BCAC IEBC Work Group Suggestions

Based on 2018 IEBC text

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12-6-18

ITEM	SECTION	TOPIC	Notes
IEBC 10-1	1011.2.1	Sprinklers in Change of occupancy	Complete – See 10-1, 10-2, 10-3, 10-5
IEBC 10-2	1011.1.1, 1022.1.1.1, 1011.1.1.2	Change of occupancy classification back to Chapters 9 (8 and 7)	Complete – See 10-1, 10-2, 10-3, 10-5
IEBC 10-3	1011.2.1 Ex	One and two family dwellings	Complete – See 10-1, 10-2, 10-3, 10-5
IEBC 4-1	401.1	Repair or alteration or new building	Complete
IEBC 13-1	Chapter 13	Performance method	Do not move forward
IEBC 1-1	Chapter 1	Maintenance	Do not move forward
IEBC 3-1	301.1	Applicability of exception in Section 301.3	Complete
IEBC 6-1	603.1, 801.3	Work area/reconfigured Definition – clarity that there is not always a work area	Complete
IEBC 13-2	1301.6.16.1	Mixed Occupancies	Complete

IEBC 6-2	601.3(New)	Total work area	Do not move forward
IEBC 6-3	608	Relocated buildings	Complete
IEBC 12-1	1201.3	Museums	Complete
IEBC 10-4	1011.4.1	MOE	Complete
IEBC 12-2	1203.3	MOE	Complete
IEBC 13-3	1301.6.2	Allowable building area	Complete
IEBC 13-4	Table 1301.6.3	Compartmentation values	Complete
IEBC 3-2	301.5, 305	Coordination with 2017 ICC A117.1	Send to A117.1
IEBC 15-1	1505.2	MOE	Complete
IEBC 5-1	501.1	Bleachers - ICC 300 reference	Complete
IEBC 5-2	505	Emergency escape and rescue openings	See IRC work group
IEBC 11-1	1106	Storm shelters - ICC 500 reference	Send to ICC 500
IEBC 10-5	1011.1.1.1, 1011.1.1.2	add horizontal assemblies as an option	Complete – See 10-1, 10-2, 10-3, 10-5
IEBC 13-5	1301.1	Scope of performance method	Complete
IEBC 9-1	908 (new), 1010.2(new)	Emergency responders radio coverage	Complete
IEBC 3-3	302.5.2	Exterior wall cladding requirements	No action
IEBC 3-4	305.4	COO for accessibility to be treated as alteration	Complete
IEBC 3-5	IRC R320	Accessibility in the IRC	Complete

IEBC 10-1, 10-2, 10-3 and 10-5 Combined change

11-26-2018 from work group –
11-27-18: Move forward as two proposals.

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.~~

> ~~**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.~~

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 system~~

~~shall be provided throughout the area where the *change of occupancy* occurs.~~ The installation of the automatic sprinkler system shall be 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. An automatic sprinkler system shall not be required in a townhouses constructed in accordance with the IRC. 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.

Cost impact: None. This would allow sprinkler systems to be added in a building over time rather than throughout where a COO occurs.

IEBC 10-1, 10-2, 10-3 and 10-5 Combined change

Separate out removal of non-required systems.

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.

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.

IEBC 4-1 Repair or alteration or new building

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.

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.

Cost impact: None. This is intended as a clarification of requirements.

IEBC 13-1 Performance method – do not move forward

In addition to the following revisions Chapter 3 would need to be modified to remove this as an independent method.

Chapter 5 Prescriptive Compliance Method
Section 503 Alterations

[B] 503.1 General. Except as provided by Section 302.4, 302.5 or this section, *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 no less conforming to 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 1009 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 1009.12 of the *International Building Code* shall not be required to comply with the requirements of Section 1012.6 of the *International Building Code* regarding full extension of the handrails where such extensions would be hazardous due to 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).
4. Buildings or portions thereof complying with Chapter 13 shall not be required to comply with this section for means of egress, fire safety and general safety.

Section 506 Change of Occupancy

506.2 Non structural safety requirements. Buildings or portions thereof complying with Chapter 13 shall not be required to comply with Section 506 for means of egress, fire safety and general safety.

Section 507 Historic Buildings

507.3 Nonstructural safety requirements. Buildings or portions thereof complying with Chapter 13 shall not be required to comply with Section 507 for means of egress, fire safety and general safety.

Chapter 8 Alterations Level 1
Section 801 General

801.1 Scope. Level 2 *alterations* as described in Section 603 shall comply with the requirements of this chapter.

~~Exception~~ Exceptions:

1. Buildings in which the reconfiguration is exclusively the result of compliance with the accessibility requirements of Section 305.7 shall be permitted to comply with Chapter 7.
2. Compliance with Sections 803 and 805 is not required when the building is in compliance with Chapter 14.

CHAPTER 13
~~PERFORMANCE COMPLIANCE~~ SCORING METHOD~~S~~

SECTION 1301 GENERAL

~~**1301.1.1 Compliance with other methods.** *Alterations*, *additions* and *changes of occupancy* to *existing structures* shall comply with the provisions of this chapter or with one of the methods provided in Section 301.3.~~

~~**[BS]1301.3.3 Compliance with flood hazard provisions.** In *flood hazard areas*, buildings that are evaluated in accordance with this section shall comply with Section 1612 of the *International Building Code*, or Section R322 of the *International Residential Code*, as applicable if the work covered by this section constitutes *substantial improvement*.~~

~~**[BS] 1301.4.1 Structural analysis.** The owner shall have a structural analysis of the *existing building* made to determine adequacy of structural systems for the proposed *alteration*, *addition* or *change of occupancy*. The analysis shall demonstrate that the building with the work completed is capable of resisting the loads specified in Chapter 16 of the *International Building Code*.~~

Reason: This is a significant shift in the structure of the code but one to begin considering for the long run. Consider making merely a scoring method that could be applied to relieve from portions of the prescriptive method or work area method instead of being a standalone method. Don't think it was considered as such but when Chapter 34 was split in half that was the end result. Does not deal with structural well where Chapter 4 and work area method have been revised heavily to be more reasonable for existing buildings. Also the scoring method itself is focused on nonstructural life safety issues only. I know we have added a bunch of band aids to address the rest but the core feature of that chapter was only meant for those issues.

Question: The reference in 801.1 is fire protection and means of egress. What is general safety? What are fire safety, means of egress and general safety sections in Chapter 5

Cost impact:

IEBC 1-1 Maintenance provision from Chapter 34 – do not move forward

1XX.X Maintenance. Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by this code shall be maintained in conformance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. To determine compliance with this subsection, the *building official* shall have the authority to require a building or structure to be reinspected. The requirements of this chapter shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures.

Reason: There has been concern that this section was lost when Chapter 34 was deleted and this section disappeared (3401.2 2012 IBC). Some view this as losing the grandfathering ability in the IBC. I view this as a mandate to maintain as built which may also be necessary. There are similar statements in various codes (usually in chapter 1) that require such maintenance but tend to focus on systems such as mechanical or fire protection. Should this be placed in Chapter 1 of the IBC?

Cost impact:

IEBC 3-1 Exception in Section 301.3

Chapter 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.

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 the following:

1. Alterations that constitute accessibility improvements, which shall comply with Section 305.
2. ~~This exception shall not apply to~~ Alterations that constitute substantial improvement in *flood hazard areas*, which shall comply with Section 503.2, 701.3 or 1301.3.3.
3. ~~This exception shall not apply to~~ 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.

Cost impact: None. 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.

IEBC 6-1 Work area/reconfigured Definition – clarity that there is not always a work area

(NEW) RECONFIGURATION OF SPACE. The rearrangement or change in the floor plan of a building or space.

CHAPTER 6 CLASSIFICATION OF WORK
SECTION 603 ALTERATION—LEVEL 2

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 nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753mm) in height shall not be considered reconfiguration of space.

CHAPTER 8 ALTERATIONS—LEVEL 2
SECTION 801 General

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: 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 3 if there is no reconfiguration of the space. If an alteration 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.

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 t hose related to egress or move it into a level 3 alteration situation.
This issue can be a very black and white issue but there are many shades of Gray. Some suggestions are above.

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

IEBC 13-2 Mixed Occupancies

Chapter 13 Performance Compliance Method
SECTION 1301 GENERAL

1301.6 Evaluation process…..
1301.6.16 Mixed occupancies...

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*.

Below **is a snapshot of Table 508.4 so it is easily available for review/use**

TABLE 508.4
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)[f]

OCCUPANCY	A, E		I-1[a], I-3, I-4		I-2		R[a]		F-2, S-2[b], U		B[e], F-1, M, S-1		H-1		H-2		H-3, H-4		H-5	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
A, E	N	N	1	2	2	NP	1	2	N	1	1	2	NP	NP	3	4	2	3	2	NP
I-1[a], I-3, I-4	—	—	N	N	2	NP	1	NP	1	2	1	2	NP	NP	3	NP	2	NP	2	NP
I-2	—	—	—	—	N	N	2	NP	2	NP	2	NP	NP	NP	3	NP	2	NP	2	NP
R[a]	—	—	—	—	—	—	N	N	1[c]	2[c]	1	2	NP	NP	3	NP	2	NP	2	NP
F-2, S-2[b], U	—	—	—	—	—	—	—	—	N	N	1	2	NP	NP	3	4	2	3	2	NP
B[e], F-1, M, S-1	—	—	—	—	—	—	—	—	—	—	N	N	NP	NP	2	3	1	2	1	NP
H-1	—	—	—	—	—	—	—	—	—	—	—	—	N	NP	NP	NP	NP	NP	NP	NP
H-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N	NP	1	NP	1	NP
H-3, H-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1[d]	NP	1	NP
H-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N	NP

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
N = No separation requirement.
NP = Not Permitted.
a. See Section 420.
b. The required separation from areas used only for private or pleasure vehicles shall be reduced by 1 hour but not to less than 1 hour.
c. See Section 406.3.2.
d. Separation is not required between occupancies of the same classification.
e. See Section 422.2 for ambulatory care facilities.
f. Occupancy separations that serve to define fire area limits established in Chapter 9 for requiring fire protection systems shall also comply with Section 707.3.10 and Table 707.3.10 in accordance with Section 901.7.

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.

Cost impact: None. This is a rating system and design alternative, not a requirement.

IEBC 6-2-do not process
IEBC Section 601.3 NEW

Chapter 6 Classification of Work
Section 601 General

601.3. Total Work area. Where multiple alterations are done to a building within a 2 year period the total work area shall be based upon the aggregate of those areas

or

601.3. Total Work area. Where multiple alterations are done to a building [enter a time period] ~~established by the adopting ordinance~~ the total work area shall be based upon the aggregate of those areas

Reason: This proposal addresses a common compliant that designers simply do smaller projects one right after another to avoid meeting the 50% work area threshold which would trigger requirements such as sprinklers. Therefore this proposal is trying to set a time frame in which the aggregate of work areas can be assessed. The balance is encouraging folks to reuse existing buildings without making it so difficult that they make no improvements to the building. It is delicate and difficult balance. Two concepts are presented which set specific time frame of 2 years (could be different) and the other leaving that time frame to be established by the jurisdiction.

Cost impact:

IEBC 6-3
IEBC Section 608

Chapter 6 Classification of Work

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.

Cost impact: None. Editorial change.

IEBC 12-1
IEBC Section 1201.3

Chapter 12 Historic Buildings
Section 1201 General

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 m2), 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~~ 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.

Cost impact: None. Editorial.

IEBC 10-4
IEBC Sections 1011.4.1 and 1011.7.4

Chapter 10 Change of Occupancy
Section 1011 Change of occupancy classification
Revise as follows:

1011.4.1 Means of egress for change to a higher-hazard category. Where a change of occupancy classification is made to a higher-hazard category (lower number) as shown in Table 1011.4, the means of egress shall comply with the requirements of Chapter 10 of the *International Building Code*.

Exceptions:

1. Stairways shall be enclosed in compliance with the applicable provisions of Section 903.1.

2. Existing stairways including handrails and guards complying with the requirements of Chapter 9 shall be permitted for continued use subject to approval of the *code official*.
3. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
4. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or $^1/_2$-inch-thick (12.7 mm) gypsum wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.
5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 805.5.1, 805.5.2 and 805.5.3.
6. Existing dead-end corridors shall comply with the requirements in Section 805.6.
7. An existing operable window with clear opening area not less than 4 square feet (0.38 m^2) and minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively, shall be accepted as an emergency escape and rescue opening.

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*.~~
3. 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.

Cost impact: None. The proposal is an editorial correction and may reduce potential costs by providing design options.

IEBC 12-2
IEBC Section 1203.3

Chapter 12 Historic Buildings
Section 1203 Fire Safety

Revise as follows:

1203.3 Means of egress. 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**,** existing ~~Existing~~ door openings and corridor and stairway widths are not required to meet the widths required by the *International Building Code* or ~~less than those specified elsewhere in~~ this code ~~may be *approved*, provided that, 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.~~ 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.

Cost impact: None. Editorial.

IEBC 13-3
IEBC Section 1301.6.2, 1301.6.2.1 and 1301.6.2.2

Chapter 13 Performance Compliance Method

Section 1301 General
1301.6 Evaluation process……

Revise as follows:

1301.6.2 Building area. The value for building area shall be determined by the formulas 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:

$A_a = A_t + (NS \times I_f)$ **(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 formulas shall be used in computing the area value. 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 multiple occupancy buildings ~~For each occupancy, choose~~ the minimum area value of the set of values obtained for the particular occupancy shall be used as the area value for that occupancy.

For single occupancy buildings:

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

For multiple occupancy buildings:

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

(Equation ~~13-4~~ 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.

Cost impact: This code change proposal would not increase or decrease the cost of construction.
This proposed code change is clarification of existing code language and neither adds to or decreases cost of construction.

IEBC 13-4

IEBC Table 1301.6.3

Chapter 13 Performance Compliance Method
Section 1301 General
1301.6 Evaluation process……
Revise as follows:

TABLE 1301.6.3
COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES[a]				
	a Compartment size equal to or greater than 15,000 square feet	b Compartment size of 10,000 square feet	c Compartment size of 7,500 square feet	d Compartment size of 5,000 square feet	e Compartment size of 2,500 square feet or 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 compartmentation value shall be obtained by linear interpolation.

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.

Cost impact: This code change proposal would not increase or decrease the cost of construction.
This proposed change is a coordination item between the IEBC and the IBC and neither adds to or decreases cost of construction.

IEBC 3-2 – send to A117.1
IEBC 301.5, 305

Chapter 3 Provisions for all compliance methods
SECTION 301
ADMINISTRATION

~~**301.5 Compliance with accessibility.** Accessibility requirements for *existing buildings* shall comply with the 2009 edition of ICC A117.1.~~

SECTION 305
ACCESSIBILITY FOR EXISTING BUILDINGS

305.1 Scope. The provisions of Sections 305.1 through 305.9 apply to maintenance, *change of occupancy*, *additions* and *alterations* to *existing buildings*, including those identified as *historic buildings*.

305.2 **Design.** Buildings and facilities shall be designed and constructed to be *accessible* in accordance with this code and ICC A117.1.

305.3 ~~**305.2**~~ **Maintenance of facilities.** A *facility* that is constructed or altered to be *accessible* shall be maintained *accessible* during occupancy.

Reason: The 2017 A117.1 now has provisions for existing buildings, so there is no longer a reason to limit the reference to the 2009 ICC A117.1. The standard should still be referenced in the IEBC, and within the accessibility section.

Cost impact:

IEBC 15-1
IEBC 1505.2

CHAPTER 15
CONSTRUCTION SAFEGUARDS
SECTION 1505

MEANS OF EGRESS

[F] 1505.2 Maintenance of means of egress. Required Means of egress, including ~~and required~~ accessible means of egress shall be maintained at all times from occupied portions of a building during construction, demolition, remodeling or *alterations* and *additions* ~~to any building~~.

Exception: Existing permanent means of egress need not be maintained where *approved* temporary means of egress and accessible means of egress systems ~~and facilities~~ are provided.

Reason: This proposal is editorial in nature to clarify the expectations for continuity during construction for all means of egress and to recognize that building are often times not occupiable during construction, which changes the accommodation expectation.

Cost impact: There is no cost impact, this proposed change is editorial in nature.

IEBC 5-1
IEBC 301.1, 501.1

Chapter 5 Prescriptive Compliance method
Section 501 General
Revised 9-17

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.~~

Chapter 3 Provisions for all Compliance methods
Section 301 General

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.

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

Chapter 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.

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

Chapter 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.

1401.1 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.

Cost impact: Will not increase. As the proposed change is only affecting the location of the pointer for greater clarity, there is no cost impact to the proposed change.

IEBC 5-2 – see IRC work group

Proposal 10: Part 1

Also IEBC 5-2

EEROs in Alterations

(COO in Part 2)
Revised 9-21

[BE] EMERGENCY ESCAPE AND RESCUE OPENING. An operable exterior window, door or other similar device that provides for a means of escape and access for rescue in the event of an emergency.

IEBC Chapter 5 Prescriptive Compliance method	IEBC Chapter 7 Alterations Level 1	IRC APPENDIX J EXISTING BUILDINGS AND STRUCTURES
SECTION 505 WINDOWS AND EMERGENCY ESCAPE OPENINGS	**SECTION 702 BUILDING ELEMENTS AND MATERIALS**	SECTION AJ102 COMPLIANCE
505.1 Replacement glass. The installation or replacement of glass shall be as required for new installations.		**AJ102.4 Replacement windows.** Regardless of the category of work, where an existing window, including the sash and glazed portion, or safety glazing is replaced, the replacement window or safety glazing shall comply with the requirements of Sections AJ102.4.1 through AJ102.4.4, as applicable.
505.2 Window opening control devices on replacement windows ~~Replacement window opening~~	**702.4 Window opening control devices on replacement windows.** In Group R-2 or R-3 buildings containing	**AJ102.4.4 Window control devices.** ~~Where window fall prevention devices complying~~

~~control devices.~~ In Group R-2 or R-3 buildings containing dwelling units, and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, window opening control devices or fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window: 1. The window is operable. 2. The window replacement includes replacement of the sash and the frame. 3. One of the following applies: 3.1. In Group R-2 or R-3 buildings containing dwelling units, the top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor. 3.2. In one- and two-family dwellings and townhouses regulated by the *International Residential Code*, the top of the sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor. 4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position. 5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm). ~~The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the *International Building Code*.~~ **~~Exceptions:~~ Exception:**	dwelling units, and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, window opening control devices or fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window: 1. The window is operable. 2. The window replacement includes replacement of the sash and the frame. 3. One of the following applies: 3.1. In Group R-2 or R-3 buildings containing dwelling units, the top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor. 3.2. In one- and two-family dwellings and townhouses regulated by the *International Residential Code*, the top of the sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor. 4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position. 5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm). ~~The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the *International Building Code*.~~ **~~Exceptions:~~ Exception:** ~~1.~~ Operable windows where	~~with ASTM F2090 are not provided,~~ window opening control devices or fall preventions devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window: 1. The window is operable. 2. The window replacement includes replacement of the sash and the frame. 3. The top of the sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor. 4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere where the window is in its largest opened position. 5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm). ~~The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit.~~

~~1.~~ Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F2006. ~~2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.~~	the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F2006. ~~2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.~~ .	
505.3 Replacement window emergency escape and rescue openings. Where windows are required to provide *emergency escape* and *rescue openings* in Group R-2 and R-3 occupancies and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, replacement windows shall be exempt from the requirements of Sections 1030.2~~, 1030.3~~ and 1030.4 *(note: this us size, height and window well)* of the *International Building Code* and Sections R310.2 and R310.4 ~~R310.2.1, R310.2.2 and R310.2.3~~ of the *International Residential Code*, provided that the replacement window meets the following conditions: 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window. 2. Where The replacement of the window is ~~not~~ part of a *change of occupancy* it shall comply with Section 1011.4.6. *(See 1011.4.1 Exception 7 and notes).*	**702.5 Replacement window emergency escape and rescue openings.** Where windows are required to provide *emergency escape* and *rescue openings* in Group R-2 and R-3 occupancies and one- and two-family dwellings and townhouses regulated by the *International Residential Code*, replacement windows shall be exempt from the requirements of Sections 1030.2~~, 1030.3~~ and 1030.4 *(note: this us size, height and window well)* of the *International Building Code* and Sections R310.2 and R310.4 ~~R310.2.1, R310.2.2 and R310.2.3~~ of the *International Residential Code*, provided that the replacement window meets the following conditions: 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window. 2. Where The replacement of the window is ~~not~~ part of a *change of occupancy* it shall comply with Section 1011.4.6. *(See 1011.4.1 Exception 7 and notes).*	**AJ102.4.3 Emergency escape and rescue openings.** Where windows are required to provide emergency escape and rescue openings, replacement windows shall be exempt from ~~the maximum sill height requirements of Section R310.2.2 and the requirements of Sections R310.2.1 and R310.2.3~~ *(note: this us size, height and window well)* R310.2 and R310.4 provided that the replacement window ~~meets the following conditions: 1. The replacement window~~ is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window. ~~2. The replacement window is not part of a change of occupancy.~~ *(IRC Appendix J does not address COO)* ~~3. Window opening control devices complying with ASTM F2090 shall be permitted for use on windows required to provide emergency escape and~~

505.3.1 Control devices. Emergency escape and rescue openings with Window opening control devices or fall prevention devices complying with ASTM F2090, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit ~~shall be permitted for use on windows required to provide emergency escape and rescue openings.~~ Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.	**702.5.1 Control devices.** Emergency escape and rescue openings with Window opening control devices or fall prevention devices complying with ASTM F2090, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit ~~shall be permitted for use on windows required to provide emergency escape and rescue openings.~~ Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.	~~rescue openings.~~ **AJ102.4.3.1 Control devices.** Emergency escape and rescue openings with window opening control devices or fall prevention devices complying with ASTM F2090, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.
	Section 701 General	
505.4 ~~Emergency escape and rescue openings~~ Bars, grilles, covers or screens. ~~Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.~~ Bars, grilles, ~~grates~~ covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosure or window wells that serve such openings, provided that the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, ~~grates~~ covers, screens or similar devices are installed, they shall not reduce the net clear opening of the emergency escape and rescue openings. Smoke alarms shall be installed in accordance with Section 907.2.10 of the *International Building Code* regardless of the valuation of the *alteration.*	**702.6 ~~701.4 Emergency escape and rescue openings~~ Bars, grilles, covers or screens.** ~~Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.~~ Bars, grilles, ~~grates~~ covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosure or window wells that serve such openings, provided that the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, ~~grates~~ covers, screens or similar devices are installed, they shall not reduce the net clear opening of the emergency escape and rescue openings. Smoke alarms shall be installed in accordance with Section 907.2.10 of the *International Building Code* regardless of the valuation of the *alteration.*	

Reason:

Coordination with proposals for Emergency Escape and Rescue openings for IBC and IRC started by BCAC committee MOE work group in Group A.

505.2, 702.3–In the current text it is difficult to see how the exceptions apply. Be separating out the requirement for emergency escape and rescue openings, the allowance for ASTM F2006 (exception 1) in taller buildings is clearer. Since both opening control devices and fall prevention devices are addressed in ASTM F2090, that can be addressed in the main text, and does not need to be an exception 2.

505.3, 702.4 - The purpose of the revision to this section is to move all the requirements for EEROs into one section. By moving the requirements for opening control/fall prevention devices from 505.2 to 505.3 is becomes clear that 505.3 allowed for non-compliance with Section 1030.2 (EERO size) and 505.2 required it. This is one option for resolution of that conflict. The sentence about operation is relocated from 505.4 – however, it is arguable if it is needed since the requirement is in IBC 1030.1.1 and IRC R310.1.1 for EEROs. The changes to the referenced section in the main text is correlative with the revisions to EERO's accepted in Group A for IBC and proposed for EERO's in IRC as part of Group B.

505.4, 701.4 - The revisions are consistent in what was approved for IBC Section 1030.5 and IRC Section 310.4 in the 2018 codes. Move 701.4 should be relocated to the window provisions. That would be consistent with the organization for EEROs in IBC and IRC and the IEBC prescriptive method.

Proposal 10: Part 2
Also IEBC 5-2
EEROs in COO

Chapter 10 Changer of occupancy
SECTION 1011 CHANGE OF OCCUPANCY CLASSIFICATION

1011.4 Means of egress, general. Hazard categories in regard to life safety and means of egress shall be in accordance with Table 1011.4.

TABLE 1011.4
MEANS OF EGRESS HAZARD CATEGORIES

RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS
1 (Highest Hazard)	H
2	I-2; I-3; I-4
3	A; E; I-1; M; R-1; R-2; R-4, Condition 2
4	B; F-1; R-3; R-4, Condition 1; S-1
5	(Lowest Hazard) F-2; S-2; U

1011.4.1 Means of egress for change to a higher-hazard category. Where a change of occupancy classification is made to a higher-hazard category (lower number) as shown in Table 1011.4, the means of egress shall comply with the requirements of Chapter 10 of the *International Building Code*.

Exceptions:

1. Stairways shall be enclosed in compliance with the applicable provisions of Section 903.1.
2. Existing stairways including handrails and guards complying with the requirements of Chapter 9 shall be permitted for continued use subject to approval of the *code official*.
3. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
4. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or 1/2- inch-thick (12.7 mm) gypsum wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.

5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 805.5.1, 805.5.2 and 805.5.3.
6. Existing dead-end corridors shall comply with the requirements in Section 805.6.
7. An ~~existing~~ operable window ~~with clear opening area not less than 4 square feet (0.38 m_2) and minimum opening height and width of 22 inches (559 mm) and of 20 inches (508 mm), respectively,~~ complying with Section 1011.4.6 shall be accepted as an emergency escape and rescue openings.

1011.4.2 Means of egress for change of use to an equal or lower-hazard category. Where a change of occupancy classification is made to an equal or lesser-hazard category (higher number) as shown in Table 1011.4, existing elements of the means of egress shall comply with the requirements of Section 905 for the new occupancy classification. Newly constructed or configured means of egress shall comply with the requirements of Chapter 10 of the *International Building Code*.

Exceptions:

1. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
2. An operable window complying with Section 1011.4.6 shall be acceptable as an emergency escape and rescue opening.

1011.4.3 Egress capacity. Egress capacity shall meet or exceed the occupant load as specified in the *International Building Code* for the new occupancy.

1011.4.4 Handrails. Existing stairways shall comply with the handrail requirements of Section 805.9 in the area of the *change of occupancy* classification.

1011.4.5 Guards. Existing guards shall comply with the requirements in Section 805.11 in the area of the *change of occupancy* classification.

1011.4.6 Emergency escape and rescue openings. Where a change of occupancy would require emergency escape and rescue opening in accordance with Section 1030.1, operable windows serving as the emergency escape and rescue opening shall comply with the following:

1. An existing operable window shall provide a minimum net clear opening of 4 square feet (0.38 m_2) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).
2. A replacement window where such window complies with both of the following:
   2.1 The replacement window meets the size requirements in Item 1.
   2.2 The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

Chapter 5 Prescriptive Method
Section 506 Change of occupancy

506.4 Emergency escape and rescue openings. Where a change of occupancy would require emergency escape and rescue opening in accordance with Section 1030.1, operable windows serving as the emergency escape and rescue opening shall comply with the following:

1. An existing operable window shall provide a minimum net clear opening of 4 square feet (0.38 m_2) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm).
2. A replacement window where such window complies with both of the following:
   2.1 The replacement window meets the size requirements in Item 1.
   2.2 The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the

same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

Reason for COO: EEROs are required in IBC Section 1030 only in R-3 and R-4 dwellings and for R-2 apartments in single exit buildings (4 units per floor, 3 stories maximum). So looking at something converting to a single family home per Table 1011.1, Section 1104.1 would only apply if a house was made out of an F-2, S-2 or U – such as a barn to a house. Any other use being converted to a house would be under 1011.4.2 – which has no language for EEROs. There does not appear to be any justification for a moving to the same or lesser hazard to be more restrictive than what is allowed for an increased hazard.

The provisions in Section 505 and 702 say they are not applicable to COO, so it should be addressed here for any occupancy that converts to R-3, R-4 and single exit R-2. The size currently permitted under Section 1104.1 Exception 7 for existing window is maintained. The requirements for replacement windows is from current language in 505 and 702.

The same language is proposed for COO under the prescriptive method – which currently does not address EEROs at all.

IEBC 11-1 – send to ICC 500
IEBC 301.1.1 (New), 1106

Chapter 3 Provisions for all Compliance methods
Section 201 General

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.

301.1.1 Storm shelters. Storm shelters added into existing buildings shall comply with ICC 500.

-or-

SECTION 303
STORM SHELTERS

303.1 Storm shelters. This section applies to the construction of storm shelters ~~constructed as separate detached buildings accessory to *existing buildings* or~~ 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.

303.1.1 Emergency shelters. Buildings or structures that are also designated as emergency shelters for short-term use after the storm shall also comply with IBC Table 1604.5 ~~as Risk Category IV structures~~ of the *International Building Code*.

Section 502 Additions

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

Chapter 11 Additions

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

303.2 ~~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.

303.2.1 ~~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.

303.2.2 ~~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).

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

Reason:Where storm shelters are required in Group E additions was added to the 2018 IEBC Section 502.8 and 1106. There need to have 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 new Section 303.1.1 would also clarify the difference between and emergency shelter 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.

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.

423.3 Occupancy classification. The occupancy classification for a storm shelter shall be determined in accordance with this section.

423.3.1 Dedicated storm shelters. A facility designed to be occupied solely as a storm shelter shall be classified as Group A-3 for the determination of requirements other than those covered in ICC 500.
Exceptions:

1. The occupancy category for dedicated storm shelters with an occupant load of less than 50 persons as determined in accordance with ICC 500 shall be in accordance with Section 303.
2. The occupancy category for a dedicated residential storm shelter shall be the Group R occupancy served.

423.3.2 Storm shelters within host buildings. Where designated storm shelters are constructed as a room or space within a host building which will normally be occupied for other purposes, the requirements of this code for the occupancy of the building, or the individual rooms or spaces thereof, shall apply unless otherwise required by ICC 500.

Reason:
ICC 500 contains specific requirements for determining the occupancy classification of storm shelters, whether constructed as a standalone building or as a room or space inside a host building which will normally be occupied for other purposes (e.g. a multi-purpose room in a Group E school or a conference room in a Group B office building). This code change adapts the occupancy language from ICC 500 and adds it to Section 423 where it will be directly accessible to all code users.
Occupancy classifications for storm shelters are broken down into four categories:
Dedicated storm shelters: Large community storm shelters may house hundreds of occupants. Thus, the ICC 500 committee deemed it appropriate to classify these shelters as Assembly Group A-3.
Small dedicated storm shelters: Some community shelters may only serve a small number of occupants. The ICC 500 committee deemed it appropriate to permit these smaller shelters to be classified as Group B as allowed by IBC Section 303.1.1
Shelters in a host building: Storm shelters constructed within a larger building as a room or space which will be used for other purposes under normal conditions (e.g. a multi-purpose room in a Group E school or a conference room in a Group B office building) are permitted to be classified using the occupancy category applicable to the space as it is normally used.
Residential storm shelters. Currently under ICC 500 these would be classified as Group B since they are limited to a maximum of 16 occupants, thus could use the Section 303.1.1 allowance. It is more appropriate that they be classified as Group R since that is the occupancy to which they are an accessory structure.
In addition, Sections 423.1 (General) and 423.2 (Construction) are revised to provide better scoping and charging language for storm shelters. The General paragraph is amended to highlight that Section 423 contains language requiring the installation of storm shelters in critical facilities such as fire stations, ambulance stations, and emergency operations centers (existing Section 423.3) and in Group E occupancies (existing Section 423.4). The requirement to classify storm shelters as hurricane, tornado, or both is relocated to the Construction provision, and a new paragraph is added to clarify that a storm shelter may be constructed in, or accessory to, any other buildings or structures governed by the IBC, where they would not otherwise be required, as long as the shelter complies with the appropriate requirements of the IBC and ICC 500. This is similar to language that exists in Section 901.2 for fire protection systems.

Cost impact:

IEBC 13-5
Scope of Performance Method

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 in Chapters 5 or the work area method of Chapter 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.

Cost impact: No cost impact as 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.

IEBC 9-1
IEBC 908(New), 1010.2(New)

Chapter 9 Level 3
Chapter 10 Change of Occupancy

Add new text as follows:

SECTION 908 (Note: this is for Level 3 alteration)
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 (Note: this is for Change of Occupancy)

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.

Cost Impact: The code change proposal will increase the cost of construction. For the safety of emergency responders, a system may need to be added in some of the larger buildings.

IEBC 3-3 – no action
IEBC 302.5.2

IEBC Exterior wall cladding requirements

Pointer to IBC

Option 1

302.5.2 Replacement or addition of exterior wall covering. Materials and methods of application used for recovering or replacing an existing exterior wall covering shall comply with the requirements of Chapter 14 and Chapter 26 of the *International Building Code*

Option 2

302.5.2 Replacement or addition of exterior wall covering. Materials and methods of application used for replacing an existing exterior wall covering shall comply with the requirements of Chapter 14 and Chapter 26 of the *International Building Code*

Pointer and Sprinklers

Add new text as follows:

Option 1

302.5.2 Exterior wall envelopes. Exterior wall envelopes added to existing buildings shall comply with Sections 302.5.2.1 and 302.5.2.2.

302.5.2.1 Replacement or addition of exterior wall envelope. Materials and methods of application used for recovering or replacing an existing exterior wall covering shall comply with the requirements of Chapter 14 and Chapter 26 of the *International Building Code*

302.5.2.2 High-rise buildings. Where an exterior wall envelope is being added to buildings with an occupied floor exceeding 75 feet above the lowest level of fire department vehicle access, the exterior wall envelope shall be noncombustible.

Exceptions:

1. Walls in which the *water-resistive barrier* is the only combustible component and the *exterior wall* has a wall covering of brick, concrete, stone, terracotta, stucco or steel with minimum thicknesses in accordance with Table 1404.2.
2. Walls in which the *water-resistive barrier* is the only combustible component and the *water-resistive barrier* has a peak heat release rate of less than 150 kW/m2, a total heat release of less than 20 MJ/m2 and an effective heat of combustion of less than 18 MJ/kg

as determined in accordance with ASTM E1354 and has a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m2.

3. T*he building is* equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the International Building Code.
4. Wall assemblies where the foam plastic insulation is covered on each face by not less than 1-inch (25 mm) thickness of masonry or concrete and meeting one of the following:
   - 4.1 There is no airspace between the insulation and the concrete or masonry.
   - 4.2 The insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E84 or UL 723 and the maximum airspace between the insulation and the concrete or masonry is not more than 1 inch (25 mm).

Option 2

302.5.2 Exterior wall envelopes. Replacment of Exterior wall envelopes ~~added to~~ on existing buildings shall comply with Sections 302.5.2.1 and 302.5.2.2.

302.5.2.1 Replacement or addition of exterior wall envelope. Materials and methods of application used for ~~recovering or~~ replacing an existing exterior wall covering shall comply with the requirements of Chapter 14 and Chapter 26 of the *International Building Code*

302.5.2.2 High-rise buildings. Where an exterior wall envelope is being ~~added~~ replaced on ~~to~~ buildings with an occupied floor exceeding 75 feet above the lowest level of fire department vehicle access, the exterior wall envelope shall be noncombustible.

Exceptions:

1. Walls in which the *water-resistive barrier* is the only combustible component and the *exterior wall* has a wall covering of brick, concrete, stone, terracotta, stucco or steel with minimum thicknesses in accordance with Table 1404.2.
2. Walls in which the *water-resistive barrier* is the only combustible component and the *water-resistive barrier* has a peak heat release rate of less than 150 kW/m2, a total heat release of less than 20 MJ/m2 and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and has a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m2.
3. T*he building is* equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the International Building Code.
4. Wall assemblies where the foam plastic insulation is covered on each face by not less than 1-inch (25 mm) thickness of masonry or concrete and meeting one of the following:
   - 4.1 There is no airspace between the insulation and the concrete or masonry.
   - 4.2 The insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E84 or UL 723 and the maximum airspace between the insulation and the concrete or masonry is not more than 1 inch (25 mm).

Proposal 3-4 – IEBC

From A117.1/IBC Coordination work group

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.

~~**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.

Proposal 3-5 –IRC

From A117.1/IBC coordination work group

R101.2 Scope. The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, *equipment*, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

Exception: The following shall be permitted to be constructed in accordance with this code where provided with a residential fire sprinkler system complying with Section P2904:

1. Live/work units located in *townhouses* and complying with the requirements of Section 419 of the *International Building Code*.
2. Owner-occupied lodging houses with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a dwelling unit.
4. A care facility with five or fewer persons receiving medical care within a dwelling unit.
5. A care facility for five or fewer persons receiving care that are within a single-family dwelling.

SECTION R320

ACCESSIBILITY

R320.1 Scope. Where there are four or more *dwelling units* or sleeping units in a single structure, the provisions of Chapter 11 of the *International Building Code* for Group R-3 shall apply.

Exception: Owner-occupied lodging houses with five or fewer guestrooms are not required to be accessible.

~~**R320.2. Guestrooms.** A *dwelling* with guestrooms shall comply with the provisions of Chapter 11 of the *International Building Code* for Group R-3. For the purpose of applying the requirements of Chapter 11 of the *International Building Code*, guestrooms shall be considered to be sleeping units.~~

~~**Exception:** Owner-occupied lodging houses with five or fewer guestrooms constructed in accordance with the *International Residential Code* are not required to be accessible.~~

R320.2 Live/work units. In *live/work units*, the nonresidential portion is required to be *accessible* in accordance with Sections 419.7 and 419.9 of the International Building Code. In a structure where there are four or more *live/work units*, the dwelling portion of the live/work unit shall comply with Section 1107.6.2.1 of the *International Building Code*.

LIVE/WORK UNIT. A *dwelling unit* or sleeping unit in which a significant portion of the space includes a nonresidential use that is operated by the tenant.

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

Reason: The accessibility provisions have not kept up with the revised scope of the IRC.

The scope in the IRC of the transient lodging is limited to owner occupied with 5 or fewer guestrooms, so there will be no larger facilities. Guestrooms are sleeping units which is covered in R320.1, so a separate section that start by applying to something that is not permitted just to get the exception is not needed. You can just apply the exception to R310.1. This does coordinate with IBC Section 1103.2.11.

For Live work units, the IBC has

> **419.7 Accessibility.** Accessibility shall be designed in accordance with Chapter 11 for the function served.
> **419.9 Plumbing facilities.** The nonresidential area of the *live/work unit* shall be provided with minimum plumbing facilities as specified by Chapter 29, based on the function of the nonresidential area. Where the nonresidential area of the *live/work unit* is required to be *accessible* by Section 1107.6.2.1, the plumbing fixtures specified by Chapter 29 shall be *accessible*.
> **1107.6.2.1 Live/work units.** In *live/work units* constructed in accordance with Section 419, the nonresidential portion is required to be *accessible*. In a structure where there are four or more *live/work units intended to be occupied as a residence*, the residential portion of the *live/work unit* shall be a *Type B unit*.
> **Exception:** The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

It is proposed to add a reference to this language to the IRC for consistency for accessibility requirements for Live/work units.

Since the terms ‘sleeping units’ and ‘live/work units’ are used in the IRC, in this section and others. It is proposed to add the definitions currently found in the IBC.

11-27-2018: BCAC IRC work group has no additional meetings. BCAC IEBC work group suggested to move this one forward as BCAC proposal.

