.4.1.3 Group I-2. A fire alarm system shall be installed in work areas of Group I-2 occupancies as required by the International Fire Code for ~~existing~~ new Group I-2 occupancies.

Reason: This proposed change is a joint proposal from the ICC Ad Hoc Committee on Healthcare (AHC) and the Code Technology Committee (CTC). The scope of the AHC deals with Group I-2 hospitals (now Group I-2 Condition 2 as a result of approved code change G257-12) and the scope of the CTC's investigation of the area of study entitled "Care Facilities" addresses Group I-1 and Group I-2 Condition 1 (nursing homes).

This section in the IEBC refers you to the IFC for fire alarm requirements in existing buildings undergoing a Level 2 Alteration. Section 1103.7.3 of the IFC refers back to the new construction requirements of Section 907.2.6.2. This proposal removes the circuitous references by stipulating that the fire alarm system needs to be installed as required for new construction.

This is a joint proposal submitted by the ICC Ad Hoc Committee for Healthcare and the ICC Code Technology Committee.

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

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

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

804.4.1.3-EB-BALDASSARRA-WILLIAMS-ADHOC.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal was felt to conflict with the IFC for existing Group I-2 occupancies. Other concerns related to the fact that this provision should be dealt with in the change of occupancy requirements for new installations.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee, request Approval as Modified by this Public Comment.

Replace the proposal as follows:

804.4.1 Occupancy requirements. A fire alarm system shall be installed in accordance with Sections 804.4.1.1 through 804.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the *work area* shall be provided and automatically activated.

Exceptions:

1. Occupancies with an existing, previously approved fire alarm system.
2. Where selective notification is permitted, alarm notification appliances shall be automatically activated in the areas selected.

804.4.1.3 Group I-2. A fire alarm system shall be installed in ~~work areas of~~ throughout Group I-2 occupancies as required by the International Fire Code ~~for existing Group I-2 occupancies.~~

Commenter's Reason: The proposal was not intended to address new vs. existing occupancies. The intent is to send the designer to the correct location for fire alarms as required in IFC and maintaining correlation in the codes. Section 804.4.1 could be confusing for designers. Fire Codes and CMS require fire alarms throughout a Group I-2 already. See IFC Section 907.2.6.2 reprinted below. By virtue of this reference the difference is that you will pick up manual fire alarm pull stations. Note that the existing requirements in Section 1103.7 would permit a previously approved fire alarm system to remain. Whereas, this proposed language would require the fire alarm system to be upgraded to new standards based on rehabilitation work.

907.2.6.2 Group I-2. An automatic smoke detection system shall be installed in *corridors* in nursing homes, long-term care facilities, detoxification facilities and spaces permitted to be open to the *corridors* by Section 407.2 of the *International Building Code*. The system shall be activated in accordance with Section 907.5. Hospitals shall be equipped with smoke detection as required in Section 407 of the *International Building Code*.

Exceptions:

1. *Corridor* smoke detection is not required in smoke compartments that contain *sleeping units* where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the *corridor* side of each *sleeping unit* and shall provide an audible and visual alarm at the care provider station attending each unit.
2. *Corridor* smoke detection is not required in smoke compartments that contain *sleeping units* where *sleeping unit* doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

EB33-13

Final Action:

AS

AM

AMPC _____

D

EB35-13
805.3.1.1

Proposed Change as Submitted

Proponent: Steve Thomas, Colorado Code Consulting, LLC (sthomas@coloradocode.net)

Revise as follows:

805.3.1.1 Single-exit buildings. Only one exit is required from buildings and spaces of the following occupancies:

1. In Group A, B, E, F, M, U and S occupancies, a single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22 860 mm).
2. Group B, F-2, and S-2 occupancies not more than two stories in height that are not greater than 3,500 square feet per floor (326 m²), when the exit access travel distance does not exceed 75 feet (22 860 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1 hour.
3. Open parking structures where vehicles are mechanically parked.
4. In community residences for the developmentally disabled, the maximum occupant load excluding staff is 12.
5. Groups R-1 and R-2 not more than ~~two~~ three stories in height, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed ~~50~~ 125 feet (15-240 mm 38,100 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1 hour. Each dwelling unit shall be provided with emergency escape and rescue openings in accordance with Section 1029 of the *International Building Code*.

(Portions of text not shown remain unchanged)

Reason: This change is intended to create consistency between the IEBC and the IBC. The travel distances for Group R-2 occupancies in Table 1021.2(1) were changed in the 2012 IBC. This change is consistent with that change. It eliminates any potential conflicts between the codes. We have also added the requirement for emergency escape and rescue openings to the section to be consistent with the footnote a of IBC Table 1021.2(1) for consistency as well.

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

805.3.1.1-EB-THOMAS

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved due to the concern with the increase in stories from two to three. This exception as currently written is for both sprinklered and non sprinklered buildings. Similar provisions in the IBC would require automatic sprinklers.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Steve Thomas, Colorado Code Consulting, LLC, representing Colorado Chapter ICC, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

805.3.1.1 Single-exit buildings. Only one exit is required from buildings and spaces of the following occupancies:

1. In Group A, B, E, F, M, U and S occupancies, a single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22 860 mm).
2. Group B, F-2, and S-2 occupancies not more than two stories in height that are not greater than 3,500 square feet per floor (326 m²), when the exit access travel distance does not exceed 75 feet (22 860 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1 hour.
3. Open parking structures where vehicles are mechanically parked.
4. In community residences for the developmentally disabled, the maximum occupant load excluding staff is 12.
5. Groups R-1 and R-2 not more than two stories in height, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet (15 240 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1 hour.
6. Group R-2 occupancies not more than three stories in height which comply with all of the following:
 - 6.1. There are not more than four dwelling units per story
 - 6.2. The building is provided with a fire sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code*.
 - 6.3 The exit access travel distance from each dwelling unit to an approved exit does not exceed 125 feet (15,240 mm).
 - 6.4 Each dwelling unit shall be provided with emergency escape and rescue openings in accordance with Section 1029 of the International Building Code.

Commenter's Reason: The committee had concerns with the revision increasing the number of stories in the section and the lack of sprinkler requirements. Our intent was to provide consistency with the International Building Code (IBC). Therefore, we are proposing that we replace the original proposal with the language above. The current language in Item 5 of Section 805.3.1.1 is not being revised. We are adding an additional item to the section that coincides with the current language in the IBC Table 1021.2(1). This proposal eliminates any potential conflicts between the IBC and IEBC.

EB35-13

Final Action: AS AM AMPC ____ D

EB38-13
805.6

Proposed Change as Submitted

Proponent: Gerald Anderson, City of Overland Park, Kansas (jerry.anderson@opkansas.org)

Revise as follows:

805.6 Dead-end corridors. Dead-end corridors in any *work area* created as a result of the alteration shall not exceed ~~35~~ 20 feet (6096 mm). Existing dead-end corridors in any work area shall not exceed 35 feet (10 670 mm).

Exceptions:

1. Where dead-end corridors of greater length are permitted by the *International Building Code*.
2. In other than Group A and H occupancies, the maximum length of an existing dead-end corridor shall be 50 feet (15 240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the *International Building Code*.
3. In other than Group A and H occupancies, the maximum length of an existing dead-end corridor shall be 70 feet (21 356 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the *International Building Code*.
4. In other than Group A and H occupancies, the maximum length of an existing, newly constructed, or extended dead-end corridor shall not exceed 50 feet (15 240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the *International Building Code*.

Reason: The intent of the code change is to make the base requirement for the allowable length of a dead-end corridor to be the same as the International Building code. The IBC limits dead-end corridors to 20 feet. The new wording will continue to make allowances for existing situations where existing dead-end corridor are found to be 35 feet length or less in length. It seems terribly inconsistent to require dead-end corridors on new construction be limited to 20 feet, and then yet allow for an alteration with a 35 foot dead end corridor.

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

805.6-EB-ANDERSON

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee understood the concerns raised by the proposal but as currently written may be difficult to apply and would be inconsistent with the IBC. It was encouraged that more work occur on the proposal in the form of a public comment. One particular concern raised was dealing with a newly constructed corridor in an existing building that due to the layout of the building could not meet the 20 foot requirement in a practical way.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Gerald Anderson, City of Overland Park, Kansas, representing self, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

805.6 Dead-end corridors. Existing dead-end corridors in any *work area* shall not exceed 35 feet (6096 mm).

Exceptions:

1. Where dead-end corridors of greater length are permitted by the *International Building Code*.
2. In other than Group A and H occupancies, the maximum length of an existing dead-end corridor shall be 50 feet (15 240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the *International Building Code*.
3. In other than Group A and H occupancies, the maximum length of an existing dead-end corridor shall be 70 feet (21 356 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the *International Building Code*.
4. In other than Group A and H occupancies, the maximum length of an existing, newly constructed, or extended dead-end corridor shall not exceed 50 feet (15 240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the *International Building Code*.

Commenter's Reason: The purpose of the code change is to clarify what I believe is the intent of the code. The current language can be read to as allow for construction of dead end corridors 35 ft in length. That reading of the code would be in conflict with the IBC which limits dead-end corridors to 20 feet. By adding the word 'existing' the code would still will make allowances for existing situations where existing dead-end corridor are found to be 35 feet length or less in length but would not allow for the construction of a dead end corridor in excess of that allowed by the IBC.

This is a much needed change. It seems terribly inconsistent to restrict dead-end corridors in new construction to 20 feet, and then turn around and allow the construction of a 35 foot dead end corridor when the IEBC is used.

EB38-13

Final Action: AS AM AMPC_____ D

EB42-13
806.2

Proposed Change as Submitted

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

Revise as follows:

806.2 Stairs and escalators in existing buildings. In *alterations* where an escalator or stair is added where none existed previously, an accessible route shall be provided in accordance with ~~Sections~~ Section 1104.4 and 1104.5 of the *International Building Code*.

Reason: The intent of this provisions is that the accessible route will be permitted to be provided in the same area as the new construction, and is not require it to be located elsewhere in the building. A reference to Section 1104.5 could require the accessible route to be provided in another part of the building is the new stairway was not on a general circulation route. A correlative change has been proposed and approved for IBC Section 3411.8.4/IEBC 410.8.4.

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

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

806.2-EB-BALDASSARRA-CTC

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: There were concerns that without the reference to Section 1104.5 the route could potentially be located outside the building which was inappropriate.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Carl Baldassarra, ICC Code Technologies Committee, requests Approval as Submitted.

Commenter's Reason: The requirement in Section 1104.5 for a "general" circulation path location (Section 1104.5) could require the accessible route to be constructed considerably outside of the work area. Therefore, the intent of the deletion of the reference to Section 1104.5 is to allow for the vertical route, typically an elevator or platform lift, to be installed within the area of alteration, rather than possibly requiring the route somewhere else in the building. This would allow design flexibility and options.

Also, this language is currently in IEBC Section 410.8.4. The revision was approved in G241-12. This needs to be approved for correlation in the code. 2015 text is below.

IBC 1104.5 Location. *Accessible routes* shall coincide with or be located in the same area as a general *circulation path*. Where the *circulation path* is interior, the *accessible route* shall also be interior. Where only one *accessible route* is provided, the *accessible route* shall not pass through kitchens, storage rooms, restrooms, closets or similar spaces.

Exceptions:

1. *Accessible routes* from parking garages contained within and serving *Type B units* are not required to be interior.
2. A single *accessible route* is permitted to pass through a kitchen or storage room in an *Accessible unit*, *Type A unit* or *Type B unit*.

IEBC 410.8.4 Stairs and escalators in existing buildings. In *alterations* where an escalator or stair is added where none existed previously, an accessible route shall be provided in accordance with Section 1104.4 of the *International Building Code*.

EB42-13

Final Action:

AS

AM

AMPC_____

D

EB43-13

806.3, 806.4, 806.5, 906.2

Proposed Change as Submitted

Proponent: Carl Baldassarra, P.E., Chair, ICC Code Technology Committee

Revise as follows:

806.3 1105.2 Accessible dwelling units and sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for accessible units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of spaces being added.

806.4 1105.3 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

806.5 1105.4 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

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

Reason: The intent of this change is to clarify when Accessible, Type A and Type B units are required in alterations and additions.

Units being added within an existing structure are considered an alteration; therefore, Accessible and Type A units that are added as part of a renovation are adequately addressed in Section 705.1.8 and 705.1.9, and the language in 806.3 and 806.4 is not needed.

Additions adjacent to or above a building must comply with new construction. Therefore, Section 806.3, 806.4 and 806.5 should be relocated to Section 1105. This clarifies that just the addition is considered for the number of units, not the addition plus the number of existing units. Section 705.1.14, Extent of application, would allow for a situation where Accessible and Type A units were provided in sufficient numbers, including the addition, in the existing building.

Type B units are currently required in existing building undergoing a Level 3 alteration, with or without a change of occupancy. This requirement will remain the same (see Section 705.1, Exception 3, Section 906.2 and the exception to Section 1012.8).

For reference these are the related sections with revisions included.

Level I Alterations

705.1 General. A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible. A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy.

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.
2. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be provided in existing *facilities*.
3. Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing *facilities* undergoing less than a Level 3 *alteration*.
4. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall meet the provisions for Type B dwelling units.

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

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

Level II Alterations

806.1 General. A building, *facility*, or element that is altered shall comply with this section and Section 705.

Level III Alterations

906.1 General. A building, *facility* or element that is altered shall comply with this section and Sections 705 and 806.

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

Change of Occupancy

1006.1 General. Accessibility in portions of buildings undergoing a *change of occupancy* classification shall comply with Section 1012.8.

1012.8 Accessibility. *Existing buildings* that undergo a change of group or occupancy classification shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities undergoing a *change of occupancy* in conjunction with less than a Level 3 *alteration*.

Additions

1105.1 Minimum requirements. Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, *primary function* shall comply with the requirements of Sections 705, 806 and 906, as applicable.

1105.2 ~~806.3~~ Accessible dwelling units and sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for accessible units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of spaces being added.

1105.3 ~~806.4~~ Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

1105.4 ~~806.5~~ Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

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

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

906.2-EB-BALDASSARRA-CTC.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: There was concern that moving these requirements to the chapter on additions would create a potential gap in the IEBC for Accessible, Type A and Type B dwelling and sleeping units.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Carl Baldassarra, ICC Code Technologies Committee, requests Approval as Submitted.

Commenter's Reason: The IEBC development committee felt that there was a possible gap in the requirements for accessible units. The CTC carefully reviewed the proposal to identify any gaps and found none. The CTC committee felt that this change would not create a gap in the provisions, but would clarify what happens with additions. Where units are added as part of an addition, should be addressed in the IEBC Chapter on additions, not in the chapter for Level 2 alterations. Section 1105.4 for Type B units is consistent with Fair Housing Requirements and is part of the safe harbor evaluation.

Dwelling and sleeping units added within a building as part of change of occupancy are alterations and will be addressed in the current text in Level I for Accessible and Type A and Level III for Type B.

This is how the language would be related in the IEBC –

Level I Alterations

705.1 General. A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible. A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy.

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.
2. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be provided in existing *facilities*.
3. Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing *facilities* undergoing less than a Level 3 *alteration*.
4. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall meet the provisions for Type B dwelling units.

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

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

Level II Alterations

806.1 General. A building, *facility*, or element that is altered shall comply with this section and Section 705.

Level III Alterations

906.1 General. A building, *facility* or element that is altered shall comply with this section and Sections 705 and 806.

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

Change of Occupancy

1006.1 General. Accessibility in portions of buildings undergoing a *change of occupancy* classification shall comply with Section 1012.8.

1012.8 Accessibility. *Existing buildings* that undergo a change of group or occupancy classification shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities undergoing a *change of occupancy* in conjunction with less than a Level 3 *alteration*.

Additions

1105.1 Minimum requirements. Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, *primary function* shall comply with the requirements of Sections 705, 806 and 906, as applicable.

1105.2 806.3 Accessible dwelling units and sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for accessible units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of spaces being added.

1105.3 806.4 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type A units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

1105.4 806.5 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added.

EB43-13

Final Action: AS AM AMPC ____ D

EB45-13
901.2, 903.2.1, 903.3

Proposed Change as Submitted

Proponent: David S. Collins, FAIA, The Preview Group, Inc., representing The American Institute of Architects

Revise as follows:

901.2 Compliance. In addition to the provisions of this chapter, work shall comply with all of the requirements of Chapters 7 and 8. The requirements of Sections 803, 804 and 805 shall apply ~~within all work areas~~ to all Level 3 alteration work per Section 505.1, whether or not they include exits and corridors shared by more than one tenant and regardless of the occupant load.

Exception: Buildings in which the reconfiguration of space affecting exits or shared egress access is exclusively the result of compliance with the accessibility requirements of Section 705.2 shall not be required to comply with this chapter.

903.2.1 Separation required. Where the ~~work area~~ Level 3 alteration work is in any attached dwelling unit in Group R-3 or any multiple single-family dwelling (townhouse), walls separating the dwelling units that are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the dwelling unit wall that is part of the *work area*.

Exception: Where *alterations* or *repairs* do not result in the removal of wall or ceiling finishes exposing the structure, walls are not required to be continuous through concealed floor spaces.

903.3 Interior finish. Interior finish in exits serving the ~~work area~~ Level 3 alterations shall comply with Section 803.4 between the highest floor on which there is ~~a work area~~ an *alteration* to the floor of exit discharge.

Reason: This change is part of the package of changes to help clarify how alteration work is described and within what limitations they are to be applied. Section 505.1 will include the limitations for the 50 percent reconfiguration of space, along with the reconfiguration or extension of systems that serve more than 50 percent of the space in a building.

Cost Impact: The code change proposal will not increase the cost of construction. This will lower the cost of construction by eliminating confusion.

901.2-EB-COLLINS.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee understood the concerns with the term and definition of "work area" but this particular strategy of stating "level 3 alteration" was not felt to solve the problem.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

David S. Collins, FAIA, The Preview Group, Inc. representing The American Institute of Architects, requests Approval as Submitted.

Commenter's Reason: EB24 was passed for level 2 alterations, removing the unnecessary and confusing terminology of work area from the IEBC, this change would coordinate those changes for the level 3 alterations

EB45-13

Final Action: AS AM AMPC_____ D

EB46-13

902.2, 902.2.1

Proposed Change as Submitted

Proponent: Carl Baldassarra, P.E., Chair, ICC Code Technology Committee

Revise as follows:

902.2 Boiler and furnace equipment rooms. Boiler and furnace equipment rooms adjacent to or within Groups I-1, I-2, I-4, R-1, R-2 and R-4 occupancies ~~the following facilities shall be enclosed by 1-hour fire-resistance-rated construction: day nurseries, children's shelter facilities, residential childcare facilities, and similar facilities with children below the age of 21/2 years or that are classified as Group I-2 occupancies, shelter facilities, residences for the developmentally disabled, group homes, teaching family homes, transitional living homes, rooming and boarding houses, hotels, and multiple dwellings.~~

Exceptions:

1. ~~Furnace and Steam boiler equipment of low-pressure type, operating at pressures of 15 pounds per square inch gauge (psig) (103.4 KPa) or less for steam equipment or is not required to be enclosed.~~
2. ~~Hot water boilers operating at pressures of 170 psig (1171 KPa) or less for hot water equipment, when installed in accordance with manufacturer recommendations are not required to be enclosed.~~
3. ~~2- Furnace and boiler equipment of residential R-3 type with 200,000 400,000 British thermal units (Btu) (2.14 4.22 × 10⁸ J) per hour input rating or less is not required to be enclosed.~~
4. ~~3- Furnace rooms protected with automatic sprinkler protection fire-extinguishing system are not required to be enclosed.~~

902.2.1 Emergency controls. ~~Emergency controls for boilers and furnace equipment shall be provided in accordance with the *International Mechanical Code* in all buildings classified as day nurseries, children's shelter facilities, residential childcare facilities, and similar facilities with children below the age of 21/2 years or that are classified as Group I-2 occupancies, and in group homes, teaching family homes, and supervised transitional living homes in accordance with the following:~~

1. ~~Emergency shutoff switches for furnaces and boilers in basements shall be located at the top of the stairs leading to the basement; and~~
2. ~~Emergency shutoff switches for furnaces and boilers in other enclosed rooms shall be located outside of such room.~~

Reason: The list of occupancies is outdated and unclear in both Section 902.2 and 902.2.1. The exceptions in 902.2 should be consistent with IBC Table 508.2.5 for new construction, not have a much lower threshold for renovations versus new. The remainder of the revisions is a clarification of the existing language. Emergency controls for boilers and furnace equipment is never required in the IMC, so Section 902.2.1 should be deleted.

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

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

902.2-EB-BALDASSARRA-CTC.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: This proposal was approved as it fixes out dated descriptions of occupancies that are now clearly addressed by the IBC. These revisions were felt to make application of the I-Codes more consistent.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Jeffrey M. Hugo, CBO, National Fire Sprinkler Association, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

902.2 Boiler and furnace equipment rooms. Boiler and furnace equipment rooms adjacent to or within Groups I-1, I-2, I-4, R-1, R-2 and R-4 occupancies shall be enclosed by 1-hour fire-resistance-rated construction:

Exceptions:

1. Steam boiler equipment operating at pressures of 15 pounds per square inch gauge (psig) (103.4 KPa) or less or is not required to be enclosed.
2. Hot water boilers operating at pressures of 170 psig (1171 KPa) or less are not required to be enclosed.
3. Furnace and boiler equipment of with 400,000 British thermal units (Btu) (4.22_x 10⁸ J) per hour input rating or less is not required to be enclosed.
4. Furnace rooms protected with an automatic sprinkler fire-extinguishing system are not required to be enclosed.

Commenter's Reason: The term "automatic sprinkler system" is consistent with Table 509 (or Table 508.2 in 2009 IBC).

EB46-13

Final Action:

AS

AM

AMPC_____

D

EB49-13 904.2

Proposed Change as Submitted

Proponent: Charles S. Bajnai, Chesterfield County, VA, ICC Building Code Action Committee

Revise as follows:

904.2 Fire alarm and detection systems. Fire alarm and detection systems ~~complying with Sections 804.4.1 and 804.4.3 shall be provided throughout the building~~ in accordance with Section 907 of the International Building Code as required for new construction.

Reason: This proposal is submitted by the ICC Building Code Action Committee (BCAC). The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 6 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: <http://www.iccsafe.org/cs/BCAC/Pages/default.aspx>.

The reference back to Section 804.4.1 through 804.4.3 misses critical upgrades of alarm systems for other occupancies. The intent of this proposal is to eliminate the reference to Chapter 8 of the IEBC because the reference creates confusion. Section 904.2.1 implies that an alarm system for all occupancies in accordance with the IBC would be required, however the reference to Section 804.4 implies that only those occupancies found in Section 804.4 are required to have them installed. Section 804.4 does not cover the fire alarm requirements for all occupancies in the IBC. An alteration level 3 to an existing A occupancy is a significant change to more than 50% of the area of a building and an alarm system would not be required with the current reference to Section 804.4 left in the code.

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

904.2-EB-BAJNAI-BCAC.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The committee approved the proposal based upon the proponent's reason. In addition, it was noted that level 3 alterations were substantial enough and fire alarm systems should be as required for new construction.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Maureen Traxler, City of Seattle Department of Planning & Development, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

904.2 Fire alarm and detection systems. Fire alarm and detection systems shall be provided throughout the building in accordance with Section 907 of the *International Building Code* as required for new construction.

Commenter's Reason: We are proposing to reinsert the phrase "throughout the building" into this code section because it clarifies that the requirements for fire alarm systems are not limited to the work area. Section 904.2 of the 2012 IEBC requires alarms throughout, but the rest of Chapter 9 applies either to the work area only or to areas from the work area to the level of exit discharge. The phrase "as required for new construction" clarifies that "throughout the building" means that a fire alarm system is only required where Section 904.2 would require it for new construction.

EB49-13

Final Action:

AS

AM

AMPC_____

D

EB52-13

202, 1001.1, 1001.2, 1001.2.1, 1001.3, 1001.3.1

Proposed Change as Submitted

Proponent: Gerald Anderson, City of Overland Park, Kansas representing self
(jerry.anderson@opkansas.org)

Revise as follows:

SECTION 202 GENERAL DEFINITIONS

CHANGE OF OCCUPANCY. ~~A change in the purpose or level of activity within a building that involves a change in application of the requirements of this code use of the building or a portion a building. A change of occupancy shall include any change of occupancy classification, any change from one group to another group within an occupancy classification or any change in an allowable use within a given group for a specific occupancy classification.~~

Revise as follows:

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

- ~~1. Where the occupancy classification is not changed; or~~
- ~~2. Where there is a change in occupancy classification of the occupancy group designations changes~~

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

1001.2.1 ~~Repair and alteration~~ Change in Occupancy with no change of occupancy classification. ~~Any repair or alteration work undertaken in connection with a change of occupancy in use that does not involve a *change of occupancy* classification or a change to another group within a given occupancy classification shall conform to the applicable requirements for the work as classified in Chapter 4 and to the requirements of Section 1002 through 1011.~~

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

~~1001.3~~ 1001.2.2 Change of occupancy classification. Where the occupancy classification of a building changes, the provisions of Sections 1002 through 1012 shall apply. This includes a *change of occupancy* classification within a group as well as a *change of occupancy* classification from one group to a different group.

~~1001.3.1~~ 1001.2.2.1 Partial change of occupancy classification. Where a portion of an *existing building* is changed to a new occupancy classification, Section 1012 shall apply.

Reason: The purpose of the code change is to bring the IEBC definition for a change in occupancy more in line with the IBC definition for a change in occupancy. The additional portions of the code change clarify the intent of the code.

Definition: The definition for a change in occupancy should include all things that would constitute a change in occupancy. The IBC uses the words "use, groups and occupancy classification. For consistency and clarity it is important to stick with language used in the building code thus I changed out the word purpose with use. Example: Occupancy classifications are A,B,H,R,I,M,S &

U. The different occupancy classifications can be divided into Groups, i.e. A-1, A-2, A-3 etc. and within the various groups there are examples of allowed uses for a particular group. Such as under group A-3, we find art galleries, dance halls, & bowling alleys.

Some other reasons for changing the definition: The words "level of activity" is vague. It would also appear that a change in occupancy is somehow dependent on whether there are other code requirements for the new occupancy. A change in occupancy should be a yes or no question. If the answer is yes then one proceeds to determine what new code provisions are applicable if any.

Section 1001.1 Scope. The stricken language is no longer necessary because the bullets points have been included in the definition. With the proposed language, I am trying to make a simple statement that the use of a building cannot be changed without the approval of the code official.

Section 1001.2. The current language is vague. It appears that the existing language is trying to address a change in use. I have inserted the word use in order to make it clear as to what the code is trying to address. It is not necessary to speak to the special provisions of the applicable International codes whatever they are. A change in use is not dependent on special provisions of the code.

Section 1001.2.1. The current language is confusing and is in conflict with 1001.3. With the new wording, I am clarify that when there is a change of use that does not involve a change in occupancy classification or a change from one group to another in a given occupancy classification the code then refers one back to chapter 4 and sections 1002 through 1011. . It is not necessary to talk about "repair and alteration" for that is not the subject. The subject matter is change in occupancy which has resulted from a change in use.

I have renumbered the existing sections 1001.3 and 1001.3.1 making them subsections of 1001.2. All of the sections are addressing different types of occupancy change so it seems more appropriate to have one section with various subsections.

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

1001.1-EB-ANDERSON.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: This proposal was approved to be consistent with the Chapter 4 of the IEBC (Previously Chapter 34 of the IBC) regarding change of occupancy.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Maureen Traxler, City of Seattle Department of Planning & Development, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

CHANGE OF OCCUPANCY. A change in the use of the building or a portion of a building. A change of occupancy shall include any change of occupancy classification, any change from one group to another group within an occupancy classification or any change in ~~an allowable~~ use within a ~~given~~ group for a specific occupancy classification.

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

1001.2 ~~Certificate of Change in occupancy.~~ Certificate of Change in occupancy. A change ~~in use of occupancy~~ shall not be made to any structure without the approval of the *code official*. A certificate of occupancy shall be issued where it has been determined that the requirements for the change ~~in of~~ occupancy have been met.

1001.2.1 ~~Change of use in occupancy with no change of occupancy classification.~~ Change of use in occupancy. Any work undertaken in connection with a change in use that does not involve a *change of occupancy* classification or a change to another group within an ~~given~~ occupancy classification shall conform to the applicable requirements for the work as classified in Chapter 4 ~~5~~ and to the requirements of Section 1002 through 1011.

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

1001.2.2 ~~Change of occupancy classification or group.~~ Change of occupancy classification or group. Where the occupancy classification ~~or group~~ of a building changes, the provisions of Sections 1002 through 1012 shall apply. This includes a *change of occupancy* classification; ~~within a group as well as and a change of occupancy classification from one group to a different group. to another group within an occupancy classification.~~

1001.2.2.1 Partial change of occupancy classification. Where the occupancy classification or group of a portion of an *existing building* is changed to a new occupancy classification, Section 1012 shall apply.

Commenter's Reason: This proposal does a very good job of clarifying the rules for change of occupancy. It's always been a confusing subject but this proposal lays out a logical way of organizing changes of occupancy into 3 categories. The definition sets up a hierarchy as explained in the reason for the original proposal. The hierarchy is:

- o Classification (A, B, E, etc.)
- o Group (numbered subset within some classifications A-1, F-2, etc.)
- o Use (B animal hospital vs. B post office)

As stated in the original definition, change of occupancy "...shall include any change of occupancy classification [e.g. B to R], any change from one group to another group within an occupancy classification [e.g. R-1 to R-2] or any change in an allowable use within a given group [e.g. R-2 dormitory to R-2 boarding house]." The text in brackets was added.

This comment makes the original proposal a little clearer and straightens out some inconsistencies within the section.

- In the definition "allowable" is deleted because the rules for change of occupancy should apply even if the original use was not allowed.
- Section titles are changed to better reflect the subject of the sections.
- "Change in occupancy" is changed to "change of occupancy" for consistency.
- In 1001.2 "change in use" is changed to "change of occupancy" because the section should apply to changes of occupancy, not only to change of use.
- 1001.2.2 corrects on instance where the original proposal misused the terms, and simplifies the language. The modification uses language similar to 1001.2.1.
- Section 1001.2.2.1 is modified so that Section 1012 applies to partial change of occupancy in the same way as it applies when an entire building changes.

EB52-13

Final Action: AS AM AMPC_____ D

EB53-13

1001.1, 1001.2, 1004.1, 1012.1, 1012.1.1.1, 1012.1.1.2, 1012.2.1, 1012.2.2

Proposed Change as Submitted

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

Revise as follows:

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

1. Where the occupancy classification is not changed; ~~or~~
2. Where there is a change in occupancy classification or the occupancy group designation changes; ~~;~~ or
3. Where there is a change in use or occupancy with a fire protection threshold requirement in Chapter 9 of the *International Building Code*.

1001.2 Change in occupancy with no change of occupancy classification. A change in occupancy, as defined in Section 202, with no change of occupancy classification or where there is a change in use or occupancy with a fire protection threshold requirement in Chapter 9 of the *International Building Code* shall not be made to any structure that will subject the structure to any special provisions of the applicable *International Codes*, including the provisions of Sections 1002 through 1011, without the approval of the *code official*. A certificate of occupancy shall be issued where it has been determined that the requirements for the change in occupancy have been met.

1004.1 General. Fire protection requirements of Section 1012 shall apply where a building or portions thereof undergo a change of occupancy classification or where there is a change in use or occupancy with a fire protection threshold requirement in Chapter 9 of the *International Building Code*.

1012.1 General. The provisions of this section shall apply to buildings or portions thereof undergoing a change of occupancy classification. This includes a change of occupancy classification within a group as well as a change of occupancy classification from one group to a different group or where there is a change in use or occupancy with a fire protection threshold requirement in Chapter 9 of the *International Building Code*. Such buildings shall also comply with Sections 1002 through 1011. The application of requirements for the change of occupancy shall be as set forth in Sections 1012.1.1 through 1012.1.4. A change of occupancy, as defined in Section 202, without a corresponding change of occupancy classification shall comply with Section 1001.2.

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

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

1012.1.1.2 Change of occupancy classification with separation. Where a portion of an *existing building* that is changed to a new occupancy classification or where there is a change in use or

occupancy with a fire protection threshold requirement in Chapter 9 of the *International Building Code* and that portion is separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the *International Building Code* for the separate occupancy, that portion shall comply with all of the requirements of Chapter 9 for the new occupancy classification and with the requirements of this chapter.

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

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

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

Reason: This proposed change is a result of the NIST analysis and report on the Charleston Sofa Store Fire. Recommendation 4 of the NIST report reads as follows:

"NIST recommends that model codes require sprinkler systems and that state and local authorities adopt and aggressively enforce this provision:

- a) for all new commercial retail furniture stores regardless of size; and
- b) for existing retail furniture stores with any single display area of greater than 190 m² (2000 ft²).

An installed fire sprinkler system that complied with a national standard such as NFPA 13 [3] would have activated and would have controlled the fire growth. If the showrooms had been divided into smaller areas with fire barriers, the compartmentation would have slowed the spread of the fire as well."

Upon investigation of recommendation 4 of the NIST report, a review of where in the family of I codes to put requirements for upgrading to automatic sprinkler protection for occupancies manufacturing, storing or merchandizing upholstered furniture and mattresses occurred. During this review it was noted that the International Existing Building Code applies the concept of "change of occupancy" broadly and not only to capture a change in the Group, but a change in the occupancy classification with a change in the Group, (see the classification breakdowns under each Group in Chapter 3 of the International Building Code).

The definition for Change of Occupancy drills down to a change "in the purpose of level of activity" for applying more current requirements of the IEBC and the IBC.

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

SECTION 1001 GENERAL

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

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

SECTION 1012 CHANGE OF OCCUPANCY CLASSIFICATION

1012.1 General. The provisions of this section shall apply to buildings or portions thereof undergoing a change of occupancy classification. This includes a change of occupancy classification within a group as well as a change of occupancy classification from one group to a different group.

What I noted was that when applying principals of fire protection, Chapter 9 of the International Building Code has use and levels of activity breakdowns separate and, in some cases, distinct from the occupancy classifications found in Chapter 3 of the International Building Code. In many cases these breakdowns are more significant than those found in Chapter 3 of the International Building Code.

What this proposal does is to suggest the insertion of language into Chapter 10 of the International Existing Building Code that would provide for capturing the fire protection thresholds found in Chapter 9 of the International Building Code as additional, and in many cases more accurate, triggers for the installation of fire protection systems and devices when a change of use or occupancy occurs within an existing building.

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

1001.1-EB-DAVIDSON.doc

Committee Action Hearing Results

Committee Action:

Disapproved

Committee Reason: There was concern that this proposal was excessive. In addition it was unclear what occurs when a change of occupancy has a "fire protection threshold requirement in Chapter 9 of the IBC." In other words what is required to occur. More language to clarify how chapter 9 of the IBC would apply is necessary. Generally the proposal would increase the scope of what would need to comply with the IBC when a change of occupancy or change of occupancy classification occurs.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Robert J. Davidson, Davidson Code Concepts, LLC, representing self, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

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

1. Where the occupancy classification is not changed; or
2. Where there is a change in occupancy classification or the occupancy group designation changes. ; or
3. Where there is a change in use or occupancy with within a space where there is a different a fire protection system threshold requirement in Chapter 9 of the *International Building Code*.

1001.2 Change in occupancy with no change of occupancy classification. A change in occupancy, as defined in Section 202, with no *change of occupancy* classification or where there is a change in use or occupancy with within a space where there is a different a fire protection system threshold requirement in Chapter 9 of the *International Building Code* shall not be made to any structure that will subject the structure to any special provisions of the applicable *International Codes*, including the provisions of Sections 1002 through 1011, without the approval of the *code official*. A certificate of occupancy shall be issued where it has been determined that the requirements for the change in occupancy have been met.

1004.1 General. Fire protection requirements of Section 1012 shall apply where a building or portions thereof undergo a *change of occupancy* classification or where there is a change in use or occupancy with within a space where there is a different a fire protection system threshold requirement in Chapter 9 of the *International Building Code*.

1012.1 General. The provisions of this section shall apply to buildings or portions thereof undergoing a change of occupancy classification. This includes a change of occupancy classification within a group as well as a change of occupancy classification from one group to a different group or where there is a change in use or occupancy with within a space where there is a different a fire protection system threshold requirement in Chapter 9 of the *International Building Code*. Such buildings shall also comply with Sections 1002 through 1011. The application of requirements for the change of occupancy shall be as set forth in Sections 1012.1.1 through 1012.1.4. A *change of occupancy*, as defined in Section 202, without a corresponding change of occupancy classification shall comply with Section 1001.2.

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

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

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

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

1012.2.1 Fire sprinkler system. Where a change in occupancy classification occurs or where there is a change in use or occupancy with within a space where there is a different a fire protection system threshold requirement in Chapter 9 of the *International Building Code* that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the *International Building Code*, such system shall be provided throughout the area where the *change of occupancy* occurs.

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

Commenter's Reason: In response to committee concerns the language has been clarified to address use changes within a space and to clarify that the trigger is a different threshold for the installation of a fire protection system. The language addresses the trigger, the base requirements for what actions to take remain unchanged in the existing IEBC language.

Below are two examples where the fire protection threshold triggers would be different than the simple listing of different activities found in Chapter 3 which is covered by the current language. In the case of an F-1, a woodworking operation in an existing space may change by increasing the area it is operated in and because the use of the space or occupancy classification did not change, the need for the added fire protection would not be triggered. By adding the new language to the IEBC as suggested, these thresholds will get captured.

[F] 903.2.4 Group F-1.

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

1. A Group F-1 fire area exceeds 12,000 square feet (1115 m²).
2. A Group F-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

[F] 903.2.4.1 Woodworking operations.

An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 2,500 square feet (232 m²) in area which generate finely divided combustible waste or use finely divided combustible materials.

A similar example would be a S-1 Group automobile repair garage where the only occupancy classification listing is:

"Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.1(1) (see Section 406.8)"

If the activity introduces commercial vehicle repair which has a lower square footage threshold than passenger automobile repair, the existing IEBC language will not capture the need for the improved fire protection. The suggested new language will.

[F] 903.2.9 Group S-1.

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

1. A Group S-1 fire area exceeds 12,000 square feet (1115 m²).
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. A Group S-1 fire area used for the storage of commercial trucks or buses where the fire area exceeds 5,000 square feet (464 m²).
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

[F] 903.2.9.1 Repair garages.

An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 10,000 square feet (929 m²).
2. Buildings no more than one story above grade plane, with a fire area containing a repair garage exceeding 12,000 square feet (1115 m²).
3. Buildings with repair garages servicing vehicles parked in basements.
4. A Group S-1 fire area used for the repair of commercial trucks or buses where the fire area exceeds 5,000 square feet (464 m²).

[F] 903.2.9.2 Bulk storage of tires.

Buildings and structures where the area for the storage of tires exceeds 20,000 cubic feet (566 m³) shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Overall, this is not a major increase in requirements, the majority of the IBC/IFC Chapter 9 thresholds would be captured with occupancy classification changes. This suggested language plugs a small hole in the application of fire protection requirements.

EB53-13

Final Action: AS AM AMPC ____ D

EB57-13
1012.2.1.1 (NEW)

Proposed Change as Submitted

Proponent: Charles S. Bajnai, Chesterfield County, VA, ICC Building Code Action Committee

Add new text as follows:

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

1012.2.1.1 Fire sprinkler system Group A occupancy. Where the new occupancy classification requiring an automatic sprinkler system is Group A-1, A-2, A-3 or A-4, an automatic sprinkler system shall be provided throughout the area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and throughout all floors from the Group A occupancy to, and including, the nearest level of exit discharge serving the Group A occupancy.

Reason: This proposal is submitted by the ICC Building Code Action Committee (BCAC) The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 6 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: <http://www.iccsafe.org/cs/BCAC/Pages/default.aspx>.

In almost all cases where Chapter 9 of the IBC specifies the need for a fire suppression system it is due to the inherent fire hazard of the use itself, thus justifying the protection only within the changed area. The exception to that rule is in the Assembly Groups. The trigger for the Assembly Groups A-1, A-2, A-3 and A-4 is the occupant load and it is clear from the expanded requirements found in IBC Section 903.2.1, the protection is to also include the intervening spaces and floors so their egress path is not compromised by a fire located in those areas. We feel that the IEBC should also reflect that intent by adding this new subsection.

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

1012.2.1.1 (NEW)-EB-BAJNAI-BCAC.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The proposal was approved as Group A occupancies can have a potential of many occupants who are typically unfamiliar with the building. This clarifies that the sprinklers be located not only within the Group A occupancy but also protect all portions of the building below to the nearest level of exit discharge to protect occupants during evacuation. This proposal is consistent with the IBC. This addresses situations such as a Group A occupancy being added to a roof.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Steve Orlowski, National Association of Home Builders (NAHB) and Tim Ryan, International Association of Building Officials (IABO), request Disapproval.

Commenter's Reason: We disagree with the committee's action to now require the installation of a suppression system in all areas and levels between the new assembly occupancy and the level of discharge in existing buildings. The existing building code has always taken into consideration that there are a large number of existing buildings that do not meet the current building code requirements and that to bring these buildings into compliance would be cost prohibitive and would ultimately leave many of these buildings that could be rehabilitated to be left unused, vacant and become unusable and not properly maintained. For existing buildings that are occupied, to require all levels between the new assembly and the level of discharge to be equipped with a fire suppression system, not only would be a huge financial burden on the building owner, it would require displacing tenants and business from areas that would be unaffected by a change in occupancy somewhere in the building that is outside the work area. Under the current requirements of the IEBC, the assembly is already required to be sprinklered and the means of egress must be separate from the remainder of the building, which provides protection for the occupants evacuating the structure without compromising the minimum standard for life safety and fire prevention in existing buildings.

EB57-13

Final Action:

AS

AM

AMPC ____

D

EB59-13
1012.5.1

Proposed Change as Submitted

Proponent: Gene Boecker, Code Consultants, Inc., representing self

Revise as follows:

1012.5.1 Height and area for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category as shown in Table 1012.5, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the *International Building Code* for the new occupancy classification.

Exceptions:

1. In other than Groups H, F-1 and S-1, in lieu of fire walls, use of fire barriers having a fire-resistance rating of not less than that specified in Table 706.4 of the *International Building Code*, constructed in accordance with Section 707 of the *International Building Code*, shall be permitted to meet area limitations required for the new occupancy in buildings protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code*.
2. Regardless of height, for high-rise buildings, the type of construction reduction specified in Section 403.2.1 of the *International Building Code* is permitted. This shall include the reduction for columns. The high rise building is required to be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Building Code*.

Reason: When the International Building Code changed to disallow the reduction of ratings on columns for high-rise buildings, it created a problem for existing buildings which had previously used the allowed reduction. This provision in the IEBC does not recognize those previously complying buildings. To meet the requirements as currently written, any change in occupancy from an office to a retail area would require a complete upgrade in the fire-resistance rating for all the columns in the entire building. This is excessive for small changes in occupancy and often impractical.

The revised language makes it clear that if the building is protected throughout with an automatic fire sprinkler system, designed to meet NFPA 13 (not 13R), then the column ratings can be what was allowed prior to the code change to the IBC. Additions will need to meet the requirements for new construction, but a change in occupancy of this type should not require the entire building to fall into non-compliance when it was fully compliant when it was built as little as five years ago.

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

1012.5.1-EB-BOECKER.doc

Committee Action Hearing Results

Committee Action:

Approved as Submitted

Committee Reason: The proposal was felt to be a reasonable approach that would not require high rise buildings to upgrade their construction type due to more restrictive requirements in Section 403. These restrictions have only been in the IBC in more recent code editions. A building could only use this exception where it is equipped throughout with an automatic sprinkler system.

Assembly Action:

None

Individual Consideration Agenda

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

Public Comment:

Jonathan Siu, City of Seattle Department of Planning & Development, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

1012.5.1 Height and area for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category as shown in Table 1012.5, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the *International Building Code* for the new occupancy classification.

Exceptions:

1. In other than Groups H, F-1 and S-1, in lieu of fire walls, use of fire barriers having a fire-resistance rating of not less than that specified in Table 706.4 of the *International Building Code*, constructed in accordance with Section 707 of the *International Building Code*, shall be permitted to meet area limitations required for the new occupancy in buildings protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code*.
2. ~~Regardless of height, for~~ For high-rise buildings constructed in compliance with a previously-issued permit, the type of construction reduction specified in Section 403.2.1 of the *International Building Code* is permitted. This shall include the reduction for columns. The high rise building is required to be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Building Code*.

Commenter's Reason: While we agree with the intent of the code change, there are two issues in this proposed code change that when considered in conjunction with each other may lead to unintended consequences for new high rise buildings, unless addressed as we have proposed in this Public Comment. The first issue is related to the phrase, "Regardless of height," which appears to be intended to address the "super high-rise" buildings greater than 420 feet in height. The second issue is related to the definition of "existing building" in the IEBC.

For new construction, the IBC limits the reduction of type of construction to buildings not greater than 420 feet in height (IBC Section 403.2.1.1, Item 1). In his reason statement, the proponent discusses the problem created "for existing buildings which had previously used the allowed reduction." It is clear he is addressing buildings which have already been constructed, and we agree with that perspective—it would be impractical to add fireproofing in an existing super high-rise building. The difficulty with the proposal arises due to the definition of "existing building" in the IEBC:

"EXISTING BUILDING. A building erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued." [emphasis added]

With this definition, a designer can get a permit issued to build a new super high-rise building, then come back later and apply for a change of occupancy and reduce the fire protection, without having actually built the building. This is not an entirely hypothetical situation. In Seattle, we issued building permits for a 600-plus foot tall office building several years ago. In the recent economic downturn, the owner mothballed the project. Within the last year, the owner applied for revisions to the original permit, to change the upper portion of the building to hotel. This would clearly be a change of occupancy classification to a higher hazard category in IEBC Table 1012.5 (Relative Hazard category 4 for B occupancies, 2 for R-1 occupancies). Yet, even though no construction has started, if the proposed change were in place, the architect could reduce the fire protection on the columns.

We believe the focus, as implied in the reason statement, ought to be on buildings that have already been constructed and were in compliance with a previous edition of the code, but are now non-conforming because the current code is different. To keep this focus, we have proposed to:

1. Delete the phrase "regardless of height." This phrase is unnecessary, as what remains will apply to all high-rise buildings.
2. Limit the application of the proposed exception to buildings that have been actually been built in accordance with a previous building permit, and therefore, presumably constructed in compliance with the applicable codes in effect at the time of construction.

We believe these changes will keep the focus on existing non-conforming buildings, and address the issue of the combination of the super high-rise provisions and the IEBC definition as discussed above.

As a note, this proposed code change would not change how projects that include changes to existing fire-resistance protection are regulated, since those projects would be subject to the provisions in the IEBC dealing with alterations.

EB59-13

Final Action: AS AM AMPC ____ D

EB63-13

602.1.1 (New), 702.1.1 (New), 1202.2.1 (New), Chapter 16

Proposed Change as Submitted

Proponent: Rebecca Morley, National Center for Healthy Housing

Add new text as follows:

SECTION 602 BUILDING ELEMENTS AND MATERIALS

602.1 Existing building materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *code official* to render the building or structure unsafe or *dangerous* as defined in Chapter 2.

602.1.1 Disturbance of existing painted surfaces. In any Group E, I-4, R-2, R-3, R-4 occupancies completed prior to 1978, where repairs disturb painted surfaces, the work shall comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations.

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a)(1) or (2) that proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

SECTION 702 BUILDING ELEMENTS AND MATERIALS

702.1 Interior finishes. All newly installed interior wall and ceiling finishes shall comply with Chapter 8 of the *International Building Code*.

702.1.1 Disturbance of existing painted surfaces. In any Group E, I-4, R-2, R-3, R-4 occupancies completed prior to 1978, where alterations disturb painted surfaces, the work shall comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations.

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a)(1) or (2) that proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

SECTION 1202 REPAIRS

1202.1 General. Repairs to any portion of an *historic building* or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

1202.2.1 Disturbance of existing painted surfaces. In any Group E, I-4, R-2, R-3, R-4 occupancies, where repairs disturb painted surfaces, the work shall comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations.

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a)(1) or (2) that proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

Add the following standard to Chapter 16:

EPA U.S. Environmental Protection Agency

40 CFR 745 - July 1, 2012 Lead-Based Paint Poisoning Prevention in Certain Residential Structures

Reason: The purpose of this proposed code language is to incorporate protection from lead-based paint into the Code's requirements. These requirements are already law in every state through the Environmental Protection Agency's Renovation Repair and Painting Rule, which governs work with paint that may contain lead-based paint in order to prevent childhood lead poisoning. These regulations have been in effect since April 2010, and have been adopted by 12 states.

Renovation of painted surfaces 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.

Multiple studies have demonstrated that lead dust is the major source of lead poisoning for young children. There is no safe level of lead exposure for children; lead affects intelligence even at very low levels.^{1,2,5,8,9} Indeed, the rate of IQ loss per 1 microgram of lead per deciliter of blood ($\mu\text{g}/\text{dL}$) is greatest at lead levels below 10 $\mu\text{g}/\text{dL}$. As a child's BLL increases from 1 to 10 $\mu\text{g}/\text{dL}$, experts estimate a child may lose anywhere from 3.9 to 7.4 IQ points, but from 10 to 30 $\mu\text{g}/\text{dL}$ the decrement is 2.5 to 3.0 IQ points. Low-level chronic exposure may have an even greater effect on IQ than a single instance of very high BLL.¹⁰

Research indicates that a five-point negative shift in IQ at the population level would increase the number of children with an "extremely low" IQ by 57%, substantially increasing the cost of special education programs.³ Considering the costs to the special education system alone, one study conservatively estimated that it costs \$38,000 over three years to educate a child with lead poisoning.¹¹ Low-level exposure to lead has also been linked to factors other than IQ that can further impact educational outcomes. EBLs are associated with Attention Deficit Hyperactivity Disorder (ADHD) and antisocial behavior, which in turn increase the likelihood of conduct disorder, criminal activity, and drug abuse.¹⁴ Each 1 $\mu\text{g}/\text{dL}$ reduction in the average preschool blood lead level saves \$13.4 billion from the direct and indirect costs of crime.¹

Several recent studies have explored the specific effects of lead on educational outcomes. These studies show a strong relationship between slightly elevated blood lead levels in young children and decreased scores on end-of-grade tests in elementary school. While similar educational effects were documented for higher blood levels decades ago,¹² the recent studies confirm that the connection between blood lead and poor educational outcomes remains true for blood levels as low as 3-4 $\mu\text{g}/\text{dL}$. A more recent study of 57,000 North Carolina children found that children with a BLL as low as 4 $\mu\text{g}/\text{dL}$ at three years of age were significantly more likely to be classified as learning-disabled than children with a BLL of 1 $\mu\text{g}/\text{dL}$.⁶

The consequences of lead exposure are clear. This code change proposal seeks to reduce the risk.

The additions to Sections 602, 702, and 1202 add health-protective requirements to protect children from lead poisoning by preventing the dispersal of lead before, during, and after work performed on a pre-1978 home. The information distribution, certification, and lead safe practices requirements are already in effect in federal and state regulation.

This change would only affect structures likely to contain lead-based paint: pre-1978 homes. As noted under the exception, the requirement is waived if paint testing proves that the paint is not lead-based paint. A rebuttable presumption of lead's presence allows the builder to demonstrate that lead is not present and obtain exemption from the requirements. EPA-approved tests include lead-based paint inspection or risk assessment, test kit used by a certified renovator, and collection of a lead-based paint chips for laboratory analysis.

The EPA 40 CFR 745 standard is available at <http://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol32/xml/CFR-2012-title40-vol32-part745.xml>.

References

1. Gould E. Childhood lead poisoning: conservative estimates of the social and economic benefits of lead hazard control. *Environ. Health Perspect.* 2009;117(7):1162–1167.
2. Jusko TA, Henderson CR, Lanphear BP, Cory-Slechta DA, Parsons PJ, Canfield RL. Blood lead concentrations. *Environ. Health Perspect.* 2008;116(2):243–248.
3. Mazumdar M, Bellinger DC, Gregas M, Abanilla K, Bacic J, Needleman HL. Low-level environmental lead exposure in childhood and adult intellectual function: a follow-up study. *Environ Health.* 2011;10:24.
4. Chandramouli K, Steer CD, Ellis M, Emond AM. Effects of early childhood lead exposure on academic performance and behaviour of school age children. *Arch. Dis. Child.* 2009;94(11):844–848.
5. Miranda ML, Kim D, Galeano MA, Paul CJ, Hull AP, Morgan SP. The relationship between early childhood blood lead levels and performance on end-of-grade tests. *Environ. Health Perspect.* 2007;115(8):1242–1247.
6. Miranda ML, Maxson P, Kim D. Early childhood lead exposure and exceptionality designations for students. *Int J Child Health Hum Dev.* 2010;3(1):77–84.
7. Advisory Committee on Childhood Lead Poisoning Prevention. *Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention.* 2012:1–68. Available at: http://www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf. Accessed March 6, 2012.
8. Lanphear BP, Hornung R, Khoury J, et al. Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. *Environ. Health Perspect.* 2005;113(7):894–899.
9. Canfield RL, Henderson CR, Cory-Slechta DA, Cox C, Jusko TA, Lanphear BP. Intellectual impairment in children with blood lead concentrations below 10 microg per deciliter. *N. Engl. J. Med.* 2003;348(16):1517–1526. 16.
10. Lanphear BP, Dietrich K, Auinger P, Cox C. Cognitive deficits associated with blood lead concentrations. *Public Health Rep.* 2000;115(6):521–529. 17.
11. Korfmacher KS. Long-term costs of lead poisoning: How much can New York save by stopping lead? Rochester, NY: University of Rochester; 2003.
12. Needleman HL, Leviton A, Bellinger D. Lead-associated intellectual deficit. *N Engl J Med.* 1982; 306(6):367.

Cost Impact: This code change proposal will not increase the cost of additions, alterations or repairs since these federal/state requirements are already in effect.

Staff analysis: A review of the standard proposed for inclusion in the code, 40 CFR 745 -July 1, 2012 with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 1, 2013.

1510.1 (NEW)-EB-MORLEY.doc

Committee Action Hearing Results

For staff analysis of the content of EPA 40 CFR 745-July 1, 2012 relative to CP#28, Section 3.6, please visit:
<http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/Proposed-B/ProposedStandards.pdf>

Committee Action:

Disapproved

Committee Reason: This proposal was disapproved based upon the previous action taken on ADM37-13 by the IEBC Committee.

Assembly Action

None

Individual Consideration Agenda

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

Public Comment:

Jane Malone, National Center for Healthy Housing, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

SECTION 602 BUILDING ELEMENTS AND MATERIALS

602.1 Existing building materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *code official* to render the building or structure unsafe or *dangerous* as defined in Chapter 2.

602.1.1 Disturbance of existing painted surfaces. In any Group E ~~day care, Group I-4 child day care, R-2, R-3, R-4~~ occupancies completed prior to 1978, where repairs disturb painted surfaces, the work shall ~~comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations, leave behind no visible dust, debris or residue.~~

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a) ~~(1) or (2) that proves~~ that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

SECTION 702 BUILDING ELEMENTS AND MATERIALS

702.1 Interior finishes. All newly installed interior wall and ceiling finishes shall comply with Chapter 8 of the *International Building Code*.

702.1.1 Disturbance of existing painted surfaces. In any Group E ~~day care, Group I-4 child day care, R-2, R-3, R-4~~ occupancies completed prior to 1978, where alterations disturb painted surfaces, the work shall ~~comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations, leave behind no visible dust, debris or residue.~~

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a) ~~(1) or (2) that proves~~ that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

SECTION 1202 REPAIRS

1202.1 General. Repairs to any portion of an *historic building* or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

1202.2.1 Disturbance of existing painted surfaces. In any Group E day care, Group I-4 child day care, R-2, R-3, R-4 occupancies completed prior to 1978, where repairs disturb painted surfaces, the work shall ~~comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations~~ leave behind no visible dust, debris or residue.

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a) ~~(1) or (2)~~ that proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

Add the following standard to Chapter 16:

EPA U.S. Environmental Protection Agency

40 CFR 745 - July 1, 2012 Lead-Based Paint Poisoning Prevention in Certain Residential Structures

Commenter's Reason: Based on the Committee decision, we have reduced this code change from a requirement for full compliance with the federal regulation to the essential but simple performance standard that will protect the occupant's and worker's children from exposure to harmful lead. It is consistent with the federal regulation in that clean-up is required at the end of renovation work. This requirement can be enforced by the code official with a visual inspection: no testing or special information is needed.

We have also clarified the Group I and E occupancies.

The exemption applies if the project meets one of these standards at 40 CFR 745.82(a):

- (1) a written determination has been made by a certified inspector or risk assessor that the components affected by the renovation are free of paint or other surface coatings that contain lead;
- (2) a certified renovator, using an EPA recognized test kit, has tested each component affected by the renovation and determined that the components are free of paint or other surface coatings that contain lead;
- (3) a certified renovator has collected a paint chip sample from each painted component affected by the renovation and a laboratory recognized by EPA has determined that the samples are free of paint or other surface coatings that contain lead.

EB63-13

Final Action: AS AM AMPC_____ D
