BUILDING CODE ACTION COMMITTEE MEETING EXISTING BUILDINGS WORK GROUP

APRIL 11-12, 2019 MEETING

GROUP B 2019

BCAC Code Change Proposals and Related Proposals

- Exiting Building (E)
- Related (X)

Existing Building committee – List of proposals

Note: The table is in numeric order, however, the proposals are grouped by topic/item number.

Com	Code change	Sections	Topic	Item Number
X	EB1-19	IEBC 202	Reconfiguration definition	IEBC 6-1
x	EB3-19	IEBC 202	Work area definition	IEBC 6-1
E	EB9-19	IEBC: 301.3	Administration	IEBC 3-1
E	EB10-19	IEBC: 301.1.1 (New), 401.1.1 (New), 501.1, 1401.1.1 (New)	Bleacher standard	IEBC 5-1
E	EB14-19	IEBC: SECTION 303 (New), 303.1 (New), 502.8, 1106.1, 1106.1.1, 1106.1.2, 1301.2.3.1	Storm shelter standard	IEBC 11-1
X	EB17-19	**IEBC®: CHAPTER 3, SECTION 301, 301.1, SECTION 302, 302.1, SECTION 503, 503.1**	Chapter 3	IEBC 6-3
X	EB24-19	IEBC®: 305.4, 305.4.1	Accessibility and change of occupancy	IEBC 3-4
E	EB25-19	IEBC®: 305.4 (New), 305.4.1 (New), 305.4.2 (New)	Accessibility and change of occupancy	IEBC 3-4
X	EB26-19	IEBC®: 305.4, 305.6, 305.8.8	Accessibility and change of occupancy	IEBC 3-4
X	EB27-19	IEBC®: 305.4.2	Accessibility and change of occupancy – exception	IEBC 3-4
E	EB41-19	IEBC: 401.1.1 (New), 401.1.2 (New)	Repair vs. reconstruction	IEBC 4-1
E	EB52-19	IEBC: 502.7, SECTION 1105, 1105.1, 503.15, 804.1	Carbon dioxide detectors in Group E	IEBC 5-3
E	EB62-19	IEBC®: 503.17 (New), 704.2 (New)	Locking in Group E	IEBC 5-2
X	EB70-19	**IEBC®: 603.1E**	reconfiguration	IEBC 6-1
E	EB71-19	IEBC: [A] 105.2, 603.1, 704.2 (New), 801.3 (New)	reconfiguration	IEBC 6-1
E	EB72-19	IEBC®: SECTION 608, 608.1, 608.2	Relocated building	IEBC 6-3
E	EB95-19	IEBC: SECTION 908 (New), 908.1 (New), 1010.2 (New)	EMERGENCY RESPONDER RADIO COVERAGE	IEBC 9-1
E	EB102-19	IEBC: 1011.1, 1011.1.1, 1011.1.1.1, 1011.1.1.2, 1011.1.2, 1011.1.3, 1011.2.1	Adding sprinklers in parts of buildings	IEBC 10-1
E	EB103-19	IEBC®: 1011.2.1.1 (New), 1011.2.1.1.1 (New)	Adding sprinklers in parts of buildings	IEBC 10-1
E	EB104-19	IEBC®: 1011.7.2 (New), 1011.7.4 (New)	Stairway enclosure	IEBC 10-4
x	EB105-19	IEBC®: 1012 (New), 1012.1 (New), 1012.1.1 (New)	Storm shelters	IEBC 11-1

Com	Code change	Sections	Topic	Item Number
E	EB106-19	IEBC: 1104.1, 1105.1	Smoke alarms. Carbon monoxide alarms	IEBC 5-3
E	EB107-19	IEBC: 1106.1.1, 110.1.3 (New)	Storm shelters	IEBC 11-1
x	EB108-19	IEBC®: SECTION 1106, 1106.1, 1106.1.1	Storm shelters	IEBC 11-1
x	EB109-19	IEBC®: 1106.1.2	Storm shelters	IEBC 11-1
E	EB110-19	IEBC®: 1201.3 (New)	Historic buildings	IEBC 12-1
E	EB111-19	IEBC®: 1203.3 (New)	Historic buildings	IEBC 12-2
X	EB114-19	IEBC®: 1301.2	Scoping in Performance compliance method	IEBC 13-5
E	EB115-19	IEBC®: 1301.1 (New)	Scoping in Performance compliance method	IEBC 13-5
X	EB116-19	IEBC®: 1301.2, 1301.2.6 (New)	Scoping in Performance compliance method	IEBC 13-5
X	EB117-19	IEBC®: 1301.2.2	Scoping in Performance compliance method	IEBC 13-5
x	EB118-19	IEBC®: 1301.3	Scoping in Performance compliance method	IEBC 13-5
E	EB119-19	IEBC: 1301.6.2, 1301.6.2.2	Area formula	IEBC 13-3
X	EB120-19	IEBC®: 1301.6.3 (New), TABLE 1301.6.3 (New), 1301.6.3.1, 1301.6.3.1 (New), 1301.6.3.2 (New)	Compartmentation	IEBC 13-4
E	EB121-19	IEBC: TABLE 1301.6.3	Compartmentation	IEBC 13-4
x	EB122-19	IEBC®: TABLE 1301.6.3	Compartmentation	IEBC 13-4
X	EB123-19	IEBC®: TABLE 1301.6.3	Compartmentation	IEBC 13-4
E	EB129-19	IEBC®: 1301.6.16.1 (New)	Mixed occupancies	IEBC 13-2
x	S53-19	IBC®: TABLE 1607.1	bleachers	IEBC 5-1
x	S58-19	IBC: TABLE 1607.1, 1607.16 (New), 1607.16.1 (New)	bleachers	IEBC 5-1

Note: Other changes related to accessibility are EB5, EB8, EB20-EB23, E28-EB37

EB102-19

IEBC: 1011.1, 1011.1.1, 1011.1.1.1, 1011.1.1.2, 1011.1.2, 1011.1.3, 1011.2.1

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

2018 International Existing Building Code

Revise as follows:

SECTION 1011
CHANGE OF OCCUPANCY CLASSIFICATION

1011.1 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 of occupancy* within a space where there is a different fire protection system threshold requirement in Chapter 9 of the International Building Code. Such buildings shall also comply with Sections 1002 through 1010 of this ~~code. The application of requirements for the *change of occupancy*shall be as set forth in Sections 1011.1.1 through 1011.1.4. A*change of occupancy*~~ , ~~as defined in Section 202, without a corresponding change of occupancy classification shall comply with Section 1001.2.~~ code.

Delete without substitution:

~~**1011.1.1 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 1011.1.1.1 and 1011.1.1.2.~~

~~**1011.1.1.1 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 of occupancy* within a space where there is a different 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 of this code applied throughout the building for the most restrictive occupancy classification in the building and with the requirements of this chapter.~~

~~**1011.1.1.2 Change of occupancy classification with separation.** Where a portion of an *existing building* is changed to a new occupancy classification or where there is a *change of occupancy* within a space where there is a different 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 of this code for the new occupancy classification and with the requirements of this chapter.~~

~~**1011.1.2 Fire protection and interior finish.** The provisions of Sections 1011.2 and 1011.3 for fire protection and interior finish, respectively, shall apply to all buildings undergoing a change of occupancy classification.~~

~~**1011.1.3 Change of occupancy classification based on hazard category.** The relative degree of hazard between different occupancy classifications shall be determined in accordance with the categories specified in Tables 1011.4, 1011.5 and 1011.6. Such a determination shall be the basis for the application of Sections 1011.4 through 1011.7.~~

Revise as follows:

1011.2 Fire protection systems. Fire protection systems shall be provided in accordance with Sections 1011.2.1 and 1011.2.2.

1011.2.1 Fire sprinkler system. Where a change in occupancy classification occurs or where there is a *change of occupancy* within a space where there is a different 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~~ The installation of the automatic sprinkler system shall be ~~provided throughout the area where the *change of occupancy* occurs.~~ required within the area of the change of occupancy and areas of the building not separated horizontally and vertically from the change of occupancy by one of the following:

1. Non rated permanent partition
2. Fire Partition
3. Smoke Partition
4. Smoke Barrier
5. Fire Barrier
6. Fire wall

Exceptions:

1. An automatic sprinkler system shall not be required in a one or two family dwelling constructed in accordance with the IRC.
2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the IRC.

3. The townhouse shall be separated from adjoining units in accordance with Section R302.2 of the International Residential Code.

1011.2.2 Fire alarm and detection system. Where a change in occupancy classification occurs or where there is a *change of occupancy* within a space where there is a different 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 in accordance with Section 907 of the International Building Code as required for new construction.

Reason: The point of the revisions to 1011.2.1 is to allow for existing buildings that wish to add a sprinkler system to do so in such a manner that the partial sprinkler system will be within walls so that it will activate appropriately. So, regardless of a work area, the sprinkler system is within a space confined by walls that will allow for the heat to activate the sprinkler system. The end result, while not confined to separated occupancies or fire areas, should get existing buildings sprinklered over time. This would be required even if the area was of a lesser hazard, unlike some of the breaks offered in Sections 1011.4 through 1011.6.
The current language could be read to require the entire fire area or building to be sprinklered, even where only a single tenant is undergoing a change of occupancy. In looking to make the general reference to Chapter 9 in Section 1011.1.1, 1011.1.1.1 and 1011.1.1.2 consistent with the allowances in 1022.2 through 1011.2.2, it seemed more appropriate to delete the language since this will be specifically addressed.

The exceptions to Section 1011.2.1 was for consistency with the allowances for existing building in the IRC. Note that townhouses would be required to be separated.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This would allow sprinkler systems to be added in a building over time rather than throughout where a COO occurs.

EB103-19

IEBC®: 1011.2.1.1 (New), 1011.2.1.1.1 (New)

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

2018 International Existing Building Code

Add new text as follows:

1011.2.1.1 Nonrequired automatic sprinkler systems. The code official is authorized to permit the removal of existing automatic sprinkler system where all of the following conditions exist:

1. The system is not required for new construction.
2. The system is removed in its entirety throughout the building.
3. The system was not installed as part of 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.

1011.2.1.1.1 Approval. Plans, investigation and evaluation reports, and other data shall be submitted documenting compliance with Items 1 and 2 of Section 1011.2.1.1 for review and approval in support of a determination authorizing the removal of the automatic sprinkler system by the code official.

Reason: A change of occupancy could be to an occupancy that did not require a sprinkler system. If the system was old, outdated or needed extensive reconfiguration, costs could be high. The new Section 1011.2.1.1 allows for non required systems to be removed. To be removed the designer/building owner would have to demonstrate to the code official that the building did not need the sprinklers for occupancy, fire areas or type of construction limitations, and that none of the trade off's for items such as travel distance or corridor rating were in effect in the building. The system would have to be removed totally – including the system in the ceiling, standpipes and the connections for the fire department outside of the building.

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Cost Impact: There will be the cost of removal, but this may be less than the cost of repairing or replacing an older system.

EB71-19

IEBC: [A] 105.2, 603.1, 704.2 (New), 801.3 (New)

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

2018 International Existing Building Code

Revise as follows:

[A] 105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. Sidewalks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below and that are not part of an accessible route.
2. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.
3. Temporary motion picture, television, and theater stage sets and scenery.
4. Shade cloth structures constructed for nursery or agricultural purposes, and not including service systems.
5. Window awnings supported by an exterior wall of Group R-3 or Group U occupancies.
6. ~~Movable~~ Non-fixed and moveable cases, counters, and partitions not over ~~69~~ 5 feet and 9 inches inches (1753 mm) in height.

Electrical:

1. **Repairs and maintenance:** Minor *repair* work, including the replacement of lamps or the connection of *approved* portable electrical equipment to *approved* permanently installed receptacles.
2. **Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for power supply, the installations of towers, and antennas.
3. **Temporary testing systems:** A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot, or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste, or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste, or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work, and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves, or fixtures, and the removal and reinstallation of water closets, provided that such *repairs* do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.

603.1 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.

Exception: The movement or addition of non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753mm) in height shall not be considered a Level 2 alteration.

SECTION 704

MEANS OF EGRESS

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

Add new text as follows:

704.2 Casework. Addition, alteration or reconfiguration of non-fixed and movable cases, counters, and partitions not over 5 feet 9 inches (1753 mm) in height shall maintain the required means of egress path.

801.3 System installations. Requirements related to work area are not applicable where the Level 2 alteration alterations are limited solely to one or more of the following:

1. Mechanical systems, electrical systems, fire protection systems and abatement of hazardous materials.
2. Windows, hardware, operating controls, electrical outlets and signs.
3. Alterations undertaken for the primary purpose of increasing the accessibility of a facility.

Reason: There are many issues of confusion in determining what is considered a “work area.” The definition of "work area" specifically states “reconfiguration of space.” It should address when the floor plan (egress etc.) changes not when a sprinkler system is installed in a building. Also what is included in reconfiguration – furniture/cubicles? Part of the confusion with this issue is that there seems to be a need to establish a **work area** where in some cases none exist. It can still be a level 2 alteration but with no work area associated with it. This does not mean that there are no regulations just that it will not necessarily make some provisions applicable such as those related to egress or move it into a Level 3 alteration situation.
Level 2, as defined in Chapter 6, includes extension of any system. The intent of this proposal is to not throw a project into Level 2 if there is only the movement of casework. The new language in Section 603.1 is to clarify that the movement of casework is not considered reconfiguration of a space and thus moving furniture will not be considered a Level 2 alteration. The addition to Section 704.2 is due to a concern that the movement of casework should not violate allowances for means of egress. Since these elements are exempt from permits (but not code requirements), the change to Section 105.2 is just for consistent terminology.

Section 801.3: If an alteration does not change the physical configuration of a space or is to improve accessibility, this should also not throw a building owner into an additional series of requirements. This allows for building owners to improve their buildings over time.

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Cost Impact: This would allow improvements that did not change the configuration of the space to not trigger Level 2 or 3 requirements.

EB119

IEBC®: 202 (New)

Proponent: Felix I. Zemel, ICC Region 6 -- North East Regional Coalition, representing ICC Region 6 -- North East Regional Coalition (felix@pracademicsolutions.com); Peter Zvingilas, ICC Region 6- North East Regional Coalition, Town of Groton and Voluntown CT, representing ICC Region 6- North East Regional Coalition (pzvingilas@voluntown.gov)

2018 International Existing Building Code

Add new definition as follows:

SPACE, RECONFIGURED An alteration that results in a change to any component of the means of egress or the path of egress travel and does not meet the scope of Alteration--Level 1 in Section 602.1.

Reason: Code officials and RDPs often debate whether a proposed project is either an Alteration--Level 1 Alteration--Level 2. From experience, this determination frequently hinges upon a determination whether the proposed work is a "reconfiguration of space," but this term is not defined in the IEBC. The MA Board of Building Regulations and Standards' Existing Building Advisory Technical Advisory Committee has been working on an interpretation of the definition of "work area" for many years, as a result. After many years of debate, they have conceptually agreed that the determination of reconfiguration of space is related to changes in either the path of egress travel or any of the egress component(s): exit access, exit, or exit discharge.
Without the addition of the last preposition of the definition, code officials may erroneously misclassify "removal and replacmeent or covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose" (scope of Alteration--Level 1 from Section 602.1) as an Alteration--Level 2 or Alteration--Level 3; thus requiring a more extensive scope of work and increasing the potential cost of construction.

Addition of this definition can potentially reduce the number of appeals of code officials' interpretations; thus improving efficiency in the permitting process.

Cost Impact: Due to the extended guidance to code officials, addition of this definition can only decrease the cost of construction. This is because it further clarifies when an alteration project should be classified as an Alteration--Level 1 or one of the other two alteration levels.

EB3-19

IEBC®: 202

Proponent: Allison Cook, Arlington County, VA, representing VBCOA; Kenney Payne, Moseley Architects, representing AIA Virginia (kpayne@moseleyarchitects.com); Ronald Clements Jr, representing Chesterfield County (clementsro@chesterfield.gov); Shaina Abney (shaina.abney@fairfaxcounty.gov); Bob Orr, representing VBCOA (borr@culpepercounty.gov); Charles Vernon, representing VBCOA (cvernon@arlingtonva.us); Michael Williams, representing Virginia Building and Code Officials Association (VBCOA) (mike.williams@harrisonburgva.gov); Debra McMahon (debra.mcmahon@fairfaxcounty.gov); David Collins, The American Institute of Architects, representing The American Institute of Architects (dcollins@preview-group.com); Christina Jackson, City of Norfolk, representing City of Norfolk / WICED of VA (christina.reynolds@norfolk.gov)

2018 International Existing Building Code

Revise as follows:

WORK AREA. That ~~portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.~~ intended room, space, or portion of a building or structure where a wall or walls are added, relocated, or removed. Work area excludes the following:

1. The addition or elimination of any door or window.
2. The reconfiguration or extension of any system
3. The installation of any additional equipment
4. the removal of finished flooring or ceiling materials
5. adjacent rooms or other rooms, spaces, or portions of the building or structure where incidental work entailed by the intended work must be performed
6. portions of the building or structure where work not initially intended is specifically required by this code.

Reason: The current definition of work area is too vague and creates the potential for significantly different interpretations of what constitutes a work area. In Virginia, we have experienced inconsistency between jurisdictions and adopted this definition to address that issue. The proposed change provides more details on what is and is not part of a work area. This should help both building officials and design professionals.

Cost Impact: This proposal is only to add clarification, it should not impact cost.

EB70-19

IEBC®: 603.1

Proponent: Allison Cook, representing VBCOA; David Collins, representing The American Institute of Architects (dcollins@preview-group.com); Debra McMahon (debra.mcmahon@fairfaxcounty.gov); Kenney Payne, Moseley Architects, representing AIA Virginia (kpayne@moseleyarchitects.com); Ronald Clements Jr, representing Chesterfield County (clementsro@chesterfield.gov); Shaina Abney, representing VBCOA (shaina.abney@fairfaxcounty.gov); Bob Orr, Culpeper County, representing VBCOA (borr@culpepercounty.gov); Charles Vernon, representing VBCOA (cvernon@arlingtonva.us); Michael Williams, representing Virginia Building and Code Officials Association (VBCOA) (mike.williams@harrisonburgva.gov); Christina Jackson, representing City of Norfolk / WICED of VA (christina.reynolds@norfolk.gov)

2018 International Existing Building Code

Revise as follows:

603.1 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.~~ equipment; and shall apply where the work area is equal to or less than 50 percent of the building area.

Reason: The use of "work area", which is a defined term, instead of "reconfigured spaces" provides clarification and consistency by using defined terms. The addition of “50% or less” is to align with the scope of a level 3, which applies when the work area that exceeds 50%

Cost Impact: This proposal is only to clarify the language.

EB10-19

IEBC: 301.1.1 (New), 401.1.1 (New), 501.1, 1401.1.1 (New)

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

2018 International Existing Building Code

Revise as follows:

3 PROVISIONS FOR ALL COMPLIANCE METHODS

SECTION 301
ADMINISTRATION

301.1 General. The *repair*, *alteration*, *change of occupancy*, *addition* or relocation of all *existing buildings* shall comply with Section 301.2, 301.3, or 301.4.

Add new text as follows:

301.1.1 Bleachers, grandstands and folding and telescopic seating. Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.

Revise as follows:

4 REPAIRS

SECTION 401
GENERAL

401.1 Scope. *Repairs* shall comply with the requirements of this chapter. *Repairs* to *historic buildings* need only comply with Chapter 12.

Add new text as follows:

401.1.1 Bleachers, grandstands and folding an telescopic seating. Repairs to existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.

Revise as follows:

5 PRESCRIPTIVE COMPLIANCE METHOD

SECTION 501
GENERAL

501.1 Scope. The provisions of this chapter shall control the *alteration, addition* and *change of occupancy* of *existing buildings* and structures, including *historic buildings* and structures as referenced in Section 301.3.2.

~~**Exception:**Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.~~

14 RELOCATED OR MOVED BUILDINGS

SECTION 1401
GENERAL

1401.1 Scope. This chapter provides requirements for relocated or moved structures, including *relocatable buildings* as defined in Chapter 2.

Add new text as follows:

1401.1.1 Bleachers, grandstands and folding an telescopic seating. Relocated or moved bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.

Reason: The bleacher safety standard includes provisions for new construction as well as maintenance, repair, alterations and relocation of bleachers. The current reference for alterations is only in the prescriptive method. It should be applicable for all methods, thus the addition to Chapter 3. In addition, this is a requirement, not an exception – currently Section 501.1 has this as an exception.
ICC 300 includes provisions for repairs and moved bleachers. Therefore, a reference should be added into the chapter for repairs (Chapter 4) and relocated buildings(Chapter 14). These chapters are not covered by Chapter 3.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: As the proposed change is only affecting the location of the pointer for greater clarity, there is no cost impact to the proposed change.

S53-19

IBC®: TABLE 1607.1

Proponent: Jennifer Goupil, American Society of Civil Engineers (ASCE), representing American Society of Civil Engineers (ASCE) (jgoupil@asce.org)

2018 International Building Code

Revise as follows:

TABLE 1607.1
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, L0, AND MINIMUM CONCENTRATED LIVE LOADS[g]

Portions of table not shown remain unchanged.

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (pounds)
4. Assembly areas		
Fixed seats (fastened to floor)	60[m]	
Follow spot, projections and control rooms	50	
Lobbies	100[m]	
Movable seats	100[m]	
Stage floors	150[n]	—
Platforms (assembly)	100[m]	
Reviewing stands, grandstands and bleachers	100[c,m]	
Stadiums and arenas with fixed seats (fastened to the floor)	60[c,m]	
Other assembly areas	100[m]	
24. Recreational uses:		
Bowling alleys, poolrooms and similar uses	75[m]	
Dance halls and ballrooms	100[m]	
Gymnasiums	100[m]	
Ice skating rink	250[n]	—
~~Reviewing stands, grandstands and bleachers~~	~~100[c, m]~~	
Roller skating rink	100[m]	
~~Stadiums and arenas with fixed seats (fastened to floor)~~	~~60[c, m]~~	

c. Design in accordance with ICC 300.

m. Live load reduction is not permitted.

Reason: This proposal contains two changes which align Items 4 and 24 of Table 1607.1 in the IBC with the corresponding table in the referenced design load standard, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures* (ASCE 7). The changes do not change the magnitude of the live loads nor the footnote references.

Both of the items are moved from Item 24 to Item 4 as they more closely align with the functions contained in Item 4. Reviewing stands/bleachers are similar to Movable seats and Stadiums/arenas with fixed seats are similar to Fixed seats (fastened to floors).

Cost Impact: This proposal contains editorial changes and clarifications.

S58-19

BC: TABLE 1607.1, 1607.16 (New), 1607.16.1 (New)

Proponent: Jennifer Goupil, American Society of Civil Engineers (ASCE), representing American Society of Civil Engineers (ASCE) (jgoupil@asce.org)

2018 International Building Code

Revise as follows:

TABLE 1607.1
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, *L0*, AND MINIMUM CONCENTRATED LIVE LOADS[g]

Portions of table not shown remain unchanged.

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (pounds)
24. Recreational uses:		
Bowling alleys, poolrooms and similar uses	75[m]	
Dance halls and ballrooms	100[m]	
Gymnasiums	100[m]	
Ice skating rink	250[n]	—
~~Reviewing stands,~~ Bleachers, folding and telescopic seating and grandstands ~~and bleachers~~	100[~~c.~~ m] (see Section 1607.16)	
Roller skating rink	100[m]	
Stadiums and arenas with fixed seats (fastened to floor)	60[~~c.~~ m] (see Section 1607.16)	

~~c.Design in accordance with ICC 300~~.

Add new text as follows:

1607.16 Seating for assembly uses. Bleachers, folding and telescopic seating and grandstands shall be designed for the loads specified in ICC 300. Stadiums and arenas with fixed seats shall be designed for the horizontal sway loads in Section 1607.16.1.

1607.16.1 Horizontal sway loads. The design of stadiums and arenas with fixed seats shall include horizontal swaying forces applied to each row of seats as follows:

1. 24 lb per linear foot (0.35 kN/m) of seat applied in a direction parallel to each row of seats, and
2. 10 lb per linear foot (0.15 kN/m) of seat applied in a direction perpendicular to each row of seats.

The parallel and perpendicular horizontal swaying forces are not required to be applied simultaneously.

Reason: This proposal is one of several that are intended to coordinate the live load table in the IBC with the live load table in the referenced design load standard, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures* (ASCE 7). The live load table in ASCE 7 no longer has footnotes. The footnotes were removed to make the table more user friendly. The information in the footnotes was moved to new or existing sections in the live load chapter of ASCE 7.
This proposal addresses Footnote C by doing the following:

A) Moving Footnote C to a new section within the live load section of the IBC.

B) Removing the reference to ICC 300 for stadiums with fixed seats, but maintaining the requirement to design fixed seats for horizontal sway forces.

C) Revising the terms used for 'bleachers' in Table 1607.1 to match the terms used in ICC 300.

A. Footnote C is moved to a new section at the end of the live load section. Footnotes, which are in smaller font than the rest of the table, are not well-suited to contain large amounts of text or to provide technical content. In addition the footnote superscript letter within the table is even smaller and easy to miss. Moving the technical content to its own section makes the table more user friendly.

B. The scope of ICC 300 does not include fixed seats, therefore it is necessary to revise Footnote C. The proposed revision creates two parts. The first part, sentence one in 1607.16, maintains the reference to ICC 300 for 'bleachers'. The second part, sentence two in 1607.16, requires stadiums

and arenas with fixed seats to be designed for horizontal sway forces (which are the same as the ICC 300 sway forces). These forces are considered fundamental to the design of stadiums and arenas and should be required by the IBC.

C. The terminology used in Table 1607.1 is revised from "Reviewing stands, grandstands and bleachers" to "Bleachers, folding and telescopic seating, and grandstands" in order match the terms used in ICC 300. This is considered to be an editorial change as all of these terms refer to systems that are free-standing, i.e. they are not fixed to the building. However, when referring to a standard, it is preferable for the terms used in the IBC to be consistent with the terms used in the standard. The term "reviewing stand" is not used in ICC 300. If unchanged, the IBC could be interpreted as adding to, or over-riding, the scope of ICC 300, which is not the intent here.

It is noted that the existing IBC text, "Reviewing stands, grandstands and bleachers", matches the current ASCE 7 text. However the changing the text to "Bleachers, folding and telescopic seating, and grandstands" is necessary for the reasons stated above. The Dead & Live Load Committee of ASCE 7 will be reviewing this terminology and monitoring the outcome of this proposal with the intent of keeping the IBC and ASCE 7 coordinated.

This proposal stands on its own merit, but also coordinates with another ASCE 7 sponsored proposal that adds a new column to Table 1607.1 with the title "See Also Section". If that proposal is approved, ICC staff has indicated that the reference to new Section 1607.16 will be placed in that new column editorially.

Cost Impact: This proposal contains editorial changes and clarifications. If the design engineer is accounting for horizontal sway loads correctly already, it will not impact the cost of construction.

EB9-19

IEBC: 301.3

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

2018 International Existing Building Code

Revise as follows:

SECTION 301
ADMINISTRATION

301.1 General. The *repair*, *alteration*, *change of occupancy*, *addition* or relocation of all *existing buildings* shall comply with Section 301.2, 301.3, or 301.4.

301.2 Repairs. *Repairs* shall comply with the requirements of Chapter 4.

301.3 Alteration, addition or change of occupancy. The *alteration*, *addition* or *change of occupancy* of all *existing buildings* shall comply with one of the methods listed in Section 301.3.1, 301.3.2 or 301.3.3 as selected by the applicant. Sections 301.3.1 through 301.3.3 shall not be applied in combination with each other.

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. New structural members added as part of the *alteration* shall comply with the International Building Code. This exception shall not apply to ~~alterations that constitute~~ the following:

1. Alterations that constitute accessibility improvements, which shall comply with Section 305.
2. Alterations that constitute substantial improvement in flood hazard areas, which shall comply with Section 503.2, 701.3 or 1301.3.3.
2. ~~This exception shall not apply to the structural~~ Structural provisions of Section 303, Chapter 5 or to the structural provisions of Sections 706, 806 and 906~~.~~

Reason: Essentially besides from some structural and flood issues the code official could allow complete exemption from this code. The largest concern is the accessibility pieces which we address in this code because of the ADA will affect them in either case. Without this link we are potentially causing legal issues for many building owners by not requiring compliance with the accessibility provisions of the IEBC for alterations. The change to the structural provisions is a correlation piece since part of the structural provisions was relocated to Section 303 in the 2018 IEBC.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This is already required by the American's with Disabilities Act. It was always the intent of the requirements to apply to existing buildings so that accessibility is improved over time.

EB25-19

IEBC®: 305.4 (New), 305.4.1 (New), 305.4.2 (New)

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

2018 International Existing Building Code

Revise as follows:

305.4 Change of occupancy. *Existing buildings* that undergo a change of group or occupancy shall comply with this ~~section.~~ Sections 305.6, 305.7 and 305.8.

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 *alterations* where the *work area* is 50 percent or less of the aggregate area of the building.

Delete without substitution:

~~**305.4.1 Partial change of occupancy.** Where a portion of the building is changed to a new occupancy classification, any *alterations* shall comply with Sections 305.6, 305.7 and 305.8.~~

~~**305.4.2 Complete change of occupancy.** Where an entire building undergoes a *change of occupancy*, it shall comply with Section 305.4.1 and shall have all of the following accessible features:~~

1. ~~Not fewer than one accessible building entrance.~~
2. ~~Not fewer than one accessible route from an accessible building entrance to *primary function* areas.~~
3. ~~Signage complying with Section 1111 of the International Building Code.~~
4. ~~Accessible parking, where parking is being provided.~~
5. ~~Not fewer than one accessible passenger loading zone, where loading zones are provided.~~
6. ~~Not fewer than one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.~~

~~Where it is *technically infeasible* to comply with the new construction standards for any of these requirements for a change of group or occupancy, Items 1 through 6 shall conform to the requirements to the maximum extent technically feasible.~~

~~**Exception:** The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.~~

Reason: There are several arguments to simplify this section.
What this does administratively is take a change of occupancy and make it consistent with requirements for an alteration. This allows flexibility for small properties.

- The federal requirements in the 2010 ADA Standard do not address a change of occupancy – they treat all alterations the same. There is no justification for ICC to require a business in stand alone building to provide additional requirements past what is expected for a business in a multi-tenant building.
- The list in Section 305.4.2 basically lists all the elements in accessible routes, which is addressed in Section 305.7, but does not include bathrooms and drinking fountains. Therefore, it is unclear as to if renovations to those items are required in a complete change of occupancy, where they would be on the list for an alteration and a partial change of occupancy. This list does not add any clarification of improvements to the code.
- This could also be read that a complete change of occupancy would never have to fix the toilet rooms or drinking fountains since it is not in the list. If the alterations are small, allowing someone to spend money to fix the toilet rooms is addressed the needs of many individuals with mobility issue.
- If the part of the route missing is an elevator or extensive front ramp, the cost could make the existing building remain vacant since this section could be viewed as not tied to the 20% maximum cost allowance.
- The arguments against revising this section in past code cycles have all been around the issue of a change of occupancy with no alterations. Many building departments are not involved in changes of occupancy that do not include alterations. Even in jurisdictions that look at this, they do not require alterations for occupancies with lesser hazards. How much should you ask someone to spend if there are no construction costs? If it is a higher hazard, there will mostly likely be alterations – so just use those requirements.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: Requiring the six route requirements in Section 305.4.2 for small buildings that undergo a change of occupancy can be a large cost. It is more appropriate to limit the cost of the route to 20% of the alteration - which this change will allow. In large buildings, this change will have minimal impact since they are more likely to already have the accessible route - or the cost will be a much smaller portion of their budget.

EB24-19

IEBC®: 305.4, 305.4.1

Proponent: Gina Hilberry, Scoping Task Group of ICC/A117.1 Standard Development Committee, representing United Cerebral Palsy (gina@cohenhilberry.com); Rick Lupton, representing Self (sparkylupton@msn.com); Marsha Mazz, representing United Spinal Association (m.mazz@verizon.net); Gene Boecker, representing Code Consultants, Inc.(geneb@codeconsultants.com)

2018 International Existing Building Code

Revise as follows:

305.4 Change of occupancy. *Existing buildings* that undergo a change of group or occupancy shall comply with ~~this section.~~ Sections 305.4.1 or 305.4.2, as applicable .

> **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 *alterations* where the *work area* is 50 percent or less of the aggregate area of the building.

305.4.1 Partial change of occupancy. Where a portion of the building is changed to a new occupancy classification, any *alterations* shall comply with Sections 305.3, 305.6, 305.7 and 305.8.

Reason: The proposal is intended as editorial revisions making the code application clearer to all users.
First - In 305.4 changing 'this section' to specific references to the 2 subsections clarifies what is being required.

Second – In Section 305.4.1, we have added Section 305.3 to those for which compliance is required. Section 305.3 addresses limits to alterations which must be considered for all alterations. We have a companion proposal which splits the requirements of Section 305.3 into two sections; it would be our intent that this proposed reference addition in 305.4.1 also reference both sections.

The reference within Section 305.4.2 takes the user back to Section 305.4.1, therefore the added reference is also picked up for complete changes of occupancy.

Cost Impact: The changes are editorial. They help users get to the correct sections and to not miss key requirements.

EB26-19

IEBC®: 305.4, 305.6, 305.8.8

Proponent: Dawn Anderson, representing self (gonedawning@yahoo.com); Gene Boecker, representing Code Consultants, Inc. (geneb@codeconsultants.com); Dan Buuck, representing National Association of Home Builders (dbuuck@nahb.org); David Collins, representing the American Institute of Architects (dcollins@preview-group.com); Marsha Mazz, representing United Spinal Association (m.mazz@verizon.net)

2018 International Existing Building Code

Revise as follows:

305.4 Change of occupancy. *Existing buildings* that undergo a change of group or occupancy 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 *alterations* where the *work area* is 50 percent or less of the ~~aggregate area of the~~ building area.

305.6 Alterations. A *facility* that is altered shall comply with the applicable provisions in Chapter 11 of the International Building Code, unless *technically infeasible*. Where compliance with this section is *technically infeasible*, the *alteration* shall provide access to the maximum extent technically feasible.

Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by Section 305.7.
2. Accessible means of egress required by Chapter 10 of the International Building Code are not required to be provided in existing facilities.
3. The *alteration* to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.
4. 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 *alterations* where the *work area* is 50 percent or less of the ~~aggregate area of the~~ building area.

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

Reason: When the provisions were combined last cycle, the language specific to the work area method was lost. This is a clarification by using the exact verbiage that describes a Level 3 alteration in Section 604.1.

Cost Impact: This change is editorial.

EB27-19

IEBC®: 305.4.2

Proponent: Gina Hilberry, Scoping Task Group of ICC/A117.1 Standard Development Committee, representing United Cerebral Palsy (gina@cohenhilberry.com); Rick Lupton, representing Self (sparkylupton@msn.com); Marsha Mazz, representing United Spinal Association (m.mazz@verizon.net); Gene Boecker, representing Code Consultants, Inc.(geneb@codeconsultants.com)

2018 International Existing Building Code

Revise as follows:

305.4.2 Complete change of occupancy. Where an entire building undergoes a *change of occupancy*, it shall comply with Section 305.4.1 and shall have all of the following accessible features:

1. Not fewer than one accessible building entrance.
2. Not fewer than one accessible route from an accessible building entrance to *primary function* areas.
3. Signage complying with Section 1111 of the International Building Code.
4. Accessible parking, where parking is being provided.
5. Not fewer than one accessible passenger loading zone, where loading zones are provided.
6. Not fewer than one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is *technically infeasible* to comply with the new construction standards for any of these requirements for a change of group or occupancy, Items 1 through 6 shall conform to the requirements to the maximum extent technically feasible.

~~**Exception:** The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.~~

Reason: There is no compelling reason to exempt buildings undergoing a complete change of occupancy to a Group R-2 apartment building for providing these 6 listed provisions. It must be first noted that Section 305.4 already exempts buildings where the work area is less than 50%.
305.4 Change of occupancy. *Existing buildings* that undergo a change of group or occupancy 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 *alterations* where the *work area* is 50 percent or less of the aggregate area of the building.

Where the action is a complete change of occupancy – such as an old warehouse to new condominiums, why should there not be an accessible entrance; accessible routes to the new units, signage where appropriate; parking and loading zones where provided and routes to such parking and loading? In all likelihood, these features will be added or altered. Please note that this only applies where there is a change of occupancy for the entire space. This does not impose improvements to the path of travel under Section 305.7 for remodeling areas of primary function. There remains an exception for R-2 uses in Section 305.7.

.

Cost Impact: The deletion of the exception may cause on increase in cost of some changes of occupancy to a Group R-2 building. We think it would be unlikely that a complete change of occupancy to residential where Type B (and likely Type A) units would be provided would not provide an accessible route to those units, nor have an accessible entrance to the building. The cost increase may result in reconfiguring existing parking to provide accessible spaces and providing a route to parking and loading locations.

EB41-19

IEBC: 401.1.1 (New), 401.1.2 (New)

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

2018 International Existing Building Code

Revise as follows:

SECTION 401
GENERAL

401.1 Scope. *Repairs* shall comply with the requirements of this chapter. *Repairs* to *historic buildings* need only comply with Chapter 12.

Add new text as follows:

401.1.1 Partial reconstruction. Where damage from fire, earthquake, storm or a similar event has rendered one or more stories of a building, structure or portion thereof as unsafe, reconstruction of such areas shall meet the requirements for a Level 2 or 3 alteration, as applicable.

401.1.2 Complete reconstruction. Where damage from fire, earthquake, storm or similar event has demolished the building structure, or a portion of a building or structure from the foundation to the roof, reconstruction of such areas shall be in accordance with the International Building Code.

Reason: There is a question as to when damage from a fire or other disaster destroying all or a good chunk of a building. Do you have to go back to IBC or can you build back the way it was? This concept is to try and separate repair from new construction requirements at a logical point. Note that this also helps people get the true value for reconstruction as the insurance industry may sometimes classify a new building (or a replacement of the large portion or an entire story) as a repair and funding is limited.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This is intended as a clarification of requirements.

EB72-19

IEBC®: SECTION 608 (New), 608.1 (New), 608.2 (New)

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

2018 International Existing Building Code

Delete without substitution:

~~**SECTION 608**~~
~~**RELOCATED BUILDINGS**~~

~~**608.1 Scope.** Relocated building provisions shall apply to relocated or moved buildings.~~

~~**608.2 Application.** Relocated buildings shall comply with the provisions of Chapter 14.~~

Reason: Section 301.4 already denotes that outside the three methods that relocated buildings are addressed by Chapter 14.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: Editorial change.

EB17-19

IEBC®: CHAPTER 3, SECTION 301, 301.1, SECTION 302, 302.1, SECTION 503, 503.1

Proponent: Gina Hilberry, Scoping Task Group of ICC/A117.1 Standard Development Committee, representing United Cerebral Palsy (gina@cohenhilberry.com); Rick Lupton, representing Self (sparkylupton@msn.com); Marsha Mazz, representing United Spinal Association (m.mazz@verizon.net); Gene Boecker, representing Code Consultants, Inc.(geneb@codeconsultants.com)

2018 International Existing Building Code

CHAPTER 3 PROVISIONS FOR ALL COMPLIANCE METHODS

Revise as follows:

SECTION 301
~~ADMINISTRATION~~ SCOPE

301.1 ~~General.~~ Applicability The *repair*, *alteration*, *change of occupancy*, *addition* or relocation of all *existing buildings* shall comply with Section 301.2, 301.3, or 301.4. The provisions of Sections 302 through 305 shall apply to all alterations, repairs, additions, relocation of structures and changes of occupancy regardless of compliance method.

SECTION 302
GENERAL PROVISIONS

Delete without substitution:

~~**302.1 Applicability.** The provisions of Section 302 apply to all *alterations*, *repairs*, *additions*, relocations of structures and *changes of occupancy* regardless of compliance method.~~

SECTION 503
ALTERATIONS

Revise as follows:

503.1 General. ~~Except as provided by Section 302.4, 302.5 or this section,*alterations*~~ Alterations to any building or structure shall comply with the requirements of the International Building Code for new construction. *Alterations* shall be such that the *existing building* or structure is not less complying with the provisions of the International Building Code than the *existing building* or structure was prior to the *alteration*.

Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the International Building Code where the existing space and construction does not allow a reduction in pitch or slope.
2. Handrails otherwise required to comply with Section 1011.11 of the International Building Code shall not be required to comply with the requirements of Section 1014.6 of the International Building Code regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.
3. Where provided in below-grade transportation stations, existing and new escalators shall have a clear width of less than 32 inches (815 mm).

Reason: An intent of the IEBC changes creating the 2018 edition was to make the provisions of Chapter 3 applicable to all existing building work regardless of the compliance method chosen. Our group's concern was that the route a code user must follow to get to requirements of Section 305 was unclear. Section 305 contains provisions which are 'exceptions' from compliance with the IBC and the ICC A117.1 standard; thus the text of 503.1 is incomplete because it doesn't like you to exceptions in Section 305. Section 305 is similar to 302.4 and 302.5 in that something less than full compliance with IBC is allowed. We noticed that the other compliance methods had no link within them to Chapter 3.
The real problem, and the solution, is in the beginning of Chapter 3 where it fails to clearly state its purpose except in the title to the chapter. Titles are not code. It is essential that Section 301.1 state that Chapter 3 applies to all compliance methods as the title states.

We further noticed that 302.1 had such language covering Section 302 – but the rest of the chapter has no such statement. This proposal fixes it. Once stated in Section 301.1, it isn't needed in 302. Once stated in 301, exceptions aren't needed in 503 or in any of the other compliance methods. We also recommend the title of 301 be changed to either Scope or Applicability. Administration is something for Chapter 1 and not appropriate here.

Cost Impact: The change provides an editorial correction to make sure the user understands that Section 305 also allows construction of alterations to a different and lesser technical requirement. And to make sure that the text of the Chapter is corrected to reflect the title – provisions for All Compliance Methods.

EB95-19

IEBC: SECTION 908 (New), 908.1 (New), 1010.2 (New)

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

2018 International Existing Building Code

Add new text as follows:

SECTION 908
EMERGENCY RESPONDER RADIO COVERAGE

908.1 Emergency responder radio coverage in existing buildings. Where existing buildings do not have an approved emergency responder radio coverage in the building based on existing coverage levels of the public safety communication systems, an approved emergency responder radio coverage system shall be installed within the building in compliance with Section 510 of the International Fire Code.

SECTION 1010
OTHER REQUIREMENTS

1010.1 Light and ventilation. Light and ventilation shall comply with the requirements of the International Building Code for the new occupancy.

Add new text as follows:

1010.2 Emergency responder radio coverage in existing buildings. Where an existing building undergoes a complete change of occupancy, and the building does not have an approved emergency responder radio coverage based on existing coverage levels of the public safety communication systems, an approved emergency responder radio coverage system shall be installed within the building in compliance with Section 510 of the International Fire Code. The system shall be installed within the time frame established by the code official.

Reason: For jurisdictions that do not adopt the Chapter 11 (retroactive) requirements of the IFC for Emergency Responder Radio Coverage, this proposal would add triggers to the IEBC that would require all existing buildings that undergo a Level 3 alteration or Change of Occupancy to have approved radio coverage. Providing these two triggers for Emergency Responder Radio Coverage provides a reasonable opportunity to install equipment and systems that ensure the safety of emergency responders that depend on reliable communication for their safety. We are not asking for this in a building undergoing a partial change of occupancy with a Level 1 or 2 alteration because that could be only one tenant in a very large multi-tenant building. IFC Section 510 includes all the requirements for the design and installation. Allowing for a time frame for installation in a COO is consistent with IFC Section 1103.2.
This proposal will correlate consistency between the IFC and the IEBC as it relates to the requirements for emergency responder radio coverage in existing buildings.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: For the safety of emergency responders, a system may need to be added in some of the larger buildings.

EB104-19

IEBC®: 1011.7.2 (New), 1011.7.4 (New)

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

2018 International Existing Building Code

Revise as follows:

1011.7.2 Stairways. Where a change of occupancy classificiation is made to a higher-hazard category as shown in Table 1011.4, interior stairways shall be enclosed as required by the International Building Code .

Exceptions:

1. In other than Group I occupancies, an enclosure shall not be required for openings serving only one adjacent floor and that are not connected with corridors or stairways serving other floors.
2. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by 1-hour fire-resistance-rated construction or *approved* wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and the occupant space shall have not fewer than one sprinkler head above the openings on the tenant side. The sprinkler system shall be permitted to be supplied from the domestic water-supply systems, provided that the system is of adequate pressure, capacity, and sizing for the combined domestic and sprinkler requirements.
3. ~~Existing penetrations of stairway enclosures shall be accepted if they are protected in accordance with the International Building Code~~
   Stairways enclosed in compliance with the applicable provisions of Section 903.1. .

1011.7.4 Openings. Openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire protection rating of not less than 1 hour and shall be maintained self-closing or shall be automatic-closing by actuation of a smoke detector. Other openings shall be fire protected in an *approved* manner. Existing fusible linktype automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135°F (57°C).

Exception: Existing penetrations of stairway enclosures shall be accepted if they are protected in accordance with the International Building Code.

Reason: This is an editorial correction. Without this exception, the means of egress allowance to use the provisions of Section 903.1 (and 802.2) would not be applicable in change of occupancy classification with alterations projects. This will make the requirements consistent and provide a pointer to 903.1. The exception related to openings (1011.7.2 Exception 3) is moved to Section 1011.7.4 since that deals with openings into exiting vertical shafts.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The proposal is an editorial correction and may reduce potential costs by providing design options.

EB110-19

IEBC®: 1201.3 (New)

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

2018 International Existing Building Code

Revise as follows:

1201.3 Special occupancy exceptions—museums. Where a building in Group R-3 is used for Group A, B or M purposes such as museum tours, exhibits, and other public assembly activities, or for museums less than 3,000 square feet (279 m^2), the *code official* ~~may~~ is authorized to determine that the occupancy is Group B where life safety conditions can be demonstrated in accordance with Section 1201.2. Adequate means of egress in such buildings, which ~~may include~~ includes, but are not limited to a means of maintaining doors in an open position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.

Reason: This addresses non mandatory language.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: Editorial.

EB111-19

IEBC®: 1203.3 (New)

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

2018 International Existing Building Code

Revise as follows:

1203.3 Means of egress. ~~Existing door openings and corridor and stairway widths less than those specified elsewhere in this code may be *approved*, provided that,~~ Where, in the opinion of the code official, there is sufficient width and height for a person to pass through the opening or traverse the means of ~~egress.~~ egress, existing door openings and corridor and stairway widths not required to meet the widths required by the International Building Code or this code. Where *approved* by the *code official*, the front or main exit doors need not swing in the direction of the path of exit travel, provided that other *approved* means of egress having sufficient capacity to serve the total occupant load are provided.

Reason: This addresses non mandatory language and also addresses the fact that this is likely intending to refer also to the IBC.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This is editorial.

EB129-19

IEBC®: 1301.6.16.1 (New)

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

2018 International Existing Building Code

Revise as follows:

1301.6.16.1 Categories. The categories for mixed occupancies are:

1. Category a-Occupancies separated by minimum 1-hour fire barriers or minimum 1-hour horizontal assemblies, or both.
2. Category b-Separations between occupancies in accordance with Section 508.4 of the International Building Code.
3. Category c-– Separations between occupancies having a fire-resistance rating of not less than twice the 1-hour, 2-hour, 3-hour or 4-hour fire-resistance ratings that are specified in Table 508.4 where ~~that~~ required by Section 508.4 of the International Building Code.

Reason: The original intent was to provide a benefit where a wall provided double the hourly rating required for some type of separation. The rewording is simply to not allow for a project to get points for a wall with a zero rating.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This is a rating system and design alternative, not a requirement.

EB119-19

IEBC: 1301.6.2, 1301.6.2.2

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

2018 International Existing Building Code

Revise as follows:

1301.6.2 Building area. The value for building area shall be determined by the formula in Section 1301.6.2.2. Section 506 of the International Building Code and the formula in Section 1301.6.2.1 shall be used to determine the allowable area of the building.
~~Subtract the actual building area from the allowable area and divide by 1,200 square feet (112 m²).~~Enter the area value and its sign (positive or negative) in Table 1301.7 under Safety Parameter 1301.6.2, Building Area, for fire safety, means of egress and general safety. In determining the area value, the maximum permitted positive value for area is 50 percent of the fire safety score as listed in Table 1301.8, Mandatory Safety Scores. Group I-2 occupancies shall be scored zero.

1301.6.2.1 Allowable area formula. The following formula shall be used in computing allowable area:

$$A_a = A_t + (NS \times I_f) \quad \textbf{(Equation 13-3)}$$

where:

A_a = Allowable building area per story (square feet).

A_t = Tabular allowable area factor (NS, S1, S13R, or SM value, as applicable) in accordance with Table 506.2 of the International Building Code.

NS = Tabular allowable area factor in accordance with Table 506.2 of the International Building Code for a nonsprinklered building (regardless of whether the building is sprinklered).

I_f = Area factor increase due to frontage as calculated in accordance with Section 506.3 of the International Building Code.

1301.6.2.2 Area formula. The following ~~formula~~ formulas shall be used in computing the area value. ~~Determine~~ Equation 13-4 shall be used for a single occupancy buildings and Equation 13-5 shall be used for multiple occupancy buildings.Determine the area value for each occupancy floor area on a floor-by-floor basis. For ~~each~~ multiple occupancy ~~, choose~~ buildings the minimum area value of the set of values obtained for the particular ~~occupancy.~~

~~$$\text{Area value}_i = \frac{\text{Allowable area}_i}{1200 \text{ square feet}}\left[1 - \left(\frac{\text{Actual area}_i}{\text{Allowable area}_i} + \ldots + \frac{\text{Actual area}_n}{\text{Allowable area}_n}\right)\right]$$~~

~~(~~
occupancy shall be used as the area value for that occupancy.

For single occupancy buildings:

Area value$_i$ = (Allowable area-Actual area)/1200 square feet (Equation 13-4)

For multiple occupancy buildings:

$$\text{Area value}_i = \frac{\text{Allowable area}_i}{1200 \text{ square feet}}\left[1 - \left(\frac{\text{Actual area}_i}{\text{Allowable area}_i} + \ldots + \frac{\text{Actual area}_n}{\text{Allowable area}_n}\right)\right]$$

(Equation 13-5)
where:

i = Value for an individual separated occupancy on a floor.

n = Number of separated occupancies on a floor.

Reason: This section as written is confusing and does not differentiate well between single occupancy buildings and multiple occupancy buildings. This proposal creates two equations to address this.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members

of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This proposed code change is clarification of existing code language and neither adds to or decreases cost of construction.

EB121-19

IEBC: TABLE 1301.6.3

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

2018 International Existing Building Code

1301.6.3 Compartmentation. Evaluate the compartments created by fire barriers or horizontal assemblies which comply with Sections 1301.6.3.1 and 1301.6.3.2 and which are exclusive of the wall elements considered under Sections 1301.6.4 and 1301.6.5. Conforming compartments shall be figured as the net area and do not include shafts, chases, stairways, walls, or columns. Using Table 1301.6.3, determine the appropriate compartmentation value (CV) and enter that value into Table 1301.7 under Safety Parameter 1301.6.3, Compartmentation, for fire safety, means of egress, and general safety.

Revise as follows:

TABLE 1301.6.3
COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES[a]				
	a Compartment size equalto or greater than 15,000square feet	**b** Compartment size of10,000 square feet	**c** Compartment size of7,500 square feet	**d** Compartment sizeof 5,000 square feet	**e** Compartment sizeof 2,500 square feetor less
A-1, A-3	0	6	10	14	18
A-2	0	4	10	14	18
A-4, B, E, S-2	0	5	10	15	20
F, M, R, S-1	0	4	10	16	22

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

a. For areas between categories, the determination of the compartmentation value obtained by linear interpolation shall be permitted.

Reason: This table when placed in the IEBC never carried over the footnote a that was found in the same table in the IBC Chapter 34. This question arises and this appears within the intent to allow interpolation.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This proposed change is a coordination item between the IEBC and the IBC and neither adds to or decreases cost of construction.

EB120-19

IEBC®: 1301.6.3 (New), TABLE 1301.6.3 (New), 1301.6.3.1, 1301.6.3.1 (New), 1301.6.3.2 (New)

Proponent: Kevin Scott, representing KH Scott & Associates LLC (khscottassoc@gmail.com)

2018 International Existing Building Code

Revise as follows:

1301.6.3 Compartmentation. Evaluate the compartments created by fire barriers or horizontal assemblies which comply with Sections ~~1301.6.3.1 and~~ 1301.6.3.2 and 1301.6.3.3 and which are exclusive of the wall elements considered under Sections 1301.6.4 and 1301.6.5. Conforming compartments shall be figured as the net area and do not include shafts, chases, stairways, walls, or columns. Using Table 1301.6.3, determine the appropriate compartmentation value (CV) and enter that value into Table 1301.7 under Safety Parameter 1301.6.3, Compartmentation, for fire safety, means of egress, and general safety.

TABLE 1301.6.3
COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES[a]				
	a ~~Compartment size equalto or greater than 15,000square feet~~	b ~~Compartment size of10,000 square feet~~	c ~~Compartment size of7,500 square feet~~	d ~~Compartment sizeof 5,000 square feet~~	e ~~Compartment sizeof 2,500 square feetor less~~
A-1, A-3	0	6	10	14	18
A-2	0	4	10	14	18
A-4, B, E, S-2	0	5	10	15	20
F, M, R, S-1	0	4	10	16	22

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

a. For compartment sizes between categories, the compartmentation value shall be obtained by linear interpolation.

Add new text as follows:

1301.6.3.1 Categories. The categories for compartment separations are:

1. Category a-compartment size of 15,000 square feet or more.
2. Category b-maximum compartment size of 10,000 square feet.
3. Category c-maximum compartment size of 7,500 square feet.
4. Category d-maximum compartment size of 5,000 square feet.
5. Category e-maximum compartment size of 2,500 square feet.

Revise as follows:

~~1301.6.3.1~~ 1301.6.3.2 Wall construction. A wall used to create separate compartments shall be a fire barrier conforming to Section 707 of the International Building Code with a fire-resistance rating of not less than 2 hours. Where the building is not divided into more than one compartment, the compartment size shall be taken as the total floor area on all floors. Where there is more than one compartment within a story, each compartmented area on such story shall be provided with a horizontal exit conforming to Section 1026 of the International Building Code. The fire door serving as the horizontal exit between compartments shall be so installed, fitted, and gasketed that such fire door will provide a substantial barrier to the passage of smoke.

~~1301.6.3.2~~ 1301.6.3.3 Floor/ceiling construction. A floor/ceiling assembly used to create compartments shall conform to Section 711 of the International Building Code and shall have a fire-resistance rating of not less than 2 hours.

Reason: This proposal is designed to correct an inconsistency in Table 1301.6.3. Currently, there is a hole in the size values for compartment size. There is no recognition of a fire compartment that is between 10,000 and 15,000 square feet.

1. Category a applies to 15,000 sq. ft. or larger

2. Category b applies to 10,000 sq. ft. or less

So what value is applied when the fire compartment is 12,000 square feet. It is not listed on the table and there is no guidance as to the value associated to this size. Obviously, it is better than 15,000 square feet, but is it the same value as 10,000 square feet.

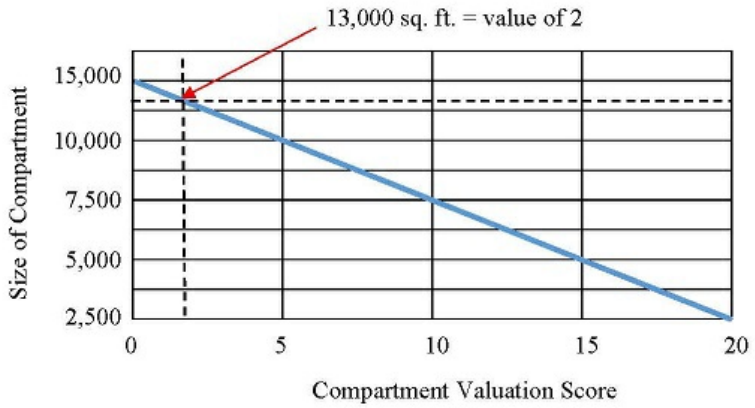
Therefore, this proposal makes two revisions:

1. Moves the criteria out of the table header

2. Corrects the gap in compartment sizes

Moving the criteria out of the table header is an editorial change. But it is consistent with the format used in all the other tables in Chapter 13. It also allows for easier application and use of the table.

The gap between 10,000 and 15,000 square feet is resolved by adding Footnote a. Footnote a allows interpolation between categories. For example, consider a Group B occupancy with the largest compartment of 13,000 square feet. It does not fit into a category, it is between Category a – 15,000 square feet or more, and Category b – 10,000 square feet or less. The score for Category a is “0” and the score for Category b is “5”. By interpolation, the Group B compartment at 13,000 square feet receives a score of “2”. See the table below.



Cost Impact: This revision allows credit for compartment size between 10,000 and 15,000 square feet where no credit was giving previously.

Proposal # 1486

EB122-19

IEBC®: TABLE 1301.6.3

Proponent: Jeffrey Harper, JENSEN HUGHES, representing JENSEN HUGHES (jharper@jensenhughes.com); Sean Donohue, representing JENSEN HUGHES (sdonohue@jensenhughes.com)

2018 International Existing Building Code

Revise as follows:

TABLE 1301.6.3
COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES				
	aCompartment size equalto or greater than 15,000square feet	**bCompartment size of10,000 square feet**	**cCompartment size of7,500 square feet**	**dCompartment sizeof 5,000 square feet**	**eCompartment sizeof 2,500 square feetor less**
A-1, A-3	0	6	10	14	18
A-2	0	4	10	14	18
A-4, B, E, S-2	0	5	10	15	20
F, M, R, S-1	0	4	10	16	22
I-2	0	2	8	10	14

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

Reason: This table does not provide Group I-2 occupancies with any benefit of fire compartmentation. This should not be confused with 1301.6.20 which provides for smoke zones because 1301.6.3.1 clearly indicates the compartmentation is to be defined based on the use or presence of fire barriers having a fire rating of 2-hours or more. I-2 occupancy should be included on this table to remain consistent with the rest of the Performance Compliance Methods sections. Just as in 1301.6.20, I-2 occupancies on this table should be scored at zero for compartments that comply with 22,500 square feet. Although the code has gone to 40,000 SF compartment sizes for hospitals, this recognizes that nursing homes (I-2 Condition 1) are still at 22,500. There should not be a negative value for being larger than 22,500 SF because this is fire compartmentation, not smoke compartmentation.

Cost Impact: This code provision will not increase cost and has a high likelihood of reducing cost by providing flexibility that does not currently exist in the code.

EB123-19

IEBC®: TABLE 1301.6.3

Proponent: Kevin Duerr-Clark, NYS Department of State, representing NYS Department of State (kevin.duerr-clark@dos.ny.gov); Ronald Stark, NYS Department of State, representing NYS Department of State (ronald.stark@dos.ny.gov)

2018 International Existing Building Code

Revise as follows:

TABLE 1301.6.3
COMPARTMENTATION VALUES[a]

OCCUPANCY	CATEGORIES				
	aCompartment size equalto or greater than 15,000square feet	bCompartment size of10,000 square feet	cCompartment size of7,500 square feet	dCompartment sizeof 5,000 square feet	eCompartment sizeof 2,500 square feetor less
A-1, A-3	0	6	10	14	18
A-2	0	4	10	14	18
A-4, B, E, S-2	0	5	10	15	20
F, M, R, S-1	0	4	10	16	22

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

a. For compartment sizes between categories, values shall be obtained by linear interpolation.

Reason: The compartment sizes given in Table 1301.6.3 are neither consecutive, not all inclussive. The table does not provide guidance for compartment sizes outside of the values given. This leads some applicants to advocate for the higher value and some code officials to argue in favor of the more restrictive lower values. In some instances, the value increase is as high as 6 points, which could make a considerable difference in the Summary Sheet results of Table 1301.7.
To resolve this discrepancy and ensure uniform enforcement, Table 1301.6.3 should include a footnote similar to those found in Tables 1301.6.12 and 1301.6.16, indicating that values between categories shall be obtained by linear interpolation.

The IEBC Commentary states that *"the evaluation of the compartments contained in an existing building is a linear function allowing interpolation between the various categories. This approach allows the compartmentation value to increase or decrease consistent with the actual changes in compartment sizes."* However, the language of neither Section 1301.6.3, nor Table 1301.6.3 reflects this intent and therefore, a footnote is needed to remove the ambiguity and facilitate enforcement.

Cost Impact: This proposal is to provide clarification consistent with the IEBC Commentary and does not have a cost implication.

EB115-19

IEBC®: 1301.1 (New)

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

2018 International Existing Building Code

Revise as follows:

1301.1 Scope. The provisions of this chapter shall apply to the *alteration*, *addition* and *change of occupancy* of *existing structures*, including historic structures, as referenced in Section 301.3.3. The provisions of this chapter are intended to maintain or increase the current degree of public safety, health and general welfare in *existing buildings* while permitting, *alteration*, *addition* and *change of occupancy* without requiring full compliance with the prescriptive method of Chapter 5 or the work area method of Chapters 6 through 12, except where compliance with other provisions of this code is specifically required in this chapter.

Reason: This compliance method should not require compliance with both the prescriptive and work area methods. As currently written, because only Chapters 6 through 12 are listed, it could be construed that compliance with Chapter 5, Prescriptive Compliance Method is required. By adding the Chapter 5 reference, it clarifies the intent to absolve projects that are properly design in accordance with Chapter 13 from compliance with both the Prescriptive and Work Area methods.
This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This is merely further clarification that this method would not require further compliance with the prescriptive method, if compliance with the performance method is established.

EB114-19

IEBC®: 1301.2

Proponent: Kevin Duerr-Clark, representing NYS Department of State (kevin.duerr-clark@dos.ny.gov)

2018 International Existing Building Code

Revise as follows:

1301.2 Applicability. *Existing buildings* in which there is work involving *additions*, *alterations* or *changes of occupancy* shall be made to conform to the requirements of this chapter or the provisions of Chapters 6 through 10. The provisions of Sections 1301.2.1 through 1301.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R and S. These provisions shall apply to Group U occupancies only where such occupancies are undergoing a change of occupancy or a partial change in occupancy with separations in accordance with Section 1301.2.2. These provisions shall not apply to buildings with occupancies in Group H~~or~~ , I-1, I-3 , or I-4.

Reason: Currently, the applicability section is silent on the use of this section on Group U buildings. Although Section 1301.6 *Evaluation process,* clearly allows it for Group U buildings, the intent is the allows the use of this compliance method for changing from one Group U to another Group. Group U buildings undergoing alterations or additions with no change in occupancy cannot be evaluated using this method. The tables, charts, and point system do not accommodate this.
This proposal simply clarifies the proper use of this method for Group U buildings.

Cost Impact: This is a clarification of how the code is already used.

EB116-19

IEBC®: 1301.2, 1301.2.6 (New)

Proponent: Kevin Duerr-Clark, representing NYS Department of State (kevin.duerr-clark@dos.ny.gov); Erika Krieger, representing NYS Department of State (codeczar@optonline.net)

2018 International Existing Building Code

Revise as follows:

1301.2 Applicability. *Existing buildings* in which there is work involving *additions*, *alterations* or *changes of occupancy* shall be made to conform to the requirements of this chapter or the provisions of Chapters 6 through 10. The provisions of Sections 1301.2.1 through ~~1301.2.5~~ 1301.2.6 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R and S. These provisions shall not apply to buildings with occupancies in Group H or I-1, I-3 or I-4.

Add new text as follows:

1301.2.6 Plumbing Fixtures. Plumbing fixtures shall be provided in accordance with Section 1009 for a *Change of Occupancy* and Section 809 for *Alterations*. Plumbing fixtures for *additions* shall be in accordance with the *International Plumbing Code*.

Reason: Currently there does not appear to be a code path, within the performance compliance method, to require additional plumbing facilities or fixtures for buildings undergoing alterations, additions, and changes in occupancy, where the occupant load is increased. The performance compliance method focuses primarily on fire and life safety. Historically, applicants have argued that due to the lacking code path, they can increase the occupant load of a building and achieve compliance using the performance method, without increasing the number of plumbing fixtures or facilities to account for the increased occupant load. This new language would provide a code path to specifically require fixtures and facilities yet provides the same level of leniency as the other compliance paths available in the Existing Building Code.
.

Cost Impact: This may increase the cost of construction because today, the code path to require the additional facilities does not exist.

EB117-19

IEBC®: 1301.2.2

Proponent: Gregory Nicholls, representing American Institute of Architects (gnicholls@preview-group.com)

2018 International Existing Building Code

Revise as follows:

1301.2.2 Partial change in occupancy. Where a portion of the building is changed to a new occupancy classification and that portion is separated from the remainder of the building with fire barrier or horizontal assemblies having a fire-resistance rating as required by Table 508.4 of the International Building Code or Section R302 of the International Residential Code for the separate occupancies, or with *approved* compliance alternatives, the portion changed shall be made to conform to the provisions of this section. Only the portion separated shall be required to be evaluated for compliance.

Where a portion of the building is changed to a new occupancy classification and that portion is not separated from the remainder of the building with fire barriers or horizontal assemblies having a fire-resistance rating as required by Table 508.4 of the International Building Code or Section R302 of the International Residential Code for the separate occupancies, or with *approved* compliance alternatives, the provisions of this section which apply to each occupancy shall apply to the entire building. Where there are conflicting provisions, those requirements which secure the greater public safety shall apply to the entire building or structure.

Reason: The code text does not explain how to evaluate a separated partial change of occupancy. The current ICC code commentary is not at all consistent with how a partial change of occupancy is treated in Section 1011.1.1.2 IEBC, even though the wording is almost the same. The code text and commentary for Section 1011.1.1.2 IEBC specifically only require compliance with Chapter 9 IEBC for that portion within the fire-resistance rated separations. When using the Performance Compliance Method in Section 1301 IEBC, once again the code text only dictates that the portion changed and separated has to comply. But that leaves some confusion as to how the evaluation needs to be done, and this is apparent with the over-reaching interpretation in the IEBC commentary, which reads,

“Where a portion of the building is changed to a new occupancy classification and that portion is separated from the remainder of the building by a fire barrier that complies with the requirements for new construction, the new occupancy portion must be evaluated with the existing or proposed building design to be in full compliance with the provisions of Chapter 13. The remainder of the existing building must also be evaluated in accordance with Chapter 13. The mandatory safety scores for the new occupancy portion of the building and the existing occupancy are obtained from those listed in Table 1401.8 and are incorporated in the building’s final evaluation score (see Table 1401.7).”

The requirement stated in the commentary to evaluate the remainder of the building is in contrast to the code text, and opposite of the code text and intent for partial change of occupancy without the performance compliance method. Why should a fully separated partial change of occupancy on the first floor of a 20-story building need the other stories to comply with the mandatory safety scores when no change of occupancy or alterations are proposed? So if the existing floors above are over the allowable height in current code, then what? This interpretation, which has no support in code text, will make it unfeasible for small changes in occupancy in existing non-compliant buildings.

By adding the text shown, it is then clear that only the portion separated needs to comply and that this is the only portion that needs to be evaluated. This is also making application of the evaluation clear and consistent with Section 1301.2.2 IEBC.

Cost Impact: By clarifying the code text to meet the intent of how a partial change in occupancy is limited in scope, the cost of construction to the remainder of the building is reduced.

EB118-19

IEBC®: 1301.3

Proponent: Jeffrey Harper, JENSEN HUGHES, representing JENSEN HUGHES (jharper@jensenhughes.com); Sean Donohue, representing JENSEN HUGHES (sdonohue@jensenhughes.com)

2018 International Existing Building Code

Revise as follows:

1301.3 Acceptance. For *repairs*, *alterations*, *additions*, and *changes of occupancy* to *existing buildings* that are evaluated in accordance with this section, compliance with this section shall be accepted by the *code official*. Existing buildings without repairs, alterations, additions or a change of occupancy that are evaluated and receive a passing score in accordance with Table 1301.8 shall be deemed to comply with Chapter 11 of the International Fire Code.

Reason: Chapter 11 of the IFC provides no alternate to compliance for existing buildings in the same manner that NFPA 101A provides for existing buildings regulated by NFPA 101.
The IEBC only applies to buildings undergoing repair, alteration, change of occupancy, addition and relocation of existing buildings. However, Chapter 13 of IEBC allows the performance compliance method to be used for existing occupancies. Per 1301.2: “The provisions of Sections 1301.2 through 1301.5 shall apply to existing occupancies that will continue to be, or are proposed to be in Groups A, B, E, F, I-2, M, R and S.” Therefore, no change is needed to allow the use of this Chapter to existing buildings.

By adding an applicability section to the administrative provisions of the fire code (included in a separate Proposal), the user is given a code path to use the evaluation methods prescribed in Chapter 13 of the IEBC for existing buildings.

Therefore, the change to Section 1301.3 of the IEBC is necessary to add authority for acceptance of the performance compliance method on existing buildings wherein no work is planned. Currently this acceptance section only applies to buildings undergoing construction.

For example: An existing office building’s highest story is 55 feet above the lowest level of fire department access and has been cited for not having any standpipes. Per IFC Section 1103.6, standpipes are required. The building is fully sprinkler protected per NFPA 13 and provided with a fire alarm system throughout. All shafts are 2-hour rated and corridors are 1-hour rated. Egress capacity, travel distances and common paths all exceed that required by the IBC for new construction and elevators have been recently replaced with fully compliant Stage 2 recall capability. The fire code would require standpipes regardless of these other systems. The Performance Compliance Method permits an accepted method of evaluating all components of a building and providing a score to account for deficiencies

Cost Impact: This code provision will not increase cost and has a high likelihood of reducing cost by providing flexibility that does not currently exist in the code.

EB62-19

IEBC®: 503.17 (New), 704.2 (New)

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

2018 International Existing Building Code

Add new text as follows:

503.17 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors with locking arrangements designed to keep intruders from entering the room shall comply with Section 1010.1.4.4 of the International Building Code.

704.2 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors with locking arrangements designed to keep intruders from entering the room shall comply with Section 1010.1.4.4 of the International Building Code.

Reason: This proposal is intended to correlate with provisions found with the IBC and IFC and provide the necessary tools so that additional security can be provided for lockdowns without compromising the safety of occupants by delaying egress and rescue by first responders. Code Change proposal E48-18 was recently approved as submitted by the Means of Egress committee and revises the IBC and IFC. This proposal provides consistency on this issue within the I-Codes. Note that this concept was introduced into the IEBC as Proposal EB23-15 and was initially approved as modified but was ultimately disapproved during OGCV. This gap needs to be addressed and this will be consistent with the IFC and IBC. The following text is the approved language to the 2018 IBC and IFC that will be within the 2021 I-Codes (E48-18 AS).

2021 International Building Code and International Fire Code

1010.1.4.4 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors from classrooms, offices and other occupied rooms with locking arrangements designed to keep intruders from entering the room shall comply with all of the following conditions :

1. The door shall be capable of being unlocked from outside the room with a key or other approved means.

2. The door shall be openable from within the room in accordance with Section 1010.1.9.

3. Modifications shall not be made to listed panic hardware, fire door hardware or door closers.

4. Modifications to fire door assemblies shall be in accordance with NFPA 80.

Remote locking or unlocking of doors from an approved location shall be permitted in addition to the unlocking operation in Item 1.

2021 International Fire CodeRevise as follows

1031.2.2 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors with locking arrangements designed to keep intruders from entering the room shall comply with Section 1010.1.4.4.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This is a correlation with the requirements that will appear in the 2021 IFC.

EB52-19

IEBC: 502.7, SECTION 1105, 1105.1, 503.15, 804.1

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

2018 International Existing Building Code

Revise as follows:

SECTION 502
ADDITIONS

502.7 Carbon monoxide ~~alarms~~ detection in existing portions of a building. Where an *addition* is made to a building or structure of Group I-1, I-2, I-4 or R occupancy and in classrooms in Group E occupancies, the existing building shall be provided with carbon monoxide ~~alarms~~ detection in accordance with Section 1103.9 of the International Fire Code or Section R315 of the International Residential Code, as applicable.

~~Exceptions:~~

1. ~~Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.~~
2. ~~Installation, alteration or *repairs* of plumbing or mechanical systems, other than fuel-burning appliances.~~

11 ADDITIONS

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

1105.1 Carbon monoxide ~~alarms~~ detection in existing portions of a building. Where an *addition* is made to a building or structure of a Group I-1, I-2, I-4 or R occupancy and in classrooms of Group E occupancies, the *existing building* shall be equipped with carbon monoxide ~~alarms~~ detection in accordance with Section 1103.9 of the International Fire Code or Section R315 of the International Residential Code, as applicable.

SECTION 503
ALTERATIONS

503.15 Carbon monoxide ~~alarms.~~ detection. ~~Carbon monoxide alarms shall be provided to protect sleeping units and dwelling units~~ Any work area in Group I-1, I-2, I-4 and R occupancies , and classrooms in Group E occupancies shall be equipped with carbon monoxide detection in accordance with Section 1103.9 of the International Fire Code.

Exceptions:

1.Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.
2.Installation, alteration or *repairs* of plumbing or mechanical systems, other than fuel-burning appliances.

8 ALTERATIONS—LEVEL 2

SECTION 804
CARBON MONOXIDE DETECTION

804.1 Carbon monoxide ~~alarms.~~ detection. Any work area in Group I-1, I-2, I-4 and R occupancies , and classrooms in Group E occupancies shall be equipped with carbon monoxide ~~alarms~~ detection in accordance with Section 1103.9 of the International Fire Code.

Exceptions:

1.Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.
2.Installation, alteration or *repairs* of plumbing or mechanical systems, other than fuel-burning appliances.

Reason: Section 502.7 and 1105.1 deal with additions, and Section 503.15 and 804.1 deal with alterations.
The intent of this proposal is correlation between the IEBC and the IFC. This proposal accomplishes two things. First it correlates the occupancies in which carbon monoxide detection is required in IFC Sections 915 and 1103.9, which essentially adds classrooms in Group E occupancies. Second, it changes references from “carbon monoxide alarms” to “carbon monoxide detection”. This change in terminology will not preclude carbon monoxide alarms from being provided in applications for which they are listed, but better reflects terminology used in the IFC.

The exceptions are proposed to be deleted from the additions section of the prescriptive method rather than added additions chapter in the work area method since the exceptions are not needed for additions.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The increased cost will be for providing carbon monoxide detection when classrooms in Group E occupancies are covered by these code sections.

EB106-19

EBC: 1104.1, 1105.1

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

2018 International Existing Building Code

Revise as follows:

SECTION 1104
SMOKE ALARMS IN OCCUPANCYGROUPS R AND I-1

1104.1 Smoke alarms in existing portions of a building. Where an *addition* is made to a building or structure of a Group R or I-1 occupancy, the *existing building* shall be provided with smoke alarms as required by Section ~~1103.8~~ 907.2.10 of the International Fire Code ~~or Section R314 of the International Residential Code as applicable~~.

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

1105.1 Carbon monoxide alarms in existing portions of a building. Where an *addition* is made to a building or structure of a Group I-1, I-2, I-4 or R occupancy, the *existing building* shall be equipped with carbon monoxide alarms in accordance with Section ~~1103.9~~ 915 of the International Fire Code ~~or Section R315 of the International Residential Code, as applicable~~.

Reason: The reference to the IRC for requirements in the existing building, where there is no work (addition) occurring is incorrect and not applicable as there are no IRC requirements for an area that is not undergoing repair, alteration or addition.
The change in the IFC reference section is simply to simplify the pointer; IFC Section 1103.9 basically refers to Section 915 with the only technical difference being Exception 1 which states “Carbon monoxide alarms are permitted to be solely battery operated where the code that was in effect at the time of construction did not require carbon monoxide detectors to be provided”; which is an appropriate exception for the retroactive requirements in IFC Chapter 11. If an Addition is being conducted, the carbon monoxide alarm requirements for new construction are appropriate.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: This is providing a more appropriate reference, not a change in requirements.

EB14-19

IEBC: SECTION 303 (New), 303.1 (New), 502.8, 1106.1, 1106.1.1, 1106.1.2, 1301.2.3.1

Proponent: Ed Kulik, representing ICC Buidling Code Action Committee (bcac@iccsafe.org); Marc Levitan, representing the ICC 500 Storm Shelter Develoment Committee

2018 International Existing Building Code

Add new text as follows:

SECTION 303
STORM SHELTERS

303.1 Storm shelters. This section applies to the construction of storm shelters constructed as rooms or spaces within *existing buildings* for the purpose of providing protection during storms that produce high winds, such as tornadoes and hurricanes. Such structures shall be designated to be hurricane shelters, tornado shelters, or combined hurricane and tornado shelters. Such structures shall be constructed in accordance with this code and ICC 500.

SECTION 502
ADDITIONS

Delete without substitution:

~~**502.8 Additions to Group E facilities.** For *additions* to Group E occupancies, storm shelters shall be provided in accordance with Section 1106.1.~~

~~SECTION 1106~~
~~STORM SHELTERS~~

Revise as follows:

~~1106.1~~ **303.2 Addition to a Group E occupancy.** Where an *addition* is added to an existing Group E occupancy located in an area where the shelter design wind speed for tornados is 250 mph in accordance with Figure 304.2(1) of ICC 500 and the occupant load in the *addition* is 50 or more, the *addition* shall have a storm shelter constructed in accordance with ICC 500.

Exceptions:

1. Group E day care facilities.
2. Group E occupancies accessory to places of religious worship.
3. Additions meeting the requirements for shelter design in ICC 500.

~~1106.1.1~~ **303.2.1 Required occupant capacity.** The required occupant capacity of the storm shelter shall include all buildings on the site, and shall be the greater of the following:

1. The total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.
2. The occupant load of any indoor assembly space that is associated with the Group E occupancy.

Exceptions:

1. Where an *addition* is being added on an existing Group E site, and where the *addition* is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on-site, the storm shelter shall at a minimum accommodate the required capacity for the addition.
2. Where *approved* by the *code official*, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the site.

~~1106.1.2~~ **303.2.2 Location.** Storm shelters shall be located within the buildings they serve, or shall be located where the maximum distance of travel from not fewer than one exterior door of each building to a door of the shelter serving that building does not exceed 1,000 feet (305 m).

SECTION 1301
GENERAL

1301.2.3 Additions. *Additions* to *existing buildings* shall comply with the requirements of the International Building Code or the International Residential Code for new construction. The combined height and area of the *existing building* and the new *addition* shall not exceed the height and area allowed by Chapter 5 of the International Building Code. Where a fire wall that complies with Section 706 of the International Building Code is

provided between the *addition* and the *existing building*, the *addition* shall be considered a separate building.

Delete without substitution:

~~**1301.2.3.1 Additions to Group E facilities.** For additions to Group E occupancies, storm shelters shall be provided in accordance with Section 1106.1.~~

Reason: Where storm shelters are required in Group E additions was added to the 2018 IEBC Section 502.8, 1106 and 1301.2.3.1. There needs to be a reference to ICC 500 if someone builds a storm shelter inside an existing building – either voluntarily or to meet the occupant capacity requirement or travel distances set up in 1106. This new text is not a requirement for a shelter, but instead what to do if one is provided. The language is similar to Section IBC Section 423. The last sentence in Section 303.1 would also clarify the difference between and shelters for after the storm and a storm shelter. This is consistent with IBC Section 423 and the revisions in G59-18.
Since this requirement is in the prescriptive method and the work area method, it is suggested to move all the requirements to Chapter 3 as a new section on storm shelters.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC 500 Code Development Committee.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The ICC 500 Standards Development committee is responsible for the development of the ICC/NSSA Standard for the Design and Construction of Storm Shelters. The committee is currently working on the development of the 2020 edition. In 2017 the ICC 500 committee held 7 open conference calls. In addition, there were numerous Working Group meetings and conference calls, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/standards-development/is-stm.

Cost Impact: If someone builds a shelter voluntarily in an existing building, this might increase the cost over a shelter that did not comply with ICC 500. However, this is a necessary safety requirement for all storm shelters.

EB107-19

IEBC: 1106.1.1, 110.1.3 (New)

Proponent: Ek Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Marc Levitan, representing the ICC 500 Storm Shelter Development Committee

2018 International Existing Building Code

SECTION 1106
STORM SHELTERS

1106.1 Addition to a Group E occupancy. Where an *addition* is added to an existing Group E occupancy located in an area where the shelter design wind speed for tornados is 250 mph in accordance with Figure 304.2(1) of ICC 500 and the occupant load in the *addition* is 50 or more, the *addition* shall have a storm shelter constructed in accordance with ICC 500.

Exceptions:

1. Group E day care facilities.
2. Group E occupancies accessory to places of religious worship.
3. Additions meeting the requirements for shelter design in ICC 500.

Revise as follows:

1106.1.1 Required occupant capacity. The required occupant capacity of the storm shelter shall include all buildings on the site, and shall be the greater of the following:

1. The total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.
2. The occupant load of ~~any~~ the largest indoor assembly space that is associated with the Group E occupancy.

Exceptions:

1. Where an *addition* is being added on an existing Group E site, and where the *addition* is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on-site, the storm shelter shall at a minimum accommodate the required capacity for the addition.
2. Where *approved* by the *code official*, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the site.

1106.1.2 Location. Storm shelters shall be located within the buildings they serve, or shall be located where the maximum distance of travel from not fewer than one exterior door of each building to a door of the shelter serving that building does not exceed 1,000 feet (305 m).

Add new text as follows:

1106.1.3 Occupancy classification. The occupancy classification for storm shelters shall be determined in accordance with Section 423.3 of the International Building Code.

Reason: Occupancy classification was added in the IBC Section 423 by G59-18. Since the IEBC uses the IBC for occupancy classifications, it seems appropriate to make this a reference. G65-18 made the clarification in Section 1106.1.1 Item 2 for assembly spaces in Section 423.4.1 Item 2.
This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC 500 Code Development committee.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The ICC 500 Standards Development committee is responsible for the development of the ICC/NSSA Standard for the Design and Construction of Storm Shelters. The committee is currently working on the development of the 2020 edition. In 2017 the ICC 500 committee held 7 open conference calls. In addition, there were numerous Working Group meetings and conference calls, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/standards-development/is-stm.

Cost Impact: This is a coordination with clarifications added to 2021 IBC.

EB105-19

IEBC®: 1012 (New), 1012.1 (New), 1012.1.1 (New)

Proponent: Benchmark Harris, self, representing self

2018 International Existing Building Code

Add new text as follows:

1012
STORM SHELTER

1012.1 Group E occupancy. In areas where the shelter design wind speed for tornados is 250 mph in accordance with Figure 1304.2(1) of ICC 500, all buildings undergoing a change a occupancy to Group E where the occupant load is 50 or more, shall have a storm shelter constructed in accordance with ICC 500.

Exceptions:

1. Group E day care facilities.
2. Group E occupancies accessory to places of religious worship.
3. Buildings meeting the requirements for storm shelter design in ICC 500.

1012.1.1 Required occupant capacity. The required occupant capacity of the storm shelter shall include all buildings on the site, and shall be the total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.

Exceptions:

1. Where the change of occupancy to Group E is on an existing Group E site, and where the area of the change of occupancy to Group E is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on-site, the storm shelter shall at a minimum accommodate the required capacity for the area undergoing the change of occupancy to Group E.
2. Where approved by the code official, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the site.

Reason: The IEBC currently requires tornado shelters for additions in Section 502.8, 1106, 1301.2.3.1. However, Chapter 10, related to change of occupancy, has no provisions requiring tornado shelters for areas changed to Group E occupancy. It is common in many areas of the country for schools to purchase existing buildings that were designed for commercial or public use other than a Group E occupancy so that the school can convert the facilities into a Group E occupancy. This is especially common for smaller private schools however it can also occur in public-private partnerships. If a storm shelter is required for new buildings and for additions, building officials have indicated that this should be required for changes of use to Group E occupancy and have requested this code change to clarify the code intent.

Cost Impact: This would increase the cost of construction by requiring tornado shelters in existing buildings that do not have any Group E occupancies where they are being changed to a Group E occupancy.

EB108-19

IEBC®: SECTION 1106, 1106.1, 1106.1.1

Proponent: Marc Levitan, representing the ICC 500 Storm Shelter Development Committee; Benchmark Harris representing the National Storm Shelter Association (NSSA) (bharris@huckabee-inc.com)

2018 International Existing Building Code

SECTION 1106
STORM SHELTERS

Revise as follows:

1106.1 Addition to a Group E occupancy. Where an *addition* is added to an existing Group E occupancy located in an area where the shelter design wind speed for tornados is 250 mph in accordance with Figure 304.2(1) of ICC 500 and the occupant load in the *addition* is 50 or more, the *addition* shall have a storm shelter constructed in accordance with ICC 500.

Exceptions:

1. Group E day care facilities.
2. Group E occupancies accessory to places of religious worship.
3. Additions meeting the requirements for shelter design in ICC 500.

1106.1.1 Required occupant capacity. The required occupant capacity of the storm shelter shall include all buildings on the site, and shall be the ~~greater of the following:~~

1. ~~The~~ total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.
2. ~~The occupant load of any indoor assembly space that is associated with the Group E occupancy.~~

Exceptions:

1. Where an *addition* is being added on an existing Group E site, and where the *addition* is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on-site, the storm shelter shall at a minimum accommodate the required capacity for the addition.
2. Where *approved* by the *code official*, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the site.

Reason: This proposal is submitted by the National Storm Shelter Association (NSSA) and the ICC 500 Storm Shelter Standard Development committee.
The ICC 500 Standards Development committee is responsible for the development of the ICC/NSSA Standard for the Design and Construction of Storm Shelters. The committee is currently working on the development of the 2020 edition. In 2017 the ICC 500 committee held 7 open conference calls. In addition, there were numerous Working Group meetings and conference calls, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/standards-development/is-stm.

NSSA was responsible for the development of the original standard for storm shelters in 2001, which ICC 500 replaced through an agreement between ICC and NSSA. Representing General, User and Producer interest categories, NSSA is a technical organization that is committed to promoting consistent quality in both residential and community storm shelters.

For the same reason that the code does not require shelters for the entire population that outdoor venues can accommodate, such as outdoor football fields, it should not be necessary for schools to increase the size of the shelters for criteria 2. It is common for schools to share sites with other buildings that have indoor assembly areas that many building officials conservatively consider to be associated with a Group E occupancy. These assembly areas are often on the same site as the school and are sometimes even used by students during the school day, but these assembly areas do not add to the normal population of students in school and the staff that are associated with those students. Many school communities can understand and support the unfunded mandate in tornado prone areas that schools bear the cost of providing tornado shelters for minors that are required by law to be in the care of a school and those adult individuals taking care of them, out of an elevated obligation that comes with having school be mandatory for minors in our country. However, it is inappropriate to require that school systems bear the cost of sheltering possible occupants from the public at these areas. The population for criteria 2 can be significantly larger than criteria 1 when there are large assembly spaces on the site such as a public library (e.g. when a public library operates on a school campus and also functions as the school library), indoor football field, performing arts center, equestrian arena, natatorium, competition basketball arena, and/or professional development center.

The additional people in question (above and beyond criteria 1) elect to be in those assembly areas (as adults, or as minors before or after normal

school hours at the permission of their parents/guardians), just like they do in any commercial or other public assembly area. If ICC believed that the public in all assembly areas needed to be sheltered because the tornado hazards are that significant in those areas, then those types of businesses should be required to build tornado shelters too. The current code places an inequitable financial burden on school districts. More importantly, though, the additional area of shelter will most likely never be used.

Yes, if a tornado with windspeeds greater than the main building was designed to withstand happens to occur at the exact moment that there is an assembly with more people than the criteria 1 population, the additional area of the shelter could be used. However, there is a very low probability of this occurring and, other than this occurrence, the additional area of shelter would typically never be used because school districts that are constructing code-required shelters (not FEMA funded safe rooms) typically have no intention of ever opening their tornado shelters up to the general public because of the many operational challenges (e.g. concern with overcrowding above the shelter capacity) and increased liability.

This issue is further complicated by the fact that Section 1106.1.2 requires storm shelters be within 1,000 feet of the buildings they serve. Many high school campuses have buildings with Assembly functions (that building officials conservatively consider to be associated with an E occupancy) greater than 1,000 feet from the school building. The code is not clear whether these assembly areas require their own tornado shelter. Removing criteria 2 would resolve this dilemma by clearly identifying that the occupant load of the classrooms, vocational areas and offices are the areas that need to be served with tornado shelters.

The rationale to remove criteria 2 applies to new campuses as well as existing construction; however, it is especially applicable for additions to existing campuses where options to provide a tornado shelter are much more limited because the existing buildings were not designed with a future tornado shelter in mind.

The following is an example based on a real case provided by a school district in Texas, with some modifications made to simplify the example:

There is an existing academy and an existing performing arts center on a 100 Acre site, with the two buildings more than 1,000 feet apart, and the 2018 IEBC is in effect. The school system proposed an addition to the existing academy to double the criteria 1 population from 1,000 to 2,000. The criteria 1 population of the performing arts center is 0. The Building Official considers the performing arts center to be an A that is associated with an E occupancy. There are moveable partitions in the performing arts center that allow all of the rooms (except for the lobby) to open up into one large performing arena for 5,000 people in seats and up to 500 people on stage, making the criteria 2 population (the largest indoor assembly area associated with the E occupancy on the site) 5,500 people. The school system is required to build a shelter for at least 5,500 people because the floor plan area of the proposed addition to the academy could accommodate 5,500 people if the entire addition was one large tornado shelter. If the two buildings were closer than 1,000 feet, the 2018 IEBC would require $10 Million of sheltering ($5.6 Million for the 2,000 people in a multi-purpose shelter and $4.4 Million for 3,500 people in a dedicated, single-use shelter). This means that even in the 1,000 feet proximity rule was not in effect, this school system would need to spend $4.4 Million on sheltering the additional population that could be in a performing arts center. However, because the buildings are more than 1,000 feet apart, the actual cost impact of criteria 2 is much greater at this campus because 2 separate shelters are required to accommodate the travel distance requirement. 2018 IEBC section 1106.1.2 requires that the shelters be located within 1,000 feet of the “population they serve” and these two buildings are more than 1,000 feet apart. Therefore, the code requires that a 5,500 person shelter be constructed as a new addition to the performing arts center to accommodate that population and a 2,000 person shelter be constructed as part of the proposed addition to the academy. The combined cost of these two shelters would be $12.5 Million ($5.6 Million for the 2,000 people in the multi-purpose shelter by the academy and $6.9 Million for 5,500 people in a dedicated, single-use shelter by the performing arts center). The school system was prepared to construct a $5.6 Million shelter for the 2,000 people in the multi-purpose shelter by the academy but could not fund the additional $6.9 Million (associated with the criteria 2 requirement) to shelter the performing arts center population, which is a special events center. Therefore, the school system was not able to double the population of their academy as they had hoped.

Cost Impact: There will be a decrease in the cost for storm shelters for existing schools that have associated assembly spaces larger than the student population.

EB109-19

IEBC®: 1106.1.2

Proponent: Benchmark Harris, representing self

2018 International Existing Building Code

Delete without substitution:

~~**1106.1.2 Location.** Storm shelters shall be located within the buildings they serve, or shall be located where the maximum distance of travel from not fewer than one exterior door of each building to a door of the shelter serving that building does not exceed 1,000 feet (305 m).~~

Reason: While 1,000 feet maximum travel may be appropriate for new schools, this can be an undue hardship for existing buildings. Where an addition is located may be limited by a variety of building and site constraints.
Good disaster management practices will typically give schools a response time long enough to be able to move students to on-site shelters.

And, good management of a storm shelter is often better when there is 1 location instead of many smaller tornado shelters. For example, it's possible to overcrowd a tornado shelter when there are multiple shelters onsite and it is not clear which shelter has room available, unless all tornado shelters are designed to accomodate the entire population of the campus which would be a significant, redundant cost. Furthermore, emergency rescue is greatly assisted when there are a fewer number of tornado shelters for people to be rescued from.

An example of how the current provision can create a significant and unnecessary financial impact at a campus: A large, existing community college in Texas with 25 buildings throughout an approximately 200 Acre campus. 1 building in the middle of the campus is for high school students that want to earn early college credit, making this existing buidling a Group E building. The other 24 buildings have assembly spaces that are considered an accessory to the Group E occupancy because they can be used by the high school students. The campus wants to build a large addition to the early college learning building for high school students, one that is large enough to accomodate the population required by Section 1106.1.1. However, there are indoor assembly spaces that are spread throughout the entire campus, much greater than 1,000 feet, requiring that multiple new tornado shelters be constructed for the assembly spaces that are accessory to a Group E occupancy. Tornado Shelters are not required for college campus classrooms, which are Group B. It is an unnecessary burden to require a community college campus construct multiple tornado shelters throughout their campuses when there are emergency planning alternatives. The community college can manage the high school student population by directing those students to their designated shelters at early signs of an approaching storm, even though some students may be in a building farther than 1,000 feet from the shelter when a tornado approaches.

Cost Impact: Decrease. Removing the requirement for a maximum 1,000 foot travel distance avoids construting multiple tornado shelters at large campuses, instead of one.