## BUILDING CODE ACTION COMMITTEE IBC EGRESS COMMITTEE 2024 PLANNING

Monograph ccp #	Related Change	CAH Results	Торіс	Public Comment Submitted	Result	Notes
E19-18		D	Atriums and open stairways		D	See G35
E20-18		D	Atriums and open stairways	Rice- AMPC	D	
	G35-18	AS	Atriums and open stairways	BCAC- AMPC	AMPC1	
E22-18		D	Occupied roof	BCAC - AMPC	D	
E29-18		D	Occupied roof	See E30	D	See E30
	F00.40		Occupied roof	Chappell - AMPC1	AS	
				Chappell - AMPC2	AS	
	230-16	AS		BCAC - AMPC3	AS	
				BCAC - AMPC4	AS	
E51-18	D		vestibules from SEPCAC	BCAC - AMPC	D	
		D		Boecker- AS	D	
				Collins - AS	D	

E108-18	D	Emergency Escape and Rescue Openings	BCAC - AMPC	D	
E109-18	D	Emergency Escape and Rescue Openings	BCAC - AS	D	
G140	D	signs at elevators	BCAC - AMPC	D	

## E19-18

IBC: 404.9.3, 1006.3.1, 1017.3,1023.2, (IFC[BE] 1006.3.1, 1017.3, 1023.2))

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

## 2018 International Building Code

### **Revise as follows:**

**404.9 Exit access travel distance.** *Exit access* travel distance for areas open to an *atrium* shall comply with the requirements of this section.

**404.9.1 Egress not through the atrium.** Where required access to the *exits* is not through the *atrium*, *exit access* travel distance shall comply with Section 1017.

**404.9.2 Exit access travel distance at the level of exit discharge.** Where the path of egress travel is through an *atrium* space, *exit access* travel distance at the *level of exit discharge* shall be determined in accordance with Section 1017.

**404.9.3 Exit access travel distance at other than the level of exit discharge.** Where the path of egress travel is not at the *level of exit discharge* from the *atrium*, that portion of the total permitted *exit access* travel distance that occurs within the *atrium* shall be not greater than 200 feet (60 960 mm). <u>Exit access travel distance shall be measured in accordance with Sections 1006.3.1 and 1017.3.</u>

**404.10 Interior exit stairways.** Not greater than 50 percent of *interior exit stairways* are permitted to egress through an atrium on the *level of exit discharge* in accordance with Section 1028.

### 10 MEANS OF EGRESS

**1006.3 Egress from stories or occupied roofs.** The *means of egress* system serving any *story* or occupied roof shall be provided with the number of separate and distinct *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. Where *stairways* serve more than one *story*, only the *occupant load* of each *story* considered individually shall be used in calculating the required number of *exits* or access to *exits* serving that *story*.

1006.3.1 Adjacent story. The path of egress travel to an *exit* shall not pass through more than one adjacent story.

**Exception:** The path of egress travel to an *exit* shall be permitted to pass through more than one adjacent *story* in any of the following:

1.In Group R-1, R-2 or R-3 occupancies, exit access stairways and *ramps* connecting four stories or less serving and contained within an individual dwelling unit, sleeping unit or live/work unit.

2.Exit access stairways serving and contained within a Group R-3 congregate residence or a Group R-4 facility. 3.<u>Exit access stairways and ramps within an atrium complying with the provisions of Section 404.</u>

4. Exit access stairways and ramps in open parking garages that serve only the parking garage.

<u>5.4</u>Exit access stairways and *ramps* serving *open-air assembly seating* complying with the exit access travel distance requirements of Section 1029.7.

<u>6.5</u>Exit access stairways and *ramps* between the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, *places of religious worship*, auditoriums and sports facilities.

**1017.3 Measurement.** *Exit access* travel distance shall be measured from the most remote point of each room, area or space along the natural and unobstructed path of horizontal and vertical egress travel to the entrance to an exit.

### Exceptions:

<u>1. Within atriums, exit access travel distance is permitted to be measured to the closest riser of an exit access stairway or the closest slope of an exit access ramp.</u>

<u>2.</u>In open parking garages, exit access travel distance is permitted to be measured to the closest riser of an exit access stairway or the closest slope of an exit access ramp.

**1017.3.1 Exit access stairways and ramps.** Travel distance on *exit access stairways* or *ramps* shall be included in the *exit access* travel distance measurement. The measurement along *stairways* shall be made on a plane parallel and tangent to the *stair* tread *nosings* in the center of the *stair* and landings. The measurement along *ramps* shall be made on the walking surface in the center of the *ramp* and landings.

**1023.2 Construction.** Enclosures for interior exit *stairways* and *ramps* shall be constructed as *fire barriers* in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. *Interior exit stairway* and *ramp* enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more and not less than 1 hour where connecting less than four stories. The number of stories connected by the interior exit *stairways* or *ramps* shall include any *basements*, but not any *mezzanines*. *Interior exit stairways* and *ramps* shall have a fire-resistance rating but not any *mezzanines*. *Interior exit stairways* and *ramps* shall have a fire-resistance rating not less than the floor assembly penetrated, but need not exceed 2 hours.

#### Exceptions:

1.Interior exit stairways and ramps in Group I-3 occupancies in accordance with the provisions of Section 408.3.8. 2.Interior exit stairways within an atrium enclosed in accordance with Section 404.6.

**Reason:** The membership approved E139-12 (AS) which added the allowance for a stairway within an atrium to be considered an exit stairway into Section 1023.2. There is confusion where an atrium is called an exit stairway – how to measure travel distance, what could be in the atrium, if you could travel through an atrium to get to an exit stairway. Section 1019.3 states that open stairways in atriums is an 'exit access stairway', so the same stairway is currently called two different things in the code.

The intent of this proposal is to call the open stairway in the atrium an exit access stairway to be consistent with the terminology in Section 1019.3, Item 3.

The revision to Section 404.8.3 is a pointer for where exit access travel distance within an atrium includes travel down an exit access stairway. The revision to Sections 1006.3.1 and 1017.3 are to measure exit access travel distance in a manner that would be consistent with the using the open stairway as a required means of egress off a story consistent with if this stairway was an exit off the floor. The smoke protection provisions for atrium in Section 404 would have to be in place to be able to use this allowance as a required means of egress.

The BCAC also has a proposal to reformat the atrium requirements. If both changes pass, there will be no conflicts. The references to the location of requirements can be correlated.

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. In 2017 the BCAC has held 3 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-action-committee-bcac.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This proposal is effectively codifying the intent to allow the use of open stairways within an atrium "as if" they are in an exit enclosure due to the enhanced safety that exists within an atrium that complies with all the requirements of IBC Section 404, without applying all the other limitations that exist for an exit enclosure elsewhere in the code.

## **IBC - Egress**

2018 Group A - Report of the Committee Action Hearing Results

## E19-18

### Committee Action:

**Committee Reason:** An open stairway in an atrium should not be an exit stairway. It should only be permitted as an exit access stairway. Travel distance should be down the stairway to an exit to the outside. Atriums are not as safe as an exit because there is fuel load in the atrium. If a stairway in an atrium is an exit it should have additional restrictions. (Vote: 10-4)

### Assembly Motion:

### **Online Vote Results:**

Failed - Support 0% (0) Oppose 0% (0)

None

## Disapproved

E20-18

## E20-18

## Proposed Change as Submitted

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

## 2018 International Building Code

### Revise as follows:

**1006.3 Egress from stories or occupied roofs.** The *means of egress* system serving any *story* or occupied roof shall be provided with the number of separate and distinct *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. Where *stairways* serve more than one *story*, only the *occupant load* of each *story* considered individually shall be used in calculating the required number of *exits* or access to *exits* serving that *story*.

**1006.3 Egress from stories or occupied roofs.** The *means of egress* system serving any *story* or occupied roof shall be provided with the number of separate and distinct *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. Where *stairways* serve more than one *story*, only the *occupant load* of each *story* considered individually shall be used in calculating the required number of *exits* or access to *exits* serving that *story*.

### Delete without substitution:

**1006.3.1** Adjacent story. The path of egress travel to an *exit* shall not pass through more than one adjacent story.

**Exception:** The path of egress travel to an *exit* shall be permitted to pass through more than one adjacent *story* in any of the following:

1.In Group R-1, R-2 or R-3 occupancies, exit access stairways and *ramps* connecting four stories or less serving and contained within an individual dwelling unit, sleeping unit or live/work unit.

2.Exit access stairways serving and contained within a Group R-3 congregate residence or a Group R-4 facility. 3.Exit access stairways and *ramps* in open parking garages that serve only the parking garage.

4.Exit access stairways and ramps serving open-air assembly seating complying with the exit access travel distance requirements of Section 1029.7.

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

1006.3.1 Adjacent story. The path of egress travel to an exit shall not pass through more than one adjacent story.

**Exception:** The path of egress travel to an *exit* shall be permitted to pass through more than one adjacent *story* in any of the following:

1.In Group R-1, R-2 or R-3 occupancies, exit access stairways and *ramps* connecting four stories or less serving and contained within an individual dwelling unit, sleeping unit or live/work unit.

2.Exit access stairways serving and contained within a Group R-3 congregate residence or a Group R-4 facility. 3.Exit access stairways and *ramps* in open parking garages that serve only the parking garage.

4.Exit access stairways and ramps serving open-air assembly seating complying with the exit access travel distance requirements of Section 1029.7.

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

**Reason:** The current list of exceptions allows for exit access stairways within 5 of the 8 options to use travel distance without a story limitation (individual dwelling units(#2), Group R-3 and R-4 congregate residences(#3), open parking garages(#6), open air seating(#7) and balconies(#8)). The 3 options currently limited to one story are the 2 story configuration (#1), water curtains around stairways opening (#4) and atriums (#5). These exceptions were added to the code by E27-15.

Travel distance, rather than stories should be the controlling factor. There would be no impact on two story configurations. Deletion of the requirement would allow for exit access travel distance to be measured down the open exit access stairway, regardless of the number of stories. This would now include open exit access stairways that use water curtains around stairways opening (#4) and atriums with smoke protection (#5). With the removal of the limitation for one story, none of the exceptions are needed.

This would be consistent with the BCAC proposal to revise measurement for travel distance along open exit access stairways in atriums.

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. In 2017 the BCAC has held 3 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-action-committee-bcac.

**Cost Impact:** The code change proposal will decrease the cost of construction This will reduce the cost in those situations where an enclosure would have been required for the stairway in buildings with more than two stories.

E20-18

Disapproved

## Public Hearing Results

### **Committee Action:**

**Committee Reason:** The exceptions that permit the travel on exit access stairways to go more than one story were carefully considered. This should not be extended to stairways with draft curtains or atriums. This is too great of an opportunity for smoke migration within high rise buildings. (Vote: 14-0)

### **Assembly Action:**

E20-18

None

## **Individual Consideration Agenda**

### **Public Comment 1:**

### IBC®:1006.3.1

**Proponents:** Sarah Rice, representing Himself (srice@preview-group.com); Stephen Thomas, Colorado Code Consulting, LLC (sthomas@coloradocode.net); Wayne Jewell (wayne.jewell@greenoaktwp.com) requests As Modified by Public Comment

### Replace as follows:

## 2018 International Building Code

**1006.3.1 Adjacent story.** The path of egress travel to an *exit* shall not pass through more than one adjacent *story*.

#### ExceptionExceptions:

<u>1.</u> The path of egress travel to an *exit* shall be permitted to pass through more than one adjacent *story* in any of the following:

1.1.1.In Group R-1, R-2 or R-3 occupancies, exit access stairways and *ramps* connecting four stories or less serving and contained within an individual dwelling unit, sleeping unit or live/work unit.

2.1.2. Exit access stairways serving and contained within a Group R-3 congregate residence or a Group R-4 facility. 3.1.3. Exit access stairways and *ramps* in open parking garages that serve only the parking garage.

4.1.4.Exit access stairways and *ramps* serving *open-air assembly seating* complying with the exit access travel distance requirements of Section 1029.7.

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

<u>2. The path of egress travel shall be permitted to pass through not more than three stories where not less than</u> two exits can be entered within the exit access travel distances specified in Section 1017.2. **Commenter's Reason:** The one story limitation for egress to an exit via an exit access stair/ramp was introduced in the 2012 IBC via Code Change E5-09/10, from the ICC Code Technology Committee. As the concept of allowing access to another exit via an exit access stair was previously limited to 2 stories in the 2009 IBC, it was consistent to incorporate that limitation. But as communities have fully embraced and adopted the 2012, 2015 and now the 2018 IBC and the design community is looking to utilize this design options, the constraints of trying to fully use the 1-story limitation are becoming visible. This is confirmed by the submittal of the code change itself - in that it has been brought forth by the ICC Building Code Action Committee (BCAC) which is comprised of a very knowledgeable group of enforcement official, industry representatives and code uses.

We the proponents agree with the BCAC that the 1-story limitation is too restrictive, but we feel that not having a limitation is too extreme. Our proposed modification seeks to allow the use of exit access stairs/ramps to access an exit on another story with 1) a three (3) story limit, and 2) a requirement that at least 2 exits be located within the exit access travel distances specified in Section 1017.

We reviewed the code related provisions to the location of exits (i.e., exit access travel distance), the enclosure of exits (i.e., fire rating) and for the protection methods required of exit access stairs in Section 1019.1 (i.e., configuration limits, draft curtains and closely spaced sprinklers). As the overarching requirement associated with the means of egress for a building is that an occupant can get to a protected location in the exit access travel distances in Section 1017, we examined how it can be complied with when both a horizontal and vertical path is available. We feel that the protection method afforded a 3-story exit access stair using Item 4 in Section 1019.1 combined with the mandate that an occupant must be able to reach a minimum of 2 exits within the exit access travel distance specified in Section 1017 affords the intended safety to the building occupants and ask that you support this modification.

**Cost Impact:** The net effect of the public comment and code change proposal will decrease the cost of construction The implementation of the concept outlined in this proposal will not increase the cost of construction, but may decrease the cost of construction.

Public Comment# 899

G35-18

## G35-18

## **Proposed Change as Submitted**

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

## 2018 International Building Code

### Add new text as follows:

404.10 Exit stairways in an atrium. Where an atrium contains an interior exit stairway all the following shall be met:

1. The entry to the exit stairway is the edge of the closest riser of the exit stairway.

2. The entry of the exit stairway shall have access from a minimum of two directions.

3. The distance between the entry to an exit stairway in an atrium, and the entrance to a minimum of one exit

stairway enclosed in accordance with Section 1023.2 shall comply with the separation of Section 1007.1.1.

4. Exit access travel distance shall be measured to the closest riser of the exit stairway.

5. Not more than 50 percent of the exit stairways shall be located in the same atrium.

**404.10** <u>404.11</u> Interior exit stairways <u>discharge</u>. Not greater than 50 percent of *interior exit stairways* are permitted to egress through an atrium on the *level of exit discharge* in accordance with Section 1028.

**Reason:** An exit stair is currently permitted to be in an atrium enclosure by IBC Sections 2023.1 and 1023.2, which allows enclosure per Section 404.6. These new provisions for the conditions for use of an atrium for an exit stair adds four specific criteria for their use as an exit.

Provision 1 - Accessed from two directions

This means that the exit stair in the atrium must have two paths of travel to allow the occupants to pass by the stair.

Provision 2 - Separation distance

To make it clear that the exit stair in the atrium must be separated from at least one other eixt stair meeting IBC Section 1023.2 by the minimum separation disance prescribed in Section 1007.1.1.

Provision 3 - Travel distance

The travel distance with the atrium to the exit stair in the atrium is to be measured to the nosing at the level the stair is serving.

Provision 4 - At least one exit is not in the atrium.

Requires that at least one exit is not permitted to be in the same atrium. The current provisions of Section 404.10 prohibit more than 50% of exit stairs from egresing through the atrium at the level of exit discharge.

**Cost Impact:** The code change proposal will decrease the cost of construction This change will facilitate design decisions, reduce the number of required exit enclosures in buildings with an atrium and help with review and approval, reducing the cost of construction.

G35-18

## **Public Hearing Results**

### Committee Action:

### As Submitted

**Committee Reason:** This proposal was approved because current Section 1023.2 already allows for a stairway within an atrium to be considered an exit stairway. This language in Items 2 and 3 would clarify that the exit access travel distance and exit separation requirements is measured to the top of the stairway. While the language in Item 1 for two

directions could be subject to interpretation, Items 1 and 4 do further limit where a stairway in an atrium can serve as an exit, so this would improve safety. (Vote: 8-7)

### **Assembly Action:**

None

G35-18

## **Individual Consideration Agenda**

### **Public Comment 1:**

IBC®: 404.9, 404.10 (New), 404.11

**Proponents:** Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

## 2018 International Building Code

**404.9 Exit access travel distance.** *Exit access* travel distance for areas open to an *atrium* shall comply with the requirements of this section.

**404.10-1** Exit stairs stairways in an atrium. Where an atrium contains an interior exit stairway all the following shall be met:

1. The exit stair entry to the exit stairway is the edge of the closest riser of the exit stairway.

2. The entry of the exit stairway shall have access from a minimum of two directions.

<u>3</u>. The distance between <u>the entry to an exit stair stairway</u> in an atrium, and <u>the entrance to a minimum of one exit</u> stair stairway enclosed in accordance with Section 1023.2 shall comply with <u>the separation in</u> Section 1007.1.1.

<u>4. Exit</u> access travel distance within the atrium shall be measured to the nosing closest riser of the landing at the top of the stair on each level served exit stairway.

5. At least one exit shall not Not more than 50 percent of the exit stairways shall be located in the same atrium.

**404.**<del>10</del> **11 Interior exit stairways discharge**. Not greater than 50 percent of *interior exit stairways* are permitted to egress through an atrium on the *level of exit discharge* in accordance with Section 1028.

**Commenter's Reason:** Open stairways in an atrium are permitted to be exit stairways per Section 1023.2 Exception 2. This proposal added additional criteria for that exit stairway. This modification does not change that allowance. This section is not placed correctly. Current Section 404.10 is for exit discharge – thus the suggested title change for clarification. This new section deals with an exit stairway. Therefore, this should not be a subset of exit discharge through the lobby. This new section should be between exit access and exit discharge sections. The renumbering fixes this.

The correct term is exit stairway, not exit stair - this is revised in the title and the Items.

It is important to clarify that dispersion, separation and travel distance is to the entry/closest riser of the open stairway in the atrium and the entrance to the exit stairway, not the stairway itself or the enclosure. This is the reason for the added Item 1 and revisions to Items 2, 3 and 4.

In Item 4, the language for measurement of the travel distance in Item 4 should match use the same terminology for other open exit stairways in the exception in Section 1017.3. The phrase "on each level served" is redundant.

In Item 5, the proposed language is consistent with exit discharge allowances in Section 1028 - the current language would allow more than 50%.

This public comment is submitted by the ICC BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions there of. In 2017 and 2018 the BCAC has held 5 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 and public comments. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-action-committee-bcac

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

The modification is a clarification of the approved text and will have no changes in construction requirements. The original proposal provided guidance on how an exit stairway within an atrium should comply with exit access travel distance and separation. The new item 5 is consistent with the exit discharge allowances. Since there was already an allowance for no enclosure in Section 1023.2 Exception 2, the original proposal is not a decrease in cost of construction.

Public Comment# 590

E22-18

## E22-18

## **Proposed Change as Submitted**

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

## 2018 International Building Code

Revise as follows:

## SECTION 1006 NUMBER OF EXITS AND EXIT ACCESS DOORWAYS

## SECTION 1006 NUMBER OF EXITS AND EXIT ACCESS DOORWAYS

**1006.3 Egress from stories or occupied roofs.** The *means of egress* system serving any *story* or occupied roof shall be provided with the number of separate and distinct *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. Where *stairways* serve more than one *story*, only the *occupant load* of each *story* considered individually shall be used in calculating the required number of *exits* or access to *exits* serving that *story*.

**1006.3 Egress from stories or occupied roofs.** The *means of egress* system serving any *story* or occupied roof shall be provided with the number of separate and distinct *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. Where *stairways* serve more than one *story*, only the *occupant load* of each *story* considered individually shall be used in calculating the required number of *exits* or access to *exits* serving that *story*.

**1006.3.2 Egress based on occupant load.** Each *story* and occupied roof shall have the minimum number of separate and distinct *exits*, or access to *exits*, as specified in Table 1006.3.2. A single *exit* or access to a single *exit* shall be permitted in accordance with Section 1006.3.3. The required number of *exits*, or *exit access stairways* or *ramps* providing access to *exits*, from any story or occupied roof shall be maintained until arrival at the *exit discharge* or a *public way*.

**1006.3.2 Egress based on occupant load.** Each *story* and occupied roof shall have the minimum number of separate and distinct *exits*, or access to *exits*, as specified in Table 1006.3.2. A single *exit* or access to a single *exit* shall be permitted in accordance with Section 1006.3.3. The required number of *exits*, or *exit access stairways* or *ramps* providing access to *exits*, from any story or occupied roof shall be maintained until arrival at the *exit discharge* or a *public way*.

## TABLE 1006.3.2 MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY OR OCCUPIED ROOF

OCCUPIED LOAD PER STORY	MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS FROM PER_STORY_OR OCCUPIED ROOF
1-500	2
501-1,000	3
More than 1,000	4

## TABLE 1006.3.2MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY OR OCCUPIED ROOF

OCCUPIED LOAD PER STORY	MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS <del>FROM <u>PER</u>STORY<u>OR</u> OCCUPIED ROOF</del>		
1-500	2		
501-1,000	3		
More than 1,000	4		

**1006.3.3 Single exits.** A single *exit* or access to a single *exit* shall be permitted from any *story* or occupied roof where one of the following conditions exists:

1. The *occupant load*, number of *dwelling units* and common path of egress travel distance do not exceed the values in Table 1006.3.3(1) or 1006.3.3(2).

2.Rooms, areas and spaces complying with Section 1006.2.1 with *exits* that discharge directly to the exterior at the *level of exit discharge*, are permitted to have one *exit* or access to a single *exit*.

3.Parking garages where vehicles are mechanically parked shall be permitted to have one *exit* or access to a single *exit*.

4.Group R-3 and R-4 occupancies shall be permitted to have one *exit* or access to a single *exit*.

5.Individual single-story or multistory *dwelling units* shall be permitted to have a single *exit* or access to a single *exit* from the *dwelling unit* provided that both of the following criteria are met:

5.1.The *dwelling unit* complies with Section 1006.2.1 as a space with one *means of egress*.

5.2.Either the exit from the *dwelling unit* discharges directly to the exterior at the *level of exit discharge*, or the *exit access* outside the *dwelling unit*'s entrance door provides access to not less than two *approved* independent *exits*.

**1006.3.3 Single exits.** A single *exit* or access to a single *exit* shall be permitted from any *story* or occupied roof where one of the following conditions exists:

1. The *occupant load*, number of *dwelling units* and common path of egress travel distance do not exceed the values in Table 1006.3.3(1) or 1006.3.3(2).

2.Rooms, areas and spaces complying with Section 1006.2.1 with *exits* that discharge directly to the exterior at the *level of exit discharge*, are permitted to have one *exit* or access to a single *exit*.

3.Parking garages where vehicles are mechanically parked shall be permitted to have one *exit* or access to a single *exit*.

4.Group R-3 and R-4 occupancies shall be permitted to have one *exit* or access to a single *exit*.

5.Individual single-story or multistory *dwelling units* shall be permitted to have a single *exit* or access to a single *exit* from the *dwelling unit* provided that both of the following criteria are met:

5.1.The *dwelling unit* complies with Section 1006.2.1 as a space with one *means of egress*.

5.2.Either the exit from the *dwelling unit* discharges directly to the exterior at the *level of exit discharge*, or the *exit access* outside the *dwelling unit*'s entrance door provides access to not less than two *approved* independent *exits*.

## TABLE 1006.3.3(1)STORIES AND OCCUPIED ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY AND OCCUPIED ROOF	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE	
Basement, first, second or third story above grade plane	R-2 <sup>a, b</sup>	4 dwelling units	125 feet	
Occupied roof over the first, second or third story above grade plane	<u>R-2 <sup>a, b</sup></u>	<u>NA</u>	<u>125 feet</u>	
Fourth story above grade plane and higher	NP	NA	NA	

For SI: 1 foot = 3048 mm.

NP = Not Permitted.

NA = Not Applicable.

a.Buildings classified as Group R-2 equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with *emergency escape and rescue openings* in accordance with Section 1030. b.This table is used for R-2 occupancies consisting of *dwelling units*. For R-2 occupancies consisting of *sleeping units*, use Table 1006.3.3(2).

## TABLE 1006.3.3(1)STORIES AND OCCUPIED ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY AND OCCUPIED ROOF	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE	
Basement, first, second or third story above grade plane	R-2 <sup>a, b</sup>	4 dwelling units	125 feet	
Occupied roof over the first, second or third story above grade plane	<u>R-2 <sup>a, b</sup></u>	<u>NA</u>	<u>125 feet</u>	
Fourth story above grade plane and higher	NP	NA	NA	

For SI: 1 foot = 3048 mm.

NP = Not Permitted.

NA = Not Applicable.

a.Buildings classified as Group R-2 equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with *emergency escape and rescue openings* in accordance with Section 1030. b.This table is used for R-2 occupancies consisting of *dwelling units*. For R-2 occupancies consisting of *sleeping units*, use Table 1006.3.3(2).

#### TABLE 1006.3.3(2) STORIES <u>AND OCCUPIED ROOFS</u> WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

STORY <u>AND OCCUPIED ROOF</u>	OCCUPANCY	MAXIMUM OCCUPANT LOAD PER STORY <u>AND</u> OCCUPIED ROOF	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet)
	A, B <sup>b</sup> , E F <sup>b</sup> , M, U	49	75
First story above or below grade plane	H-2, H-3	3	25
above grade plane	H-4, H-5, I, R-1, R-2 <sup>a, c</sup>	10	75
	S <sup>b, d</sup>	29	75
Second story above grade plane <u>and</u> occupied roof over the second story above grade plane	B, F, M, S <sup>d</sup>	29	75
Third story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

a.Buildings classified as Group R-2 equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with *emergency escape and rescue openings* in accordance with Section 1030. b.Group B, F and S occupancies in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 <u>or on the roof of such buildings</u> shall have a maximum *exit access* travel distance of 100 feet. c.This table is used for R-2 occupancies consisting of *sleeping units*. For R-2 occupancies consisting of *dwelling units*, use Table 1006.3.3(1).

d.The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

#### TABLE 1006.3.3(2) STORIES <u>AND OCCUPIED ROOFS</u> WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

STORY <u>AND OCCUPIED ROOF</u>	OCCUPANCY	MAXIMUM OCCUPANT LOAD PER STORY <u>AND</u> OCCUPIED ROOF	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet)
	A, B <sup>b</sup> , E F <sup>b</sup> , M, U	49	75
First story above or below grade plane	H-2, H-3	3	25
above grade plane	H-4, H-5, I, R-1, R-2 <sup>a, c</sup>	10	75
	S <sup>b, d</sup>	29	75
Second story above grade plane <u>and</u> occupied roof over the second story above grade plane	B, F, M, S <sup>d</sup>	29	75
Third story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

a.Buildings classified as Group R-2 equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with *emergency escape and rescue openings* in accordance with Section 1030. b.Group B, F and S occupancies in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 <u>or on the roof of such buildings</u> shall have a maximum *exit access* travel distance of 100 feet. c.This table is used for R-2 occupancies consisting of *sleeping units*. For R-2 occupancies consisting of *dwelling units*, use Table 1006.3.3(1).

d.The length of *exit access* travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

**Reason:** This is part of a series of 3 proposals dealing with occupied roofs. See BCAC proposals to the definition of penthouse and Section 1009.

The change to the title and heading in Table 1006.3.2 is for consistency with the text.

The proposed modifications to Section 1006 includes adding 'occupied roofs' to Table 1006.3.3(1) to clarify the conditions in which one exit or access to one exit is allowed for Group R-2 occupancies. The tables are modified to clarify that the occupied roofs are allowed 'over the allowable stories.'

Similarly this proposal adds 'occupied roofs' to Table 1006.3.3(2) to clarify the conditions in which one exit or access to one exit is allowed for the other occupancies. The table was also modified to clarify that the occupied roofs are allowed 'over the allowable stories.' A proposed modification to footnote b or the table clarifies that the allowable increase in exit access travel distance from 75 feet to 100 feet for properly sprinklered Group B, F and S occupancies also includes the roof area for these uses.

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. In 2017 the BCAC has held 3 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-action-committee-bcac.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This proposal provides clarification to a subject that was not previously addressed. The changes to the single occupant tables could allow for one exit stairway from an occupied roof instead of two.

## **Public Hearing Results**

### **Committee Action:**

**Committee Reason:** Where an occupied roof can have a single exit is an issue that needs to be addressed, however, in Table 1006.3.3(1) and 1006.3.3(2) the proposal would allow a single exit roof over what was previously allowed as a single exit story. The roof should be treated as a story and limited as such for a single exit – match the current allowed height rather than exceed the current height limits. (Vote: 9-5)

### **Assembly Action:**

None

Disapproved

E22-18

## **Individual Consideration Agenda**

**Public Comment 1:** 

IBC : TABLE 1006.3.3(1), TABLE 1006.3.3(2)

**Proponents:** Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

## 2018 International Building Code

## TABLE 1006.3.3(1)STORIES AND OCCUPIED ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY AND OCCUPIED ROOF	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE
Basement, first <del>,</del> <u>or</u> second <del>or third</del> story above grade plane	R-2 <sup>a, b</sup>	4 dwelling units	125 feet
Occupied roof over the first, second or third story above grade plane	R-2 <sup>a, b</sup>	NA	125 feet
Fourth story above grade plane and higher	NP	NA	NA
Occupied roof over third story above grade plane and higher	<u>NP</u>	NA	NA

For SI:

1 foot = 3048 mm.

NP = Not Permitted.

NA = Not Applicable.

- a. Buildings classified as Group R-2 equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with *emergency escape and rescue openings* in accordance with Section 1030.
- b. This table is used for R-2 occupancies consisting of *dwelling units*. For R-2 occupancies consisting of *sleeping units*, use Table 1006.3.3(2).

#### TABLE 1006.3.3(2) STORIES AND OCCUPIED ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

STORY AND OCCUPIED ROOF	OCCUPANCY	MAXIMUM OCCUPANT	
LOAD PER STORY AND OCCUPIED ROOF			
First story above or	A, B <sup>b</sup> , E F <sup>b</sup> , M, U	49	75
below	H-2, H-3	3	25
plane and occupied	H-4, H-5, I, R- 1, R-2 <sup>a, c</sup>	10	75
roofs over the first story above grade plane	S <sup>b, d</sup>	29	75
Second story above grade plane <del>and occupied roof over the second story <del>above</del> <del>grade</del> <del>plane</del></del>	B, F, M, S <sup>d</sup>	29	75
Third story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

- a. Buildings classified as Group R-2 equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with *emergency escape and rescue openings* in accordance with Section 1030.
- b. Group B, F and S occupancies in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or on the <u>occupied</u> roof of such buildings shall have a maximum *exit access* travel distance of 100 feet.
- c. This table is used for R-2 occupancies consisting of *sleeping units*. For R-2 occupancies consisting of *dwelling units*, use Table 1006.3.3(1).
- d. The length of *exit access* travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

**Commenter's Reason:** Per Section 1006.3, and occupied roof is treated as a story for purposes of means of egress. The change to Table 1006.3.2 is needed for consistency with that text.

The revisions for the single exit tables is to clarify where a single exit is permitted from an occupied roof. The original proposal allowed for a single exit roof over any single exit story. The modification would allow for a single exit roof above a single story building since that is the same vertical travel distance as permitted for a basement. The upper limit for two and three story buildings has been revised to only allow for a single exit roof at the same height as currently permitted for a single exit story.

The revisions to the footnotes under Table 1006.3.3(2) is for consistent language.

**Cost Impact:** The net effect of the public comment and code change proposal will decrease the cost of construction This proposal provides clarification to a subject that was not previously addressed. The changes to the single occupant tables could allow for one exit stairway from an occupied roof instead of two.

Public Comment# 577

## E29-18

IBC: 1009.2.1, (IFC[BE] 1009.2.1)

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

## 2018 International Building Code

#### Revise as follows:

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4. For purposes of determining where an elevator is required for accessible means of egress, in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, an occupied roof shall not be considered a story.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *ramp* conforming to the provisions of Section 1012.

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4. For purposes of determining where an elevator is required for accessible means of egress, in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, an occupied roof shall not be considered a story.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *ramp* conforming to the provisions of Section 1012.

**Reason:** This is part of a series of 3 proposals dealing with occupied roofs. See BCAC proposals to the definition of penthouse and Section 1006.

This is NOT for when an accessible route is required to an occupied roof. That is already addressed in Section 1104.4. This is ONLY for when an elevator would be required to serve as part of an accessible means of egress, and thus add a requirement for standby power. This allowance would only be applicable where there was an occupied roof on a 4 story building. If there is an occupied roof on any taller buildings, unless those buildings meet one of the other exceptions for ramps or horizontal exits, standby power would be required to all floors, including the occupied roof. The roof is required to be open to the outside, so there is not the accumulation for smoke that would be found on a typical interior floor – so that offers extra passive protection of occupants on the roof. Therefore, there did not seem to be any justification to require standby power for this limited situation. The stairways would still be required to comply with Section 1009 for accessible means of egress from the roof.

This proposal reinforces the concept that an occupied roof is not a story for the purpose of determining that an elevator is required as an accessible means of egress in properly sprinklered 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. In 2017 the BCAC has held 3 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-action-committee-bcac.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This clarifies that standby power is not required for an elevator serving an occupied roof on a 4 story building. Without this clarification, if standby power was required, that would be a significant cost increase.

## **IBC - Egress**

2018 Group A - Report of the Committee Action Hearing Results

## E29-18

### **Committee Action:**

Committee Reason: An occupied roof is not a story, so this needs a different approach. A story is defined as a space between a floor and a ceiling. See E30-18. (Vote: 11-3)

Assembly Motion:

**Online Vote Results:** 

Failed - Support 0% (0) Oppose 0% (0)

E29-18

## None

## Disapproved

E30-18

## E30-18

## **Proposed Change as Submitted**

Proponents: Micah Chappell, representing City of Seattle (micah.chappell@seattle.gov)

## 2018 International Building Code

#### Revise as follows:

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor <u>or occupied roof</u> is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *ramp* conforming to the provisions of Section 1012.

**Reason:** The code recognizes that there are practical limits to complete reliance on assisted evacuation of building occupants by fire personnel because of the limited availability of trained personnel or special devices. As a result, current ICC language requires an elevator be part of the accessible means of egress starting with the 4<sup>th</sup> story above the level of exit discharge (See 1009.2.1). Occupied roofs at the same level do not currently have this same requirement. The vertical travel distance encountered by a fire fighter performing an assisted rescue is the same whether the occupants are on an occupied roof on the 4<sup>th</sup> floor above the level of exit discharge or whether they are on the floor of the 4<sup>th</sup> story above the level of exit discharge more popular this becomes more of an issue for building departments around the country.

Occupied roofs at four or more stories above the level of exit discharge should be treated like occupied floors at the same level in the building. The occupant loads and hazards are similar between occupied roofs and occupied floors, the benefits to occupants and fire personnel from an elevator with emergency back-up power are similar, and a similar approach has been taken in other sections of the building code (see IBC Chapter 10 1006.3, 1006.3.2, and 1006.3.3). The 2018 IBC 1104.4 also requires at least one accessible route to each accessible story, mezzanine and occupied roof in multilevel buildings and facilities. If the requirements for an accessible route to the accessible level treat the occupied roof and accessible floor in the same manner, it is logical to conclude that the same level of protection for the accessible means of egress from an occupied roof should be required.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This proposal clarifies the current intent of the accessible means of egress provisions of IBC 1009.2.1. The added language clarifies that an area of refuge and emergency power/legally required standby power must be provided per IBC 1009.4 for an occupied roof that is four or more stories above the level of exit discharge.

No fiscal impact.

E30-18

## **Public Hearing Results**

### Committee Action:

### As Submitted

**Committee Reason:** This tells you when standby power is required for an elevator for building with an occupied roof. Occupied roofs are not currently addressed. The vertical distance for assisted rescue for a roof on the top of a 4 story building is the same as a 5<sup>th</sup> floor, so standby power should be required. Separate provisions for the occupied roof, to avoid confusion over if the occupied roof is a story, floor or level, would make this cleaner. There is an question with the

current exception for horizontal exits as an alternative for standby power being permitted on lower floors, which would not be buildable on the roof. Occupied roofs, by being open to the outside air, may be safer than the floor with horizontal exits. See E29-18. (Vote: 8-7)

### **Assembly Action:**

None

E30-18

## **Individual Consideration Agenda**

### **Public Comment 1:**

### IBC®:1009.2.1

**Proponents:** Micah Chappell, representing Seattle Department of Construction and Inspection (micah.chappell@seattle.gov) requests As Modified by Public Comment

#### Modify as follows:

## 2018 International Building Code

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor or occupied roof is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors <u>or occupied roof</u> provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *ramp* conforming to the provisions of Section 1012.

**Commenter's Reason:** Original proposal was approved by Committee. See 2018 Committee Action Hearing for original reason statement.

This modification coordinates the charging language change approved at the CAH with Exception 1.

Exception 1 acknowledges that a building that is fully sprinklered and a horizontal exit provides an acceptable level of protection. That level of protection is also achieved with an occupied roof meeting these criteria thus the exception should apply.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

No fiscal impact.

Public Comment# 779

E30-18

## E30-18

## **Proposed Change as Submitted**

Proponents: Micah Chappell, representing City of Seattle (micah.chappell@seattle.gov)

## 2018 International Building Code

#### Revise as follows:

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor <u>or occupied roof</u> is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *ramp* conforming to the provisions of Section 1012.

**Reason:** The code recognizes that there are practical limits to complete reliance on assisted evacuation of building occupants by fire personnel because of the limited availability of trained personnel or special devices. As a result, current ICC language requires an elevator be part of the accessible means of egress starting with the 4<sup>th</sup> story above the level of exit discharge (See 1009.2.1). Occupied roofs at the same level do not currently have this same requirement. The vertical travel distance encountered by a fire fighter performing an assisted rescue is the same whether the occupants are on an occupied roof on the 4<sup>th</sup> floor above the level of exit discharge or whether they are on the floor of the 4<sup>th</sup> story above the level of exit discharge more popular this becomes more of an issue for building departments around the country.

Occupied roofs at four or more stories above the level of exit discharge should be treated like occupied floors at the same level in the building. The occupant loads and hazards are similar between occupied roofs and occupied floors, the benefits to occupants and fire personnel from an elevator with emergency back-up power are similar, and a similar approach has been taken in other sections of the building code (see IBC Chapter 10 1006.3, 1006.3.2, and 1006.3.3). The 2018 IBC 1104.4 also requires at least one accessible route to each accessible story, mezzanine and occupied roof in multilevel buildings and facilities. If the requirements for an accessible route to the accessible level treat the occupied roof and accessible floor in the same manner, it is logical to conclude that the same level of protection for the accessible means of egress from an occupied roof should be required.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This proposal clarifies the current intent of the accessible means of egress provisions of IBC 1009.2.1. The added language clarifies that an area of refuge and emergency power/legally required standby power must be provided per IBC 1009.4 for an occupied roof that is four or more stories above the level of exit discharge.

No fiscal impact.

E30-18

## **Public Hearing Results**

### Committee Action:

### As Submitted

**Committee Reason:** This tells you when standby power is required for an elevator for building with an occupied roof. Occupied roofs are not currently addressed. The vertical distance for assisted rescue for a roof on the top of a 4 story building is the same as a 5<sup>th</sup> floor, so standby power should be required. Separate provisions for the occupied roof, to avoid confusion over if the occupied roof is a story, floor or level, would make this cleaner. There is an question with the

current exception for horizontal exits as an alternative for standby power being permitted on lower floors, which would not be buildable on the roof. Occupied roofs, by being open to the outside air, may be safer than the floor with horizontal exits. See E29-18. (Vote: 8-7)

### **Assembly Action:**

None

E30-18

## **Individual Consideration Agenda**

### **Public Comment 2:**

### IBC®: 1009.2.1

**Proponents:** Micah Chappell, representing Seattle Department of Construction and Inspection (micah.chappell@seattle.gov) requests As Modified by Public Comment

#### Modify as follows:

## 2018 International Building Code

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor or occupied roof is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors <u>or occupied roof</u> provided with a *ramp* conforming to the provisions of Section 1012.

**Commenter's Reason:** Original proposal was approved by Committee. See 2018 Committee Action Hearing for original reason statement.

This modification coordinates the charging language change approved at the CAH with Exception 2.

Exception 2 applies where sprinklers are provided, and the ramp provides an adequate route down for assisted rescue. That level of protection is also achieved with an occupied roof meeting these criteria thus the exception should apply.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

No fiscal impact.

Public Comment# 789

E30-18

## E30-18

## **Proposed Change as Submitted**

Proponents: Micah Chappell, representing City of Seattle (micah.chappell@seattle.gov)

## 2018 International Building Code

#### Revise as follows:

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor <u>or occupied roof</u> is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *ramp* conforming to the provisions of Section 1012.

**Reason:** The code recognizes that there are practical limits to complete reliance on assisted evacuation of building occupants by fire personnel because of the limited availability of trained personnel or special devices. As a result, current ICC language requires an elevator be part of the accessible means of egress starting with the 4<sup>th</sup> story above the level of exit discharge (See 1009.2.1). Occupied roofs at the same level do not currently have this same requirement. The vertical travel distance encountered by a fire fighter performing an assisted rescue is the same whether the occupants are on an occupied roof on the 4<sup>th</sup> floor above the level of exit discharge or whether they are on the floor of the 4<sup>th</sup> story above the level of exit discharge more popular this becomes more of an issue for building departments around the country.

Occupied roofs at four or more stories above the level of exit discharge should be treated like occupied floors at the same level in the building. The occupant loads and hazards are similar between occupied roofs and occupied floors, the benefits to occupants and fire personnel from an elevator with emergency back-up power are similar, and a similar approach has been taken in other sections of the building code (see IBC Chapter 10 1006.3, 1006.3.2, and 1006.3.3). The 2018 IBC 1104.4 also requires at least one accessible route to each accessible story, mezzanine and occupied roof in multilevel buildings and facilities. If the requirements for an accessible route to the accessible level treat the occupied roof and accessible floor in the same manner, it is logical to conclude that the same level of protection for the accessible means of egress from an occupied roof should be required.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This proposal clarifies the current intent of the accessible means of egress provisions of IBC 1009.2.1. The added language clarifies that an area of refuge and emergency power/legally required standby power must be provided per IBC 1009.4 for an occupied roof that is four or more stories above the level of exit discharge.

No fiscal impact.

E30-18

## **Public Hearing Results**

### Committee Action:

### As Submitted

**Committee Reason:** This tells you when standby power is required for an elevator for building with an occupied roof. Occupied roofs are not currently addressed. The vertical distance for assisted rescue for a roof on the top of a 4 story building is the same as a 5<sup>th</sup> floor, so standby power should be required. Separate provisions for the occupied roof, to avoid confusion over if the occupied roof is a story, floor or level, would make this cleaner. There is an question with the

current exception for horizontal exits as an alternative for standby power being permitted on lower floors, which would not be buildable on the roof. Occupied roofs, by being open to the outside air, may be safer than the floor with horizontal exits. See E29-18. (Vote: 8-7)

### **Assembly Action:**

None

E30-18

## **Individual Consideration Agenda**

### **Public Comment 3:**

IBC®:1009.2.1

**Proponents:** Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

#### Modify as follows:

## 2018 International Building Code

**1009.2.1 Elevators required.** In buildings where a required *accessible* floor or occupied roof is four or more stories above or below <u>a level of exit discharge or where an accessible occupied roof is above a story that is three or more stories above the level of exit discharge</u>, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4.

#### Exceptions:

1.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *horizontal exit* and located at or above the *levels of exit discharge*.

2.In buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the elevator shall not be required on floors provided with a *ramp* conforming to the provisions of Section 1012.

**Commenter's Reason:** The new language is confusing. An occupied roof is not a story. Therefore, to be clear, the requirement for an occupied roof should be dealt with separately. It is not the intent of this public comment to change to result of what was voted approved by the MOE Code Development Committee.

It is important to point out that the original change said that there was no fiscal impact. Since the occupied roof is not considered a story, with the 2018 text, it could have been interpreted that standby power was not required to an occupied roof on a 5 story building. Therefore, this does have a significant cost for a 4 story building that decides to have an occupied roof.

The result will be as follows:



 ${\sf Height} \cdot {\sf at} \cdot {\sf which} \cdot {\sf standby} \cdot {\sf power} \cdot {\sf would} \cdot {\sf be} \cdot {\sf required} \cdot {\sf on} \cdot {\sf the} \cdot {\sf elevator} \cdot {\sf for} \cdot {\sf accessible} \cdot {\sf MOE} \P$ 

T

This public comment is submitted by the ICC BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions there of. In 2017 and 2018 the BCAC has held 5 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 and public comments. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-action-committee-bcac

**Cost Impact:** The net effect of the public comment and code change proposal will increase the cost of construction This modification is a clarification of requirements, and will not change the requirement of the approved change. However, the original proposal claimed that there was no fiscal impact. Depending on how an occupied roof was interpreted, this could have <u>significant</u> fiscal impact by requiring standby power to the elevator in a 4 story building with an occupied roof.

Public Comment# 581

E38-18

## E38-18

## **Proposed Change as Submitted**

Proponents: Gregory Keith, representing The Boeing Company (grkeith@mac.com)

## 2018 International Building Code

### Revise as follows:

**1010.1 General.** *Means of egress* doors shall meet the requirements of this section. Doors serving a *means of egress* system shall meet the requirements of this section and Section 1022.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on *means of egress* doors. *Means of egress* doors shall not be concealed by curtains, drapes, decorations or similar materials.

### Add new text as follows:

**1020.1** General. Corridors serving as an exit access component in a means of egress system shall comply with the requirements of this section.

#### **Revise as follows:**

**1024.1** Exit passageways.<u>General</u>. Exit passageways serving as an exit component in a *means of egress* system shall comply with the requirements of this section. An *exit passageway* shall not be used for any purpose other than as a *means of egress* and a *circulation path*.

**1026.1** Horizontal exits.General. Horizontal exits serving as an exit in a means of egress system shall comply with the requirements of this section. A horizontal exit shall not serve as the only exit from a portion of a building, and where two or more exits are required, not more than one-half of the total number of exits or total exit minimum width or required capacity shall be horizontal exits.

### Exceptions:

1.Horizontal *exits* are permitted to comprise two-thirds of the required *exits* from any building or floor area for occupancies in Group I-2.

2.Horizontal *exits* are permitted to comprise 100 percent of the *exits* required for occupancies in Group I-3. Not less than 6 square feet (0.6 m2) of *accessible* space per occupant shall be provided on each side of the *horizontal exit* for the total number of people in adjoining compartments.

**1027.1** Exterior exit stairways and ramps.<u>General.</u> Exterior exit stairways and ramps serving as an element of <u>exit</u> component in a required means of egress system shall comply with the requirements of this section.

### Add new text as follows:

**1028.1** General. The exit discharge shall comply with Sections 1028 and 1029 and the applicable requirements of Sections 1003 through 1015.

### <u>1029</u> EGRESS COURTS

#### Revise as follows:

**1028.41029.1** Egress courts.General. Egress courts serving as a portion of the <u>an</u>exit discharge component in the means of egress system shall comply with the requirements of Sections 1028.4.1 and 1028.4.2. in this section.

**1028.4.1<u>1029.2</u> Width or capacity.** The required capacity of *egress courts* shall be determined as specified in Section 1005.1, but the minimum width shall be not less than 44 inches (1118 mm), except as specified herein. *Egress courts* serving Group R-3 and U occupancies shall be not less than 36 inches (914 mm) in width. The required capacity and width of *egress courts* shall be unobstructed to a height of 7 feet (2134 mm).

The width of the egress court shall be not less than the required capacity.

Exception: Encroachments complying with Section 1005.7.

#### Revise as follows:

**1028.4.21029.3** Construction and openings. Where an *egress court* serving a building or portion thereof is less than 10 feet (3048 mm) in width, the *egress court* walls shall have not less than 1-hour *fire-resistance-rated* construction for a distance of 10 feet (3048 mm) above the floor of the *egress court*. Openings within such walls shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour.

#### Exceptions:

1.Egress courts serving an occupant load of less than 10.

2.Egress courts serving Group R-3.

**Reason:** This is a series of editorial revisions intended to formalize the charging language of several sections within Chapter 10. The International Building Code is a so-called model code. Once adopted by a given political subdivision it becomes law. Having proper enabling or charging provisions for various technical requirements is legally necessary. Presently, Section 1020 for corridors contains no charging language. A general section has been created using the same format as is currently used in Section 1018 for aisles and Section 1019 for exit access stairways and ramps.

Section 1010.1 has been improved by adding the "General" section title to be consistent with other means of egress component sections. Additionally, the first and second sentences of Section 1010.1 are redundant. The first sentence has been deleted. The second sentence now clarifies that the section is applicable to gates and turnstiles consistent with the Section 1010 heading.

The titles of Sections 1024.1, 1026.1 and 1027.1 have been changed to "General" to be consistent with other means of egress component sections.

Lastly, egress courts are a means of egress component. In the Chapter 10 format, individual means of egress components have their own section. Currently, egress court provisions are located in Section 1028.4 within the exit discharge section. This proposal simply relocates the egress court technical provisions to a new Section 1029 so as to be consistent with other Chapter 10 provisions.

This proposal establishes the proper legal charging language for lacking sections. In doing so, it provides consistency within the various Chapter 10 means of egress component sections. Some practitioners are given to assigning an importance factor between different terms and formats. Approval of this proposal will clarify these important means of egress provisions.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This proposal is essentially editorial.

E38-18

## **Public Hearing Results**

### Committee Action:

**Committee Modification: 1010.1** <u>Doors General.</u> <u>Means of egress</u> doors shall meet the requirements of this <u>section.</u> Doors, gates and turnstiles serving a means of egress system shall meet the applicable requirements of this section and Section 1022.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on *means of egress* doors. *Means of egress* doors shall not be concealed by curtains, drapes, decorations or similar materials.

**Committee Reason:** The modification was to remove the change to Section 1010.1 from the proposal. The changes in E37-18 addressed this in a more comprehensive manner.

The revised language is consistent with the remainder of the sections in the code. There was concern about pulling Egress Courts out of the section for exit discharge without a general statement for this means of egress part as indicated

# As Modified

### **Assembly Action:**

## **Individual Consideration Agenda**

### **Public Comment 2:**

IBC®: 1029 (New), 1028.4, 1028.4.1, 1028.4.2

**Proponents:** Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Further modify as follows:

## 2018 International Building Code

1029 EGRESS COURTS

**1029.1** <u>1028.4</u> <u>General Egress courts</u>. Egress courts serving as an <u>a portion of the exit discharge</u> component in the means of egress system shall comply with the requirements in this section of Sections 1028.4.1 and 1028.4.2.

**1029.2** <u>1028. 4.1</u> Width or capacity. The required capacity of *egress courts* shall be determined as specified in Section 1005.1, but the minimum width shall be not less than 44 inches (1118 mm), except as specified herein. *Egress courts* serving Group R-3 and U occupancies shall be not less than 36 inches (914 mm) in width. The required capacity and width of *egress courts* shall be unobstructed to a height of 7 feet (2134 mm).

The width of the egress court shall be not less than the required capacity.

Exception: Encroachments complying with Section 1005.7.

**1029.3** <u>1028. 4.2</u> **Construction and openings.** Where an *egress court* serving a building or portion thereof is less than 10 feet (3048 mm) in width, the *egress court* walls shall have not less than 1-hour *fire-resistance-rated* construction for a distance of 10 feet (3048 mm) above the floor of the *egress court*. Openings within such walls shall be protected by opening protectives having a fire protection rating of not less than <sup>3</sup>/<sub>4</sub> hour.

#### Exceptions:

- 1.Egress courts serving an occupant load of less than 10.
- 2.Egress courts serving Group R-3.

**Commenter's Reason:** This proposal is to move the requirements for egress courts back into it's current position as a part of Section 1028. Splitting exit discharge into 2 sections is adding confusion for users. Also, the scoping language for exit discharge in more than one section was not proposed – so this could be a conflict with the format of Chapter 10 in the scoping for general, exit access and exit language in Sections 1003.1, 1016.1 and 1022.1.

This public comment is submitted by the ICC BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions there of. In 2017 and 2018 the BCAC has held 5 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 and public comments. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-action-committee-bcac

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This modification is returning existing text to it s orginal location. There are no changes in requirements.

## E108-18

## E108-18

## **Proposed Change as Submitted**

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

## 2018 International Building Code

### Revise as follows:

1030.1.1 Operational constraints and opening control devices. Emergency escape and rescue openings shall be operational from inside the room without the use of keys or tools. Window-opening control devices complying with ASTM F2090 shall be permitted for use on windows serving as a required emergency escape and rescue opening shall comply with ASTM F2090.

**Reason:** This is one of a series of 11 proposals to coordinate the Emergency Escape and Rescue Openings (EERO) technical criteria in the IBC and IRC. Please see the proposal for the definition of Emergency Escape and Rescue Openings for additional information. Due to the code development schedule the proposals for IBC will be proposed in Group A and the proposals for IRC will be proposed in Group B.

IBC - Last sentence reworded as a requirement to be consistent with IRC

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. In 2017 the BCAC has held 3 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-action-committee-bcac.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This is a coordination item for requirements for EEROs already permitted between the codes.

E108-18

Disapproved

## **Public Hearing Results**

### **Committee Action:**

Committee Reason: There is an errata to the IRC to Section R310.1.1. This will make the current language in the IRC and IBC match, so this revision is not necessary. (Vote 14-0)

### **Assembly Action:**

None

F108-18

## Individual Consideration Agenda

### **Public Comment 1:**

### IBC @: 1030.1.1

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

## 2018 International Building Code

**1030.1.1 Operational constraints and opening control devices.** *Emergency escape and rescue openings* shall be operational from inside the room without the use of keys or tools. Window-opening control devices on windows serving as a required *emergency escape and rescue opening* shall comply with <u>ASTM F2090</u><u>Section 1015.8</u>.

**Commenter's Reason:** The BCAC requested that this proposal be disapproved because there was a possibility that there was errata to the IRC that would make these sections the same. That was not the case. However, not all emergency escape and rescue openings (EEROs) are required to have a window opening control device that complies with ASTM F2090. The proposed revision will coordinate with Sections 1015.8. Section 1015.8 contains requirements other than compliance with the ASTM standard. The BCAC will provide coordinating proposals for EEROs for IRC in Group B.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

The standards are already included in Section 1015.8, so there is no change to requirements that would increase costs.

E109-18

## E109-18

## **Proposed Change as Submitted**

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

## 2018 International Building Code

#### Add new text as follows:

**1030.2** Emergency escape and rescue openings. Emergency escape and rescue openings shall have minimum dimensions in accordance with Section 1030.2.1 through 1030.2.3.

#### **Revise as follows:**

**1030.21030.2.1** Minimum size. Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53 m2).

**Exception:** The minimum net clear opening for *grade-floor emergency escape and rescue openings* shall be 5 square feet (0.46 m2).

**1030.2.1**<u>1030.2.2</u> Minimum dimensions. The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

1030.31030.2.3 Maximum height from floor. Emergency Where a window is provided as the emergency escape and rescue openings, such window shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.

**Reason:** This is one of a series of 11 proposals to coordinate the Emergency Escape and Rescue Openings (EERO) technical criteria in the IBC and IRC. Please see the proposal for the definition of Emergency Escape and Rescue Openings for additional information. Due to the code development schedule the proposals for IBC will be proposed in Group A and the proposals for IRC will be proposed in Group B. This proposal deals with Minimum size, dimensions and height.

IBC 310.3 - revise to coordinate language and organization with the IRC.

There will be a similar proposal to Group B for IRC:

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. In 2017 the BCAC has held 3 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-action-committee-bcac.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction This is a coordination item for requirements for EEROs already permitted between the codes.

E109-18

## **Public Hearing Results**

### **Committee Action:**

### Disapproved

**Committee Reason:** The change in the text to Section 1030.2.3 appears to be mandating a window. There is no sill height given for other openings. Emergency escape and rescue openings can be doors or other acceptable openings. (Vote 13-1)

## **Individual Consideration Agenda**

## Public Comment 1:

**Proponents:** Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests As Submitted

**Commenter's Reason:** One of the points of the 11 changes proposed for emergency escape and rescue opening (EERO) is that they can be doors or windows. The committee approved 9 of those changes during the code change hearings in April. This proposal is an important piece for coordination of the IRC and IBC requirements for EEROs. To address the committee's concerns - The threshold on doors is addressed in Section 1010. Section 1030.2.3 does not mandate windows, but says if window option is chosen, then there is maximum height of the bottom edge so that people can crawl out.

A complete version on what this section would look like if all 11 proposals passed was in the reason statement of G5-18. The following is the section related to door and window sizes. Section 1030.3 was approved in code change E110-18.

**1030.2 Emergency escape and rescue openings.** Emergency escape and rescue opening shall have minimum dimensions in accordance with Section 1030.2.1 through 1030.2.3.

**1030.2.1 Minimum size.** *Emergency escape and rescue openings* shall have a minimum net clear opening of 5.7 square feet (0.53 m<sup>2</sup>).

**Exception:** The minimum net clear opening for grade-floor emergency escape and rescue openings shall be 5 square feet  $(0.46 \text{ m}^2)$ .

**1030.2.2 Minimum dimensions.** The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

**1030.2.3 Maximum height from floor.** Where a window is provided as the *Emergency escape and rescue openings*, such window shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.

**1030.3 Emergency escape and rescue doors.** Where a door is provided as the required emergency escape and rescue opening, it shall be a swinging door or a sliding door.

The BCAC will provide coordinating proposals for EEROs for IRC in Group B.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This is a coordination item for requirements for EEROs already permitted between the codes.

Public Comment# 560

G140-18

## G140-18

## **Proposed Change as Submitted**

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

## 2018 International Building Code

### Revise as follows:

**3002.3 Emergency signs** for other than occupant evacuation elevators... Where other than occupant evacuation elevators are provided, an *approved* pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the <u>exit stairways exits</u> and not to use the elevators in case of fire. The sign shall read: IN CASE OF FIRE, ELEVATORS ARE OUT OF SERVICE. USE EXIT STAIRS.

### Exceptions Exception:

1. The emergency sign shall not be required for elevators that are part of an accessible *means of egress* complying with Section 1009.4.

2. The emergency sign shall not be required for elevators that are used for occupant self-evacuation in accordance with Section 3008.

### Add new text as follows:

**3002.3.1 Emergency signs for occupant evacuation elevators.** Where occupant evacuation elevators are provided, an approved pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use occupant evacuation elevators in the event of fire. The sign shall read: IN CASE OF FIRE , THIS OCCUPANT EVACUATION ELEVATOR IS AVAILABLE FOR EXITING THE BUILDING.

Analysis: Duplicated text in the International Fire Code not shown for brevity.

**Reason:** This is one of 17 proposals being submitted as a package relating to technical and organizational changes proposed for Chapter 6 of the Fire Code. While the Code Committees will consider each proposal independently, the intent is for approval of all proposals in this package which have been submitted as a correlated set of companion code change proposals.

This proposal correlates with the series of proposals to the IFC Chapter 6 submitted by the F-CAC for correlation of Elevator requirements and specification of required signage for all elevators.

This proposal addresses the emergency signage for the elevators in the IBC and the IFC. The changes are reflected in the IBC as these are the parent sections for these requirements. If approved this language will be duplicated in Chapter 6 of the IFC. This also correlates with the signage requirements in ASME A17.1. Exit stairways were changed to "exits" because there could be ramps instead of stairways.

Two distinct sections are established between occupant evacuation elevators and other than those elevators.

This proposal also adds standardized language to both the IBC and te IFC for occupant evacuation elevator signage to ensure consistency between codes and to provide clear and concise building occupant instruction for their use.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) in support of the FCAC's efforts. 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. In 2017 the BCAC has held 3 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/code-development-process/building-code-action-committee-bcac.

Cost Impact: The code change proposal will decrease the cost of construction

By providing standardized language for the emergency signs for occupant evacuation elevators, and correlating for consistency the standardized language for other elevators.

## **Public Hearing Results**

### **Committee Action:**

**Committee Reason:** There is confusion regarding cueing at elevator lobbies and whether the elevator is available or not. The proposal doesn't specify clearly. The code official may enforce the requirement at all elevator call stations, not just occupant elevators. The flaw in this proposal is dealing with the typical highrise situations. It is should not be every elevator in every lobby. The use of the term "is" will create a situation where occupants may wait for an elevator that never comes. Tinker with the words "is" and "may" and possibly "pictoral." There may be a way to link the signage to the visual requirement that is going to be part of the A117.1 automated system.....so that when someone goes to an elevator lobby they would know whether the elevator will come or not...or when to go to the stairs. There is a need to identify the elevators, but this is not the way to do it. Maybe simple a sign saying "evacuation elevator, "occupant elevator," "when directed," or "this elevator available...: (Vote: 14-0)

### **Assembly Action:**

None

G140-18

## **Individual Consideration Agenda**

### Public Comment 1:

IBC®: 3002.3, 3002.3.1 (New)

**Proponents:** Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

#### Modify as follows:

## 2018 International Building Code

**3002.3 Emergency signs for other than occupant evacuation elevators...** Where other than occupant evacuation elevators are provided, an *approved* pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exits and not to use the these elevators in case of fire. The sign shall read: IN CASE OF FIRE, ELEVATORS ARE OUT OF SERVICE. USE <u>AVAILABLE EXIT</u>.

#### Exception:

The emergency sign shall not be required for elevators that are part of an accessible *means of egress* complying with Section 1009.4.

**3002.3.1 Emergency signs for occupant evacuation elevators.** Where occupant evacuation elevators are provided <u>in accordance with Section 3008</u>, an approved pictorial sign of a standardized design shall be posted adjacent to each elevator call station <del>on all floors instructing <u>notifying</u> occupants to use occupant evacuation elevators in the event of fire. The sign shall read: <u>IN CASE OF FIRE, THIS <u>THESE</u> OCCUPANT EVACUATION <u>ELEVATOR IS AVAILABLE FOR EXITING THE</u> <u>BUILDING</u> <u>ELEVATORS ARE AVAILABLE AS AN EXIT</u>.</del></u>

**Commenter's Reason:** IBC Section 3008.1.1 requires that "signage shall be provided to denote which elevators are available for occupant evacuation." However, the code does not provide standardized language for that signage. Requiring standardized language would reduce confusion for the occupants regarding the use of these elevators, by providing consistency and clarity for the required signage.

As noted in the proposed new text for Section 3002.3.1, the standardized language for these occupant elevators is <u>only</u> applicable to the elevator call stations serving those elevators designated as occupant elevators in accordance with the requirements in IBC Section 3008.

Modifications have been made to the original proposal to address the specific direction from the code development committee.

### Disapproved

The proposed standardized language for the sign is in alignment with ASME A17.1.

This text is repeated in IFC Section 606.3.

**Cost Impact:** The net effect of the public comment and code change proposal will increase the cost of construction This would require a sign at occupant evacuation elevators. A sign was already required at other elevators.

Public Comment# 595