BCAC 2024 I-Code Group A proposals

Date: 1-23-2021

Following is a list of the proposals submitted for Group A by the Building Code Action Committee. These proposals are currently being processed. Some of them may break into parts for the hearings.

The table shows the proposals in the document. The proposals are in order by CdpAccess numbers at this time.

Any questions, please contact Kimberly Paarlberg at kpaarlberg@iccsafe.org.

Item	CAC Coord.	Section number	CDPAccess #	Code Change Number	Time	Topic	Testifier	Notes
Flam Gas	FCAC	IBC 307.4, 307.5	6057			High hazard classification of flammable gas		
General 1	None	IPMC 404.6	6270			Efficiency Dwelling units		
ADM 1	None	IBC 106	6271			Chapter 1 signage section		Group B
General 5	None	IBC 406.3.1	6292			Private Garages-previous area increase allowance		
General 2	None	IBC 202	6303			Occ. roof-Highrise		
General 12	FCAC	IBC 510.2, 707.3.11	6304			podium offset		
General 13-2	None	IBC 2020, 423	6307			Storm shelter		
General 14	None	IBC 3115	6315			Intermodal shipping containers		
OCC Item 5-1	None	IBC 3103.5	6333			Bleachers in Chapter 31		
OCC Item 8	FCAC	IBC 903.2.11.6, IFC 202, 903.2.11.6, 907.2.12	6336			Special amusement area		
Egress 18-1	None	IBC 1109.2	6337			folding and telescopic seating		
OCC Item 17		IBC 428 and IFC Chpt. 38	6362			Labs		IFC did not agree, so this is being submitted by Jeff O'Neil, Wayne Jewell and Andrew Kollar
OCC Item 9	None	IZC 202, 501.1, 901.2,3, 903	6365			Accessory dwelling units		
OCC Item 5-2	None	IBC Appendix Q	6411			Temporary uses		New standards in an Appendix
General 13-1	None	IPMC 202, 310	6435			Maintenance of storm shelter		
Item 35	PMGCAC	IBC 1202.1	6492			air leakage		
Item 30	PMGCAC	IBC 603.1.2	6544			plastic plumbing fixtures		
ADM 13-2	None	IBC 305, 308 and 310	6545			Scoping coordination - Day care		ADM Item 13 Proposal 1 is Group B
ADM 13-3	None	IBC 308, 310	6549			Scoping coordination - 5 or less custodial or medical care		
ADM 13-4	None	IBC 310	6552			Scoping coordination - Lodging houses		
ADM 13-5	None	IBC 508	6554			Scoping coordination - Live work units		
ADM 15	FCAC	IFC 105, 3103, 3105, 3106	6558			IFC permits for temporary structures		Assuming 105.6.21 and 105.6.24 can be coordination piece with this proposal
Egress 7	None	IBC 1108.7	6568			Type A unit exception		
Egress 8-1	None	IPMC 304.18.1	6570			deadbolts		
Egress 8-2	None	IBC 1010.2.4	6571			deadbolts		
Egress 12	None	IBC 1011.2	6572			terminology for accessible MOE		
Egress 22-2	None	IBC 1010.1.1	6573			shower door		
Egress 9	None	IBC 1008	6578			Means of egress and emergency egress lighting		
Egress 10	FCAC, PMGCAC	All codes	6593			"Accessibility" used in codes for 'access to'		
Egress 19	None	IBC 1108.6.1.1	6598			bathing facilities in hotels		
Egress 2	None	IBC 1031	6599			EERO		

Egress 18-2	None	IBC 1009.1	6601			bleacher common path of travel		
Egress 22-1	None	IBC 1010.1.1, 1003.3.1	6603			door stop		
Egress 22-3	None	IBC 202	6604			overhead door stop		
Egress 28	None	IBC 3001.5	6605			two way communication at elevators lobbies		
Egress 30	None	IBC E104.2	6606			hotel rooms with communication features		
Egress 33	None	IBC 1010.1.1, 1010.4	6607			door maximum width		
Egress 23	None	IBC 1010.2.3	6618			Pool barriers		
Egress 31	None	IBC 1006.3.4, 1031.2	6619			Coord. With single exits		
Egress 3-2A	None	IBC 1009.2.1	6620			Occupied roof - terminology for AMEO		
Egress 3-2B	None	IBC 1009.2.1	6622			Occupied roof - ramp to roof		
Egress 3-2C	None	IBC 1009.2.1	6623			Occupied roof - horizontal exit		
Egress 3-3	None	IBC 503	6624			Occupied roof - guards		
Egress 3-1	None	IBC 1006	6625			Occupied roof - single exit		
5.8.1	FCAC	IBC 306.2, 306.3, 311.2, 311.3	6855			Fire protection for distilleries		
Egress 35	None	IBC 1031.2	6861			EERO path or travel		
Egress 32	None	IBC 202, 1010.2.15	6862			Control vestibule		
Egress 29	None	IBC 1006.3.4, 3006.5	6863			exits from elevator lobbies		
Egress 20-1	None	IBC 1105.1	6864			automatic doors - multi-use		
Egress 20-2	None	IBC 1105.1	6865			automatic doors- strip mall		
Egress 20-4	None	IBC 202	6866			automatic doors - definitions		
Egress 20-3	None	IBC 1105.1.1	6867			automatic doors - door terms		
Egress 11-1	None	IBC 1103.2.11, 1108.6.3	6868			Small hotels are R-3		
Egress 11-2	None	IBC 310.3	6869			Group R-3 hotels		
Egress 11-3	None	IBC 310.3	6870			fire department dorms		
Egress 6-4	FCAC	IBC 707.6	6871			elevator doors in fire barriers		
Egress 6-1	FCAC	IBC 713, 716, 3002, 3006	6872			elevator hoistway enclosure		
Egress 6-2	FCAC	IBC 708. 709, 710, 3006, 3007, 3008	6874			elevator lobby enclosure		
Egress 6-3	None	IBC 1020, 3006	6876			elevator hoistway doors in rated corridor		
1.4-2A	FCAC	IBC varies	6949			Occupied roof definition		
Egress 6-5	FCAC	IBC 716.2.2, 1020.2.1	6970			smoke draft in 2 and 3 story buildings		
General 8	PMGCAC FCAC	Various	7016			mandatory language		A lot of this is [A] which is group B - which would leave IBC, IZC and IFC
1.4-2B	FCAC	IBC 202, 1505.10, 1507.15.1	7067			Landscaped to vegetative roof		
1.4-5	FCAC	IBC 202. 1510	7092			Raised Deck Systems		Group B proposal to Chapter 15
OCC 6	None	IBC 509	7475					

High Hazard Classification of Flammable Gas (6057)

IBC: [F] 307.4, [F] 307.5

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

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

2021 International Building Code

Revise as follows:

[F] 307.4 High-hazard Group H-2. Buildings and structures containing materials that pose a deflagration hazard or a hazard from accelerated burning shall be classified as Group H-2. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA *flammable or combustible liquids* that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103.4 kPa).
Combustible dusts where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3.
Cryogenic fluids, flammable.
Category 1A *Flammable gases.*
Category 1B *Flammable gases* having a burning velocity greater than 3.9 in/s (10 cm/s).
Organic peroxides, Class I.
Oxidizers, Class 3, that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103 kPa).
*Pyrophoric*liquids, solids and gases, nondetonable.
Unstable (reactive) materials, Class 3, nondetonable.
Water-reactive materials, Class 3.

[F] 307.5 High-hazard Group H-3. Buildings and structures containing materials that readily support combustion or that pose a *physical hazard* shall be classified as Group H-3. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA *flammable or combustible liquids* that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103.4 kPa) or less
Combustible fibers, other than densely packed *baled cotton*, where manufactured, generated or used in such a manner that the concentration and conditions create a fire or *explosion* hazard based on information prepared in accordance with Section 414.1.3
Consumer *fireworks*, 1.4G (Class C, Common)
Cryogenic fluids, oxidizing
Category 1B *flammable gases* having a burning velocity of 3.9 in/s (10 cm/s) or less
Flammable solids
Organic peroxides, Class II and III
Oxidizers, Class 2
Oxidizers, Class 3, that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103 kPa) or less
Oxidizing gases
Unstable (reactive) materials, Class 2
Water-reactive materials, Class 2

Reason: This change coordinates the classification of high hazard with the change in definition to “flammable gas.” Category 1A flammable gases have an explosive component in that their deflagration index is extremely low. By comparison, Category 1B flammable gases with a burning velocity of 3.9 in/s or less have a very high deflagration index. Thus, there is a significant difference in the hazard level between the two flammable gas categories.The more appropriate classification for a Category 1B flammable gas with a burning velocity of 3.9 in/s or less appears to be Use Group H-3. This classification can be supported by a comparison of level of hazard identified in the code change to the MAQ table for flammable gas. The minimum ignition energy varies by as much at 58,000 times. The heat of combustion is between 6 and 19 percent of these Category 1B flammable gases. Thus, Use Group H-3 is the proper classification for Category 1B flammable gas with a burning velocity of 3.9 in/s or less.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC) and 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will decrease the cost of construction
This code change reduces the cost of construction. By modifying the Use Group for Category 1B flammable gas, the construction costs are also lowered. The construction costs for Category 1A flammable gas remain unchanged, neither increased nor decreased in the cost of construction.

BCAC General Item 1-Efficiency unit (6270)

IPMC: 404.6

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

2021 International Property Maintenance Code

Revise as follows:

404.6 Efficiency unit. Nothing in this section shall prohibit an efficiency living unit from meeting the following requirements:

1. A unit occupied by not more than one *occupant* shall have a minimum clear floor area of 120 square feet (11.2 m^2). A unit occupied by not more than two *occupants* shall have a minimum clear floor area of ~~220~~ 190 square feet (~~20.4~~ 17.6 m^2). A unit occupied by three *occupants* shall have a minimum clear floor area of ~~320~~ 260 square feet (~~29.7~~ 24.1 m^2). These required areas shall be exclusive of the areas required by Items 2 and 3.
2. The unit shall be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a minimum clear working space of 30 inches (762 mm) in front. Light and *ventilation* conforming to this code shall be provided.
3. The unit shall be provided with a separate *bathroom* containing a water closet, lavatory and bathtub or shower.
4. The maximum number of *occupants* shall be three.

Reason: This proposal aims to correlate the minimum clear floor area requirements for efficiency dwelling units between the IPMC to that of the IBC. There was a similar proposal last cycle, G130-18 Part II. The proposal was rejected because of the inclusion for Type A and Type B unit, therefore, we removed that from the proposal.
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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will decrease the cost of construction
The correlation for the IPMC to match that of the IBC for occupied units, reduces the square footage for minimum clear floor area.

BCAC General -Item 5-Allowable Area (6292)

IBC: 406.3.1, 406.3.2 (New)

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

2021 International Building Code

Revise as follows:

406.3.1 Classification. *Private garages* and carports shall be classified as Group U occupancies. ~~Each *private garage* shall be not greater than 1,000 square feet (93 m^2) in area. Multiple *private garages* are permitted in a building where each *private garage* is separated from the other *private garages* by 1-hour *fire barriers* in accordance with Section 707, or 1-hour *horizontal assemblies* in accordance with Section 711, or both.~~

Add new text as follows:

406.3.2 Allowable Area. Each private garage shall be not greater than 1,000 square feet (93 m^2) in area. Multiple private garages are permitted in a building where each private garage is separated from the other private garages by 1-hour fire barriers in accordance with Section 707, or 1-hour horizontal assemblies in accordance with Section 711, or both. Where located in a mixed occupancy building, the allowable area of the building shall be determined by including the area of the private garages as part of the area for one of the other occupancies.

Reason: This proposal is to re-instate a provision that G59-12 incidentally removed. Item 1 of Section 406.3.2 of the 2012 IBC provided a path to include the area of a private garage as part of the major occupancy of the building. This allowed for attached private garages in buildings where they are commonly located to not cause a significant reduction in the allowable area of the entire building. G59-12 removed that provision without providing another measure to address it. Not allowing this often creates an unnecessary and significant reduction in the allowable area of the building. For instance, where located in a Group B or M, as the private garage is classified as a U, the allowable area of the non-sprinklered building is 5,500 instead of 9,000. Section 406.3.2, which does address other occupancies, would require compliance with 508 and therefore require a 2-hour fire barrier to allow minimal additional area.
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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will decrease the cost of construction
This proposal will result in a reduction in cost of construction in cases where it will allow for a larger building without having to go to a more restrictive type of construction, or other method of area increase.

BCAC General-Item 2-Occ. roof-Highrise-proposal 4 (6303)

IBC: SECTION 202

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

2021 International Building Code

Revise as follows:

[BG] HIGH-RISE BUILDING. A building with the floor of an occupied ~~floor~~ story located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

Reason: The intent of this proposal is to clarify that an occupied roof that is over 75' where the floor is below 75' does not make this building a high-rise. Also thinking into the future, changing an unoccupied roof to an occupied roof should not change the building requirements to this extent. An open to the air occupied roof does not increase the hazard the same as a story.
If you make this a high-rise what could be added is additional alarm systems requirements, additional requirements for sprinklers, additional special inspections, luminous egress markings in the stairways, a fire command center, standpipes, secondary water supply, smoke detection systems, separation between stairway enclosures, smokeproof enclosures, etc. A justification or need for these systems for just an occupied roof has not been demonstrated.

This would be consistent with the change to Section 503.1.4 –

503.1.4 Occupied roofs. A roof level or portion thereof shall be permitted to be used as an occupied roof provided the occupancy of the roof is an occupancy that is permitted by Table 504.4 for the story immediately below the roof. The area of the occupied roofs shall not be included in the building area as regulated by Section 506. An occupied roof shall not be included in the building height or number of stories as regulated by Section 504, provided the penthouses and other enclosed roof structures comply with Section 1511.

Exceptions:

1. The occupancy located on an occupied roof shall not be limited to the occupancies allowed on the story immediately below the roof where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and occupant notification in accordance with Section 907.5 Sections 907.5.2.1 and 907.5.2.3 is provided in the area of the occupied roof. Emergency voice/alarm communication system notification per Section 907.5.2.2 shall also be provided in the area of the occupied roof where such system is required elsewhere in the building.

2. (no change to this exception)

A floor is a floor & a roof is a roof. Just because a roof is an "occupied" roof, does not make it a floor. The code has had provisions related to adequate egress from "occupied" roofs for years without classifying the roof as an occupancy for purposes of other code issues including height/area limitations, mixed uses, sprinklers, or type of construction.

The IBC currently requires a minimum of one standpipe hose connection needs to be extended to the roof (Section 905.4 – 2021 IBC).

It should be noted that there are new provisions in the 2015 IBC (Section 903.2.1.6) which addresses sprinkler protection due to an occupied roof and in the 2018 IBC (Section 503.1.4) which address occupied roofs based on the floor immediately below the roof. In both cases, if sprinkler protection is provided throughout the building, whether the roof is an occupied roof has no bearing on height/area limitations, occupancy separation requirements or the classification of the building as a high-rise.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The technical criteria for high-rises would not change. This is a clarification. The opposite interpretation could have a significant increase in building costs because of the additional system indicated in the reason.

BCAC General Item 12 -Podium separation (6304)

IBC: 510.2, 707.3.11 (New)

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Building Code

Revise as follows:

510.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of *fire walls*, limitation of number of *stories* and type of construction where the following conditions are met:

1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours. Where ~~vertical offsets are provided as part of~~ a *horizontal assembly* contains vertical offsets , the vertical offset ~~and the structure supporting the vertical offset~~ shall be constructed as a fire barrier in accordance with Section 707 and shall have a *fire-resistance rating* of not less than 3 hours.
2. The building below, including the *horizontal assembly* and any associated vertical offsets, is of Type IA construction.
3. *Shaft, stairway, ramp* and escalator enclosures through the *horizontal assembly* shall have not less than a 2-hour *fire-resistance rating* with opening protectives in accordance with Section 716.

   Exception: Where the enclosure walls below the *horizontal assembly* have not less than a 3-hour *fire-resistance rating* with opening protectives in accordance with Section 716, the enclosure walls extending above the *horizontal assembly* shall be permitted to have a 1-hour *fire-resistance rating*, provided that the following conditions are met:

   1. The building above the *horizontal assembly* is not required to be of Type I construction.
   2. The enclosure connects fewer than four stories.
   3. The enclosure opening protectives above the *horizontal assembly* have a *fire protection rating* of not less than 1 hour.

4. *Interior exit stairways* located within the Type IA building are permitted to be of combustible materials where the following requirements are met:

   4.1. The building above the Type IA building is of Type III, IV, or V construction.

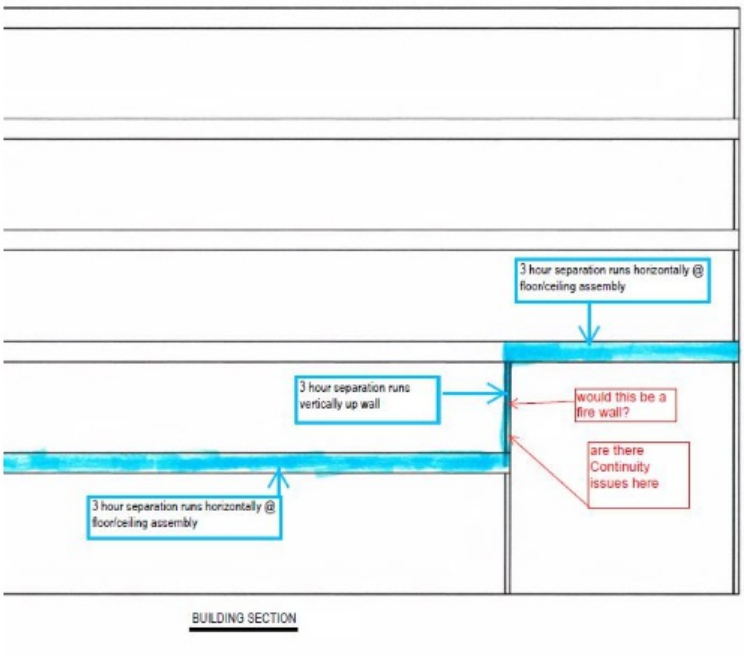
   4.2. The *stairway*located in the Type IA building is enclosed by 3-hour fire-resistance-rated construction with opening protectives in accordance with Section 716.

5. The building or buildings above the *horizontal assembly* shall be permitted to have multiple Group A occupancy uses, each with an *occupant load* of less 300, or Group B, M, R or S occupancies.
6. The building below the *horizontal assembly* shall be protected throughout by an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.
7. The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the *grade plane*.

Add new text as follows:

707.3.11 Horizontal separation offsets. The fire-resistance rating of a fire barrier serving as the vertical offset in a horizontal building separation shall comply with Section 510.2.

Reason: The code provides for the allowance of vertical offsets in horizontal building separations, but does not clarify how the separation must be constructed other than to also be 3-hour rated. This code proposal fills in the gap so that users know what type of assembly must be used, fire barriers, and subsequently how to address openings, penetrations, joints, continuity, etc. This also clarifies that the vertical offset must also be Type 1A construction just like the horizontal assembly does.



This proposal is submitted by the ICC Fire Code Action Committee (FCAC) and the ICC Building Code Action Committee (BCAC).
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Cost Impact: The code change proposal will not increase or decrease the cost of construction
This proposal only provides clear direction as to how the vertical offset must be constructed, in the manner that it likely commonly is.

BCAC General Item 13-ICC 500-STORM SHELTERS (6307)

IBC: SECTION 202, SECTION 423, 423.1, 423.3.1, 423.5.1

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

2021 International Building Code

Revise as follows:

[BG] STORM SHELTER. A building, structure or portions thereof, constructed in accordance with ICC 500 and designated for use during ~~a severe wind storm event, such as a~~ ~~hurricane~~ ~~or~~ ~~tornado~~ hurricanes, tornadoes or other severe windstorms.

SECTION 423 STORM SHELTERS

Revise as follows:

423.1 General. This section applies to the design and construction of storm shelters constructed as separate detached buildings or constructed as rooms or spaces within buildings for the purpose of providing protection from ~~storms that produce high winds, such as~~ tornadoes~~ , and~~ hurricanes~~,~~ and other severe windstorms during the storm. This section specifies where *storm shelters* are required and provides requirements for the design and construction of *storm shelters*. Design of facilities for use as emergency shelters after the storm are outside the scope of ICC 500 and shall comply with Table 1604.5 as a *Risk Category* IV Structure.

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

Exceptions:

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

423.5.1 ~~Required~~ Design occupant capacity. The required design occupant capacity of the *storm shelter* shall include all of the buildings on the site and shall be the greater of the following:

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

Exceptions:

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

Reason: ICC 500, a current reference standard in the IBC, IRC and IEBC, was recently updated to a 2020 edition for reference in the 2021 I-Codes. The new edition made some minor revisions to terminology differences that need to be reflected in the corresponding IBC Section 423 language. The key changes are as follows:

- Refer consistently to “tornadoes, hurricanes and other severe windstorms” to reflect that extratropical events are called hurricanes, typhoons or cyclones depending on region.
- Replace “occupant load” with design occupant capacity” to reflect ICC-500’s unique calculation of shelter capacity, which is different from the occupant load used in the IBC to size means of egress.
- Clarifying the term “community shelters” includes those shelters open to the general public, those open only to the occupants of the building served by the shelter, or both.

A corresponding proposal will be submitted in Group B to update Section R323 of the 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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The changes are editorial and necessary for correlation with ICC-500. They do not impact the way storm shelters are designed and constructed.

BCAC GENERAL ITEM 14-INTERMODAL SHIPPING CONTAINERS (6315)

IBC: SECTION 3115, 3115.8.4, 3115.8.4.2, 3115.8.4.3, 3115.8.5, 3115.8.5.2, 3115.8.5.3, TABLE 3115.8.5.3

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

2021 International Building Code

Revise as follows:

SECTION 3115 INTERMODAL SHIPPING CONTAINERS

3115.8.4 Detailed structural design procedure. A structural analysis meeting the requirements of this section shall be provided to the *building official* to demonstrate the structural adequacy of the intermodal shipping containers.

Exception: Intermodal shipping containers designed in accordance with Section 3115.8.5.

3115.8.4.2 Seismic design parameters. The seismic force-resisting system shall be designed and detailed in accordance with one of the following:

1. Where all or portions of the ~~corrugated steel~~ intermodal shipping container ~~sides~~ elements are considered to be the seismic force-resisting system, design and detailing shall be in accordance with the ASCE 7, Table 12.2-1 requirements for light-frame bearing-wall systems with shear panels of all other materials.
2. Where portions of the ~~corrugated steel~~ intermodal shipping container ~~sides~~ elements are retained, but are not considered to be the seismic force-resisting system, an independent seismic force-resisting system shall be selected, designed and detailed in accordance with ASCE 7, Table 12.2-1.
3. Where portions of the ~~corrugated steel~~ intermodal shipping container ~~sides~~ elements are retained and integrated into a seismic force-resisting system other than as permitted by Section 3115.8.4.2 Item 1, seismic design parameters shall be developed from testing and analysis in accordance with Section 104.11 and ASCE 7, Section 12.2.1.1 or 12.2.1.2.

3115.8.4.3 Allowable shear value. The allowable shear values for the *intermodal shipping container* ~~corrugated steel sheet panel~~ side walls and end walls shall be demonstrated by testing and analysis accordance with Section 104.11. Where penetrations are made in the side walls or end walls designated as part of the lateral force-resisting system, the p enetrations shall be substantiated by rational analysis.

3115.8.5 Simplified structural design procedure of single-unit containers. Single-unit *intermodal shipping containers* conforming to the limitations of Section 3115.8.5.1 shall be permitted to be designed in accordance with ~~the simplified structural design provisions of Section~~3115.8.5.2 Sections 3115.8.5.2 and 3115.8.5.3.

3115.8.5.2 ~~Simplified structural~~ Structural design assumptions. Where permitted by Section 3115.8.5.1, single-unit, stand-alone intermodal shipping containers shall be designed using the following assumptions for the~~corrugated steel shear~~ side walls and end walls:

1. The appropriate detailing requirements contained in Chapters 16 through 23.
2. Response modification coefficient, R = 2.
3. Overstrength factor, Ω_0 = 2.5.
4. Deflection amplification factor, C_d = 2.
5. Limits on structural height, h_n = 9.5 feet (2900 mm).

3115.8.5.3 Allowable shear. The allowable shear for the ~~corrugated steel~~ intermodal shipping container side walls (longitudinal) and end walls (transverse) for wind design and seismic design using the coefficients of Section 3115.8.5.2 shall be in accordance with Table 3115.8.5.3, provided that all of the following conditions are met:

1. The total linear length of all openings in any individual side wall or end wall shall be limited to not more than 50 percent of the length of that side wall or end wall, as shown in Figure 3115.8.5.3(1).
2. Any full-height wall length, or portion thereof, less than 4 feet (305 mm) shall not be considered as a portion of the lateral force-resisting system, as shown in Figure 3115.8.5.3(2).
3. All side walls or end walls used as part of the lateral force-resisting system shall have an existing or new boundary element on all sides to form a continuous load path, or paths, with adequate strength and stiffness to transfer all forces from the point of application to the final point of resistance, as shown in Figure 3115.8.5.3(3).

4. Where openings are made in the intermodal shipping container walls, floors or roofs, for doors, windows and other openings:

   4.1 The openings shall be framed with steel elements that are designed in accordance with Chapters 16 and 22.

   4.2 The cross section and material grade of any new steel element shall be equal to or greater than the steel element removed.

5. A maximum of one penetration not greater than 6 inches (152 mm) in diameter for conduits, pipes, tubes or vents, or not greater than 16 square inches (10 323 mm^2) for electrical boxes, is permitted for each individual 8-foot (2438 mm) length of lateral force-resisting wall. Penetrations located in walls that are not part of the lateral force-resisting system shall not be limited in size or quantity. Existing *intermodal shipping container* vents shall not be considered a penetration, as shown in Figure 3115.8.5.3(4).

6. End wall doors designated as part of the lateral force-resisting system shall be welded closed.

TABLE 3115.8.5.3
ALLOWABLE SHEAR VALUES FOR INTERMODAL SHIPPING CONTAINER ~~CORRUGATED STEEL~~ SIDE WALLS AND END WALLS FOR WIND OR SEISMIC LOADING

CONTAINER DESIGNATION[b]	CONTAINER DIMENSION (nominal length)	CONTAINER DIMENSION (nominal height)	ALLOWABLE SHEAR VALUES (PLF)[a, c]	
			Side Wall	End Wall
1EEE	45 feet	9.5 feet	75	843
1EE		8.5 feet		
1AAA	40 feet	9.5 feet	84	
1AA		8.5 feet		
1A		8.0 feet		
1AX		< 8.0 feet		
1BBB	30 feet	9.5 feet	112	
1BB		8.5 feet		
1B		8.0 feet		
1BX		< 8.0 feet		
1CC	20 feet	8.5 feet	168	
1C		8.0 feet		
1CX		< 8.0 feet		
1D	10 feet	8.0 feet	337	
1DX		< 8.0 feet		

For SI: 1 foot = 304.8 mm.

a. The allowable strength shear values for the side walls and end walls of the intermodal shipping containers are derived from ISO 1496-1 and reduced by a factor of safety of 5.

b. Container designation type is derived from ISO 668.

c. Limitations of ~~Section~~ Sections 3115.8.5.1 and 3115.8.5.3 shall apply.

Reason: Most of the modifications contained in this code change proposal represent editorial changes to terminology as a result of comments received following the introduction of the Intermodal Shipping Container proposals in 2018 and 2019. These comments included concerns about redundancy and including language that is consistent with Chapter 16 Structural provisions.
3115.8.4. Proposed editorial change to the subsection title to insert the word “structural” to reflect that the design provision contained herein is structural in nature.

3115.8.4.2 Item 3. Proposed editorial change to reference the correct section. The intended section reference is supposed to be 3115.8.4.2 Item 1, not 3115.4.2 Item 1 as that section does not exist.

3115.8.4.2, 3115.8.5.2, 3115.8.5.3, and Table 3115.8.5.3. During the Code Action Hearing for the 2018 Group A Code Development Cycle, the Code Action Committee recommended to the proponent to change the wording as part of a public comment. This was inadvertently missed during the Public Comment Hearing. This proposed editorial change is to strike out the words “corrugated steel” and “sides” and replace with the words “intermodal shipping container” and “elements”. The intent to emphasize the entirety of the structural elements (i.e., corrugated steel, top and bottom railing, and side columns) contributes to the lateral force resisting system and not just the individual corrugated steel component.

3115.8.5. Proposed editorial change to the subsection title to insert the word “procedure” reflect the emphasis on structural design procedure of this provision.

Table 3115.8.5.3. Proposed editorial change to the table footnote (a) to insert the word “value” to properly complete the sentence and table footnote (c) to include sections with the applicable conditions for using this table.

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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The proposed changes are editorial in nature, does not change any technical requirement, and as a result should not have any impact on construction cost.

BCAC Occupancy Item 5 Temporary bleachers (6333)

IBC: 3103.1, 3103.5 (New)

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

2021 International Building Code

Revise as follows:

3103.1 General. The provisions of Sections 3103.1 through ~~3103.4~~ 3103.5 shall apply to structures erected for a period of less than 180 days. *Special event structures*, tents, umbrella structures and other membrane structures erected for a period of less than 180 days shall also comply with the *International Fire Code*. Those erected for a longer period of time shall comply with applicable sections of this code.

Add new text as follows:

3103.5 Bleachers. Temporary bleachers,grandstandsandfolding and telescopic seating, that are not building elements, shall comply withICC 300.

Reason: The ICC 300 includes provisions for relocated and temporary bleachers. This information should be included in the IBC Chapter 31 requirements, so it does not get missed for seasonal venues or items such as seating for parades. The definition of 'temporary special event structures' in the IFC says that applies to items not addressed in IBC, so a similar reference in IFC is not needed.
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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There is already a reference for ICC 300 in IBC Chapter 10, therefore, this is not a change in requirements.

BCAC Occupancy Item 8 FCAC WG5.5-Special amusement buildings (6336)

IFC: SECTION 202, 105.5.3, TABLE 903.2.11.6, 907.2.12; IBC: TABLE 903.2.11.6

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Fire Code

Revise as follows:

SPECIAL AMUSEMENT ~~BUILDING~~ AREA. ~~A building that is temporary, permanent or mobile that contains a device or system that conveys passengers or provides a walkway along, around or over a course in any direction as a form of amusement arranged so that the egress path is not readily apparent due to visual or audio distractions or an intentionally confounded egress path, or is not readily available because of the mode of conveyance through the building or structure.~~ A special amusement area is any temporary or permanent building or portion thereof that is occupied for amusement, entertainment or educational purposes and is arranged in a manner that:

1. Makes the means of egress path not readily apparent due to visual or audio distractions.
2. Intentionally confounds identification of the means of egress path.
3. Otherwise makes the means of egress path not readily available because of the nature of the attraction or mode of conveyance through the building or structure.

105.5.3 ~~Amusement buildings~~ Special amusement areas. An operational permit is required to operate a special amusement ~~building~~ area.

TABLE 903.2.11.6
ADDITIONAL REQUIRED FIRE PROTECTION SYSTEMS

SECTION	SUBJECT
903.2.10.2	Mechanical-access enclosed parking garages
914.2.1	Covered and open mall buildings
914.3.1	High-rise buildings
914.4.1	Atriums
914.5.1	Underground structures
914.6.1	Stages
914.7.1	Special amusement ~~buildings~~ areas
914.8.2	Airport traffic control towers
914.8.3, 914.8.6	Aircraft hangars
914.9	Flammable finishes
914.10	Drying rooms
914.11.1	Ambulatory care facilities
1030.6.2.3	Smoke-protected assembly seating
1103.5.1	Existing Group A occupancies
1103.5.2	Pyroxylin plastic storage in existing buildings
1103.5.3	Existing Group I-2 occupancies
1103.5.5	Existing Group I-2, Condition 2 occupancies
1103.5.5	Pyroxylin plastics
Table 1207.7, Table 1207.8, Table 1206.9, Table 1206.10	Stationary and mobile energy storage systems
2108.2	Dry cleaning plants
2108.3	Dry cleaning machines
2309.3.1.5.2	Hydrogen motor fuel-dispensing area canopies
2404.2	Spray finishing in Group A, E, I or R
2404.4	Spray booths and spray rooms
2405.2	Dip-tank rooms in Group A, I or R
2405.4.1	Dip tanks
2405.9.4	Hardening and tempering tanks
2703.10	HPM facilities
2703.10.1.1	HPM work station exhaust
2703.10.2	HPM gas cabinets and exhausted enclosures
2703.10.3	HPM exit access corridor
2703.10.4	HPM exhaust ducts
2703.10.4.1	HPM noncombustible ducts
2703.10.4.2	HPM combustible ducts
2807.3	Lumber production conveyor enclosures
2808.7	Recycling facility conveyor enclosures
3006.1	Class A and B ovens
3006.2	Class C and D ovens
Table 3206.2	Storage fire protection
3206.4	Storage
3210.1.1	Record storage over 12 feet
3704.5	Storage of more than 1,000 cubic feet of loose combustible fibers

5003.8.4.1	Gas rooms
5003.8.5.3	Exhausted enclosures
5004.5	Indoor storage of hazardous materials
5005.1.8	Indoor dispensing of hazardous materials
5104.4.1	Aerosol product warehouses
5106.3.2	Aerosol display and merchandising areas
5306.2.1	Exterior medical gas storage room
5306.2.2	Interior medical gas storage room
5306.2.3	Medical gas storage cabinet
5606.5.2.1	Storage of smokeless propellant
5606.5.2.3	Storage of small arms primers
5704.3.7.5.1	Flammable and combustible liquid storage rooms
5704.3.8.4	Flammable and combustible liquid storage warehouses
5705.3.7.3	Flammable and combustible liquid Group H-2 or H-3 areas
6004.1.2	Gas cabinets for highly toxic and toxic gas
6004.1.3	Exhausted enclosures for highly toxic and toxic gas
6004.2.2.6	Gas rooms for highly toxic and toxic gas
6004.3.3	Outdoor storage for highly toxic and toxic gas
6504.1.1	Pyroxylin plastic storage cabinets
6504.1.3	Pyroxylin plastic storage vaults
6504.2	Pyroxylin plastic storage and manufacturing

For SI: 1 cubic foot = 0.023 m^3.

907.2.12 Special amusement ~~buildings~~ areas. An automatic smoke detection system shall be provided in buildings with special amusement ~~buildings~~ areas in accordance with Sections 907.2.12.1 through 907.2.12.3.

2021 International Building Code

Revise as follows:

TABLE 903.2.11.6
ADDITIONAL REQUIRED PROTECTION SYSTEMS

SECTION	SUBJECT
402.5, 402.6.2	Covered and open mall buildings
403.3	High-rise buildings
404.3	Atriums
405.3	Underground structures
407.7	Group I-2
410.6	Stages
411.3	Special amusement ~~buildings~~ areas
412.2.4	Airport traffic control towers
412.3.6, 412.3.6.1, 412.5.6	Aircraft hangars
415.11.11	Group H-5 HPM exhaust ducts
416.5	Flammable finishes
417.4	Drying rooms
424.3	Play structures
428	Buildings containing laboratory suites
507	Unlimited area buildings
508.5.7	Live/work units
509.4	Incidental uses
1030.6.2.3	Smoke-protected assembly seating
IFC	Sprinkler system requirements as set forth in Section 903.2.11.6 of the *International Fire Code*

Reason: The purpose of the change is primarily for coordination and correction. The IFC definition for the Special Amusement Area in this proposal matches the IBC definition approved in G48-18. The changes in the references in tables and footnotes is editorial to use the defined term.It is important to note the 'special amusement area' is already approved in the IBC definition of puzzle rooms, Section 411, Table 1017.2 footnote and IFC Section 914.7 and 3103.3.1. This proposal is submitted by the ICC Fire Code Action Committee (FCAC) and 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will increase the cost of construction
Many of these rooms may be classified currently as a B occupancy as they are not specifically called out in the code. As such, there are very little requirements for fire alarm or sprinkler systems. Depending on the size and configuration of the room(s), this provision would increase the cost of construction.

BCAC Egress Item 18 Proposal 1 bleachers (6337)

IBC: 1109.2, 1109.2.2

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

2021 International Building Code

Revise as follows:

1109.2 Assembly area seating. A building, room or space used for assembly purposes with spectator seating with *fixed seating,* bleachers, grandstands or folding and telescopic seating shall comply with Sections 1109.2.1 through 1109.2.5. Lawn seating shall comply with Section 1109.2.6. Assistive listening systems shall comply with Section 1109.2.7. Performance areas viewed from assembly seating areas shall comply with Section 1109.2.8. Dining areas shall comply with Section 1109.2.9.

1109.2.2 Wheelchair spaces. ~~In rooms and spaces used for assembly purposes with *fixed seating*, accessible~~ *Accessible wheelchair spaces* shall be provided in accordance with Sections 1109.2.2.1 through 1109.2.2.3.

Reason: The intent of this proposal is to clarify that bleachers, grandstands, and folding and telescoping seating are required to provide accessible wheelchair spaces. The revision "with spectator seating" will match A117.1 terminology. While fixed seating is defined as including seats with or without backs, the current text is not clear if portable or permanent bleacher systems or folding and telescopic seating have to provide wheelchair spaces. The International Building Code specifies the number of wheelchair spaces for assembly space with 'assembly spaces with fixed seating'. The A117.1 specifies how many groups of wheelchair spaces (wheelchair space locations) and how they are to be dispersed. The text in A117.1 is 'assembly spaces with spectator seating.' The A117.1 does provide some exceptions for the location of the wheelchair spaces in the bleachers (ICC A117.1 802.10.2 Exception 2). The revisions will match A117.1 terminology and clarify that the wheelchair spaces are required in bleachers, grandstands and folding telescopic seating.

ICC 300 Standard for Bleachers, Folding and Telescopic Seating, and Grandstands references the building code for accessibility.

SECTION 310

ACCESSIBILITY

310.1 Accessibility. Tiered seating shall be accessible as required by the building code.

ICC A117.1 Accessible and Usable Buildings and Facilities, includes special allowances for accessible bleacher seating.

SECTION 802

ASSEMBLY AREAS

802.1 General. Wheelchair spaces and wheelchair space locations in assembly areas with spectator seating shall comply with Section 802.

802.10.2 Dispersion for variety of distances from the event. Wheelchair space locations shall be dispersed at a variety of distances from the event to provide viewing options.

Exceptions:

1. In bleachers, wheelchair space locations provided only in rows at points of entry to bleacher seating shall be permitted.

2. Assembly areas utilized for viewing motion picture projections with 300 seats or less shall not be required to comply with Section 802.10.2.3. Assembly areas with 300 seats or less other than those utilized for viewing motion picture projections shall not be required to comply with Section 802.10.2 where all wheelchair space locations are within the front 50 percent of the total rows.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Examples of bleacher with wheelchair spaces

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification. It is not a change in the requirements for bleachers, grandstands or folding and telescopic seating.

BCAC Occupancy Item 9 Accessory Dwelling Units (6365)

IZC: (New), 501.1, TABLE 801.2.1, 801.2.3, 801.2.3.1 (New), SECTION 903 (New), 903.1 (New), 903.1.1 (New), 903.1.2 (New), 903.2 (New)

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

2021 International Zoning Code

Add new definition as follows:

ACCESSORY DWELLING UNIT (ADU). An additional, subordinate dwelling unit on the same lot, that is entirely within a dwelling unit, attached to a dwelling unit, or in a detached structure.

Revise as follows:

501.1 Residential zone. Allowable residential (R) zone uses shall be:

Division 1. The following uses are permitted in an R, Division 1 zone:Single-family dwellings, publicly owned and operated parks, recreation centers, swimming pools and playgrounds, police and fire department stations, public and governmental services, public libraries, schools and colleges (excluding colleges or trade schools operated for profit), public parking lots, *private garages*, buildings accessory to the above permitted uses (including private garages , accessory dwelling units and *accessory living quarters*), and temporary buildings.

Division 2. The following uses are permitted in an R, Division 2 zone:

Any use permitted in R, Division 1 zones and two-family dwellings.

Division 3. The following uses are permitted in an R, Division 3 zone:

All uses permitted in R, Division 2 zones, multiple-unit dwellings, such as apartment houses, boarding houses, condominiums and *congregate residences*.

TABLE 801.2.1
OFF-STREET PARKING SCHEDULE

USE	NUMBER OF PARKING SPACES REQUIRED
Assembly	1 per 300 gross square feet
Accessory dwelling unit (ADU)	1 per accessory dwelling unit
Dwelling unit	2 per dwelling unit
Health club	1 per 100 gross square feet
Hotel/motel	1 per sleeping unit plus1 per 500 square feet of common area
Industry	1 per 500 gross square feet
Medical office	1 per 200 gross square feet
Office	1 per 300 gross square feet
Restaurant	1 per 100 gross square feet
Retail	1 per 200 gross square feet
School	1 per 3.5 seats in assembly rooms plus1 per faculty member
Warehouse	1 per 500 gross square feet

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

801.2.3 Location ~~of~~ on lot. The parking spaces required by this code shall be provided on the same lot as the use or where the exclusive use of such is provided on another lot not more than 500 feet (152 m) radially from the subject lot within the same or less-restrictive zoning district.

Add new text as follows:

801.2.3.1 Accessory dwelling unit parking. Vehicular access to the required parking space shall not be obstructed by the parking space for the occupants of the primary dwelling unit.

SECTION 903 ACCESSORY DWELLING UNITS (ADU)

903.1 General. Accessory dwelling units shall be permitted in residential zones.

903.1.1 Approval. Applications for an ADU are subject to the requirements for a conditional use permit as per Chapter 12 and shall meet the following criteria:

1. The applicant must demonstrate that the ADU complies with all development and design standards of this Section.
2. The applicant must demonstrate that the proposed new construction or modifications to existing construction comply with the applicable building and fire safety codes.

903.1.2 Occupancy permit, control. No occupancy of the ADU shall take place without an occupancy permit issued by the code official appointed by the authority having jurisdiction. The initial occupancy permit shall remain in force for a period of 2-years from the date of issue, provided that there is continued ownership. Thereafter, succeeding permits may be issued by the code official for each succeeding 2-year period, provided that the structure and use continue to comply with the relevant provisions of Section 903, the building and fire safety codes, and the conditional use special permit. Occupancy permits shall not be transferable upon new ownership or a change in occupancy.

903.2 Conditions. ADUs shall be permitted without requiring a change of zoning where in compliance with all of the following:

1. Only one ADU shall be permitted for each primary dwelling unit.
2. The owner of a property containing an ADU shall reside in either the primary dwelling unit or the ADU, as of the date of permit approval.
3. An ADU shall have a separate house number from the primary dwelling unit.

4. ADUs shall be secondary in size and function to the primary dwelling unit and shall comply with all of the following limits.
   4.1. Not less than 190 square feet (17.65 m^2) in area.
   4.2. Not more than 50 percent of the area of the primary dwelling unit.
   4.3. Not more than 1,200 square feet (111 m^2) in area.
5. An ADU shall be provided with a separate entrance than that serving the primary dwelling unit.
6. An ADU shall have a maximum number of two bedrooms.
7. Off-street parking shall comply with Section 801.
8. The location of a detached ADU shall comply with Section 803.
9. An ADU shall be provided with adequate provisions for electricity, water supply and sewage disposal.

Reason: Accessory dwelling unit (ADU) is a term already in use across the United States – including Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, the District of Columbia, Florida, Hawaii, Idaho, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee, Texas, Utah, Vermont, Virginia, Washington, and Wisconsin. However, the definition of an ADU and associated code requirements vary significantly not only state to state, but from jurisdiction to jurisdiction. The International Zoning Code (IZC) should provide definition and framework of requirements in an effort to create a uniform understanding of ADUs. It is also important to note the lack of building and codes standards has created circumstances where the requirements are being determined through local and state legislative processes, instead of ICC's code change process, which is a consensus process driven by the knowledge and experience of code officials.
This code change proposal does not address requirements associated with life safety, nor how to construct a new ADU, now how to renovate an existing structure to add an ADU; those requirements must be codified in the IBC, IRC, and IEBC through separate proposals in their respective code development cycles. The following explanations provide context for these definitions and IZC requirements.

Two definitions are created, the first recognizing the common parlance of an Accessory Dwelling Unit (ADU) and pointing to the second definition, which describes the use more accurately as a subset of a dwelling unit, and positions it next to the dwelling unit definition.

The content of the definition for an ADU was developed based on similarities found in existing Zoning ordinances in effect around the United States, and distinguishing the difference between and ADU and a Two-Family Dwelling; i.e., the subordinate nature of the size and function to the primary or second dwelling unit. Though subordinate is not a defined term in Chapter 2, there is precedent in the I-Codes for using the term (Refer to Accessory Building – "an incidental subordinate building..." and Home Occupation – "the partial use of a home for commercial or nonresidential uses by a resident thereof, which is subordinate and incidental..."

The definition is intended for integration throughout the I-Codes, as further code development cycles address specific code regulations for the IBC, IEBC, and IRC depending on the type of ADU proposed. This definition recognizes that an ADU features the same components of a dwelling unit in terms of living, sleeping, eating, cooking and sanitation which presently can only be defined in the I-Codes as a dwelling unit. The reality is that the application of the ADU concept in different jurisdictions is inconsistent, and at times may allow deviation from the full requirements the code prescribes for a two-family dwelling unit arrangement. It is necessary to recognize the unique circumstances wherein an ADU must comply with those two-family dwelling unit requirements, and when alternative arrangements are acceptable that do not compromise the health, safety, and welfare of the Public. The definition also recognizes that the ADU can either be within the primary dwelling unit (such as in the basement of a single-family home) or a detached accessory structure (similar to a detached garage).

The definition avoids non-enforceable provisions such as if the ADU is rented, the relationship between the person(s) in the ADU and the primary dwelling, and characteristics that would preclude placement within the IBC, IEBC, IRC, and IZC.

The additional language in Chapter 5 recognizes that an ADU can be created within any residentially zoned parcel, regardless of whether that is in a single-family (Division 1), two-family (Division 2), or multi-family (Division 3) zone. In practice there are examples of ADUs being subordinate to single-family dwellings (the most common example), one or both units of a two-family dwelling (less common), within Townhouses (3-stories or less), and within Townhouses (4 stories). It is ultimately the responsibility of the IBC, IEBC, an IRC to regulate ADU design within those contexts.

The off-street and on-lot parking requirements are proposed as 1 per ADU. Where the code requires two parking spaces per dwelling unit, the subordinate use (the ADU) is lesser in size than the primary dwelling (see 903.2). There is debate about the impact on parking demands in existing neighborhoods, so requiring some parking but not at the same level as

the primary dwelling unit was determined the best option to address all concerns (source: https://accessorydwellings.org/2014/07/16/do-adus-cause-neighborhood-parking-problems/).

Section 903 creates conditions to ensure that an ADU is subordinate to the primary dwelling unit.

Section 903.1.2 occupancy permit, control proposes a two-year renewal cycle for the occupancy permit and renewal upon sale of the property. This is to allow for regular, routine inspections of the ADU as well as ensuring any new owner understands the requirements and restrictions of the ADU.

Section 903.2 conditions propose nine (9) requirements that ensure the ADU does not become a “duplex” or second single-family home on the same lot. Should these conditions not be met, the proposed ADU must be remain considered as a separate dwelling unit with all applicable regulations of the IBC, IEBC, or IEBC in effect.

- Item 1 re-affirms the subordinate nature of the ADU to the primary dwelling unit;
- Item 2 establishes an Owner-occupancy requirement;
- Item 3 requires a separate address for the ADU from the primary unit.
- Item 4 sets size parameters for the ADU.

- The minimum square footage of 190 SF aligns with the IBC minimum for an efficiency unit.
- The maximum size is based on a comparison of requirements in effect in CO, OR, MA, CA, and VA which ranged from 750 SF to 1,400 SF; most between 1,000 SF and 1,200 SF.
- A similar comparison between percentages of the primary unit showed 30% to 50% with more jurisdictions favoring the higher value.

- Item 5 requires a separate entrance to prevent a house that has a second kitchen (such as a recreation room in a basement with a cooking area), but are not an ADU from being mandated to meet the ADU requirements.
- Item 6 limits the unit to two bedrooms to minimize parking demands while still allowing the ADU to address housing market demands and cost concerns.

- Item 7 is a pointer to the parking requirements in Section 801.
- Item 8 is a pointer to the multiple buildings on a single lot requirements of Section 803.
- Item 9 recognizes the need for an ADU to have adequate utilities.

The BCAC is working on a proposal to add accessory dwelling units in the IEBC and IRC Group B proposals.

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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The proposal creates an allowance whereby a someone can build an accessory dwelling unit within a residentially zoned district, where it would otherwise not be permitted. No one is under any obligation to build an ADU, nor are they required to plan for the construction of a future ADU.

For someone choosing not to construct an ADU where these code provisions will not be applicable, there are no cost implications.

For someone choosing to construct an ADU where these code provisions are applicable, the cost of construction will increase proportionally to the size of the project, and to create additional off-street parking. According to an article titled Calculating the Costs of Building an ADU published on the BuildinganADU.com blog, the average cost for an ADU from 2016-2019 based on their research is as follows:

- Detached New Construction: $305/SF
- Basement ADU: $265/ SF
- Attached ADU: $300/ SF
- Garage Conversion: $297/ SF
- Detached New Construction Above a Garage: $212/ SF

BCAC Occupancy Item 5 Temporary Use- APPENDIX Q (6411)

IBC: APPENDIX Q (New), Q101 (New), Q101.1 (New), Q101.1.1 (New), Q101.1.2 (New), Q102 (New), Q102.1 (New), (New), Q103 (New), Q103.1 (New), Q104 (New), Q104.1 (New), Q104.2 (New), Q105 (New), Q105.1 (New), Q106 (New), Q106.1.1 (New), Q106.2 (New), Q106.3 (New), Q106.4 (New), Q106.4.1 (New), Q106.4.2 (New), Q106.4.3 (New), Q106.4.4 (New), Q106.4.5 (New), Q106.5 (New), Q106.5.1 (New), Q106.5.2 (New), Q106.5.3 (New), Q106.6 (New), Q106.7 (New), Q106.7.1 (New), Q107 (New), Q107.1 (New), Q107.1.1 (New), Q107.1.2 (New), Q107.1.3 (New), Q107.2 (New), Q107.2.1 (New), Q107.2.2 (New), Q107.3 (New), Q107.3.1 (New), Q107.3.2 (New), Q107.3.3 (New), Q107.3.4 (New), Q107.3.5 (New), Q107.4 (New), Q107.5 (New), SECTIONQ108 (New), Q108.1 (New), TABLE Q108.1 (New)

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

2021 International Building Code

Add new text as follows:

APPENDIX Q
TEMPORARY STRUCTURES AND USES TO SERVE EMERGENCIES

Q101 GENERAL

Q101.1 Scope. The provisions of this appendix shall apply to the use, construction, installation, alteration, relocation and location of emergency need based temporary structures and any service utilities or systems that serve such temporary structures.

Q101.1.1 Objectives. The objective of this Appendix is intended to provide flexibility to permit the use of innovative approaches and techniques to establish temporary structures and uses in a timely fashion while encountering unusual circumstances and maintain the level of safety intended by the code.

Q101.1.2 Temporary use. Temporary use during emergencies may exceed 180 days. Judgement shall be used by the code official to allow for temporary uses and conditions to continue for the duration of the emergency based on the needs of the emergency. The building official is authorized to grant extensions for demonstrated cause.

Q102 DEFINITIONS

Q102.1 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

Add new definition as follows:

EMERGENCY. Any event declared by local, state, or federal entities that temporarily overwhelms response capabilities, and may require the suspension or modification of regulations, codes, or standards to facilitate response to such an event.

TEMPORARY STRUCTURES. That which is built, constructed or erected for a period of less than 180 days.

TEMPORARY USE. An activity or practice that is established at designated location for a period of less than 180 days. Uses include, but are not limited to, those functional designations listed within the occupancy group descriptions in Section 302.1 of this code.

Add new text as follows:

Q103 SUBMITTAL DOCUMENTS

Q103.1 General. Submittal documents shall be of sufficient clarity to indicate the location, nature and extent of the work or use proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the code official.

Q104 CONFORMANCE

Q104.1 Conformance. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this section as necessary to provide a reasonable level of safety, health and general welfare.

Q104.2 Changes over time. As an emergency evolves, and more resources become available, plans should be made to bring structures and temporary uses in line with the main body of the code.

Q105 PERMITS

Q105.1 Required permits. Temporary structures other than tents and other membrane structures that occupy an area greater than 120 square feet (11.16 m^2), shall not be erected, operated or maintained for any purpose without obtaining a permit from the code official. Tents and membrane structures should be permitted in accordance with the International Fire Code.

Q106 GENERAL STANDARDS FOR EMERGENCY STRUCTURES

Q106.1.1 Scope. The provisions of Sections Q106.2 through Q106.7 shall apply to all structures constructed, erected or relocated during emergencies.

Q106.2 Intent. The intent of this section is to provide a base level of safety in a structure built or repurposed for emergency use.

Q106.3 Change of occupancy. Existing buildings used in a way that was not originally intended by occupancy class or use shall be allowed without formally changing the occupancy class. The previous occupancy class shall be restored upon the conclusion of the emergency.

Q106.4 Fire Safety Provisions. Determine fire safety requirements in accordance with Section Q106.4.1 through Q106.4.5 in order to make determinations of safe conditions rather than strict adherence to the provisions of International Fire Code.

Q106.4.1 Fire safety and evacuation plans. Fire Safety and evacuation plans shall be provided in accordance with Section 403 and 404 of the International Fire Code. Plans should be updated where there are any physical changes to the layout of the structure.

Q106.4.2 Training and practice drills. Training of staff and practice drills shall comply with Section 405 and 406 of the International Fire Code. Structures in place for longer than 30 days shall conduct evacuation drill in accordance with Section 405.3 of the International Fire Code based on the temporary use.

Q106.4.3 Fire Protection. An evaluation shall be performed to decide on fire protection needed utilizing NFPA 550.

Q106.4.4 Emergency Access. Emergency vehicle access roads shall be approved by the fire code official.

Q106.4.5 Fire Watch. A fire watch in accordance with Section 403.11.1 of the International Fire Code shall be permitted to be provided in lieu of other fire protection system.

Q106.5 Means of Egress. Means of Egress shall comply with Sections 1004, 1005, 1006, 1007, 1008 and 1010 of the International Building Code in addition to Sections Q106.5.1 through Q106.5.3.

Q106.5.1 Exit Discharge. Exits shall provide access to a public way, or to a safe dispersal area in accordance with 1028.5.

Q106.5.2 Means of Egress Lighting. The means of egress shall be illuminated when the space is occupied.

Exception: Sleeping areas.

Q106.5.3 Exit Signs. Exit signs shall be provided where the means of egress is not readily identifiable. Exit signs shall be permitted to be illuminated by the lighting provided in the structure.

Q106.6 Accessibility. A facility that is constructed to be accessible shall be maintained accessible during occupancy.

Q106.7 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, the source of energy, fuel, or power, or the water system or sewer system in accordance with Section 112. Water closets and lavatories shall be either permanent plumbing fixtures installed within the structure, or temporary water closets or lavatories, such as chemical toilets or other means approved by the code official.

Q106.7.1 Portable heating and cooling equipment. Portable heating and cooling equipment shall be used in accordance with their listing, and manufacturer's instructions.

Q107 Use Specific Standards

Q107.1 Increased occupant load. Temporary waivers for allowing for additional occupants in existing building shall comply with Section Q107.1.1 through Q107.1.3.

Q107.1.1 Authorization. The code official is authorized to allow for an increase in the number of occupants or a change of use in a building or portion of a building during an emergency.

Q107.1.2 Maintenance of the means of egress. The existing a means of egress shall be maintained.

Q107.1.3 Sleeping areas. Where a space is used for sleeping purposes, the space shall be equipped with smoke alarms in accordance with Section 907.2.11 or be provided with a fire watch in accordance with Section 403.11.1 of the International Fire Code. Carbon monoxide detectors shall be installed in accordance with Section 915 where the structure uses any fossil fuel or wood burning appliances.

Q107.2 Temporary healthcare facilities. Temporary health care facilities shall comply with Section Q107.2.1 and Q107.2.2.

Q107.2.1 General. Temporary health care facilities shall be erected, maintained and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

Q107.2.2 Membrane structures under projections. Membrane structures of less than 100 square fe et (9.3 m^2) may be placed under projections of a permanent building provided the permanent building is protected with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

Q107.3 Use of tiny houses or manufactured housing. Tiny houses or manufactured housing used for temporary housing shall comply with Section Q107.3.1 through Q107.3.5.

Q107.3.1 Fire separation distances. Tiny houses or manufactured housing shall be separated by not less than 5 feet (1524 mm) between structures.

Q107.3.2 Fire breaks. Tiny houses and manufactured housing shall not be located in groups of more than 20 units. Fire breaks of at least 20 feet (6096 mm) shall be provided between each group.

Q107.3.3 Smoke alarms. Tiny houses and manufactured housing used for sleeping purposes shall be equipped with a smoke alarm complying with Section 907.2.11. Smoke detectors are not required to be hard wired.

Q107.3.4 Carbon monoxide detectors. Carbon monoxide detectors shall be installed in accordance with Section 915, where the tiny house or manufactured housing uses any fossil fuel or wood burning appliances.

Q107.3.5 Structures located in a wildland urban interface zone. Tiny houses and manufactured housing that are located in a wildland urban interface area shall be provided with defensible space in accordance with the Section 603 of the International Wildland Urban Interface Code.

Q107.4 Tents and membrane structures used as sleeping accommodations. Tents or membrane structures used as sleeping accommodations shall comply with the same requirements as tiny homes in Section Q107.3.1 through Q107.3.5 and Chapter 31 of the International Fire Code.

Q107.5 Temporary emergency shelters during/after a natural disaster – wildfire, tornado, flood. Where emergency shelters are planned, the process of organizing, planning, implementing, and evaluating a program for mass evacuation, sheltering, and re-entry shall comply withNFPA 1660.

SECTIONQ108 REFERENCED STANDARDS

Q108.1 General. SeeTable Q108.1for standards that are referenced in various sections of this appendix.Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix referenced in the standard.

TABLE Q108.1
REFERENCED STANDARDS

STANDARD ACRONYM	STANDARD NAME	SECTIONS HEREIN REFERENCED
NFPA 550-2017	Guide to the Fire Safety Concepts Tree	Q106.5.3
NFPA 1660 - 2022	Standard on Community Risk Assessment, Pre-Incident Planning, Mass Evacuation, Sheltering, and Re-entry Programs.	Q107.5

Reason: The purpose of the proposed Appendix is to provide regulatory options to users based on trends that don't fit squarely in the IBC. Code users are facing diverse challenges never encountered before. Examples include setting up medical facilities in gymnasiums, or in tents in a park or parking lot. With the wildfires in the Western United States, emergency temporary housing is needed for displaced residents, as well as First Responders from other areas who are providing assistance. The Appendix format allows for Jurisdictional adoption with or without amendments, creating solutions for these types of uses, providing the AHJ with wide flexibility while ensuring public health, safety and general welfare for the end users
There will be related proposals submitted in group B.

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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
These options mirror established ICC codes sections and standards.

Staff Analysis: A review of the standard proposed for inclusion in the code, NFPA 550-2017 and NFPA 1660-2022, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2021.

BCAC General Item 13-A- IPMC -ICC 500 (6435)

IPMC: SECTION 202 (New), SECTION 310 (New), 310.1 (New), 310.2 (New), 310.3 (New), ICC Chapter 08 (New)

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

2021 International Property Maintenance Code

Add new definition as follows:

STORM SHELTER. A building, structure or portion thereof, constructed in accordance with ICC 500, designated for use during hurricanes, tornadoes or other severe windstorms.

Add new text as follows:

SECTION 310 STORM SHELTERS

310.1 General. Community storm shelters shall be evaluated, maintained and repaired in accordance with this section and ICC 500.

310.2 Evaluation. Community storm shelters shall be evaluated annually, and when requested by the authority having jurisdiction, in accordance with ICC 500.

310.3 Maintenance and Repairs. Community storm shelters shall be maintained in an operable condition. All structural and operational elements shall be repaired or replaced in accordance with ICC 500 where damaged or found to be inoperable.

Add new standard(s) as follows:

500: ICC/NSSA Standard for the Design and Construction of Storm Shelters-2020

Reason: The 2020 edition of ICC 500, which was incorporated by reference in the 2021 I-Codes, contains new provisions for the evaluation, maintenance and repair of community storm shelters. The owner or their authorized agent of a storm shelter are required to have the shelter evaluated annually and where requested by the authority having jurisdiction to identify whether any structural elements are damaged or whether any impact-protective systems (including doors, windows and shutters) are damaged or are not operational. Any structural elements or impact-protective systems are found to be damaged or not operational are required to be repaired or replaced in accordance with Section 113 of ICC 500. 2020 ICC 500:

SECTION 113

EVALUATION, MAINTENANCE AND REPAIRS

113.1 General.

Community shelters shall be evaluated and maintained in accordance with Sections 113.2 through 113.4.

113.2 Evaluation. The owner or owner's authorized agent shall evaluate the storm shelter annually and when requested by the *authority having jurisdiction*. The evaluation of the storm shelter shall include the following:

1. The *storm shelter envelope* shall be evaluated through visual observation to assess whether the walls and roofs are intact and undamaged.

2. *Impact-protective systems* shall be evaluated for compliance with the manufacturer's operational and maintenance requirements.

113.3 Maintenance and repairs.

Storm shelters shall be maintained in an operable condition at all times. All structural and operational elements shall be repaired or replaced where damaged or found to be inoperable.

113.3.1 Damaged or missing components. *Storm shelters* shall be maintained so that walls and roofs are intact and undamaged. Any damage to the storm shelter or its *impact-protective systems* that impair its functionality shall be repaired or replaced. Damaged or missing components shall be replaced with components that are specified within the tested or listed assembly.

113.3.2 Replacement assemblies and systems.

Where it is necessary to replace certified or listed *impact-protective systems*, replacements shall comply with applicable ICC 500 requirements and shall be tested and installed as required by this standard for new installations or construction.

113.4

Recordkeeping. A record of the evaluations shall be maintained by the owner or owner's authorized agent. A record of the evaluations and any other tests, repairs or replacements and other operations and maintenance shall be kept on the premises or other *approved* location and consist of all changes to the original *storm shelter envelope* or *impact-protective systems*. Records shall include the date and person conducting the evaluations and maintenance or repairs.

The proposed IPMC storm shelter provisions trigger evaluations of community storm shelters in order to verify that they are able to continue protecting occupants from extreme wind events. Door assemblies in multi-use storm shelters are especially vulnerable to disrepair when used frequently for their 'normal use' functions (e.g., gym, classroom, auditorium). Observations of existing storm shelter door assemblies have revealed the following common maintenance issues that can result in operational failure during an extreme wind event: debris in floor latch points preventing full connection, rust, and malfunctioning hardware.

The new ICC-500 provision is specific to community storm shelters. Residential storm shelters are excluded so as not to burden homeowners who choose to incorporate a small residential storm shelter into their home or provide one in their yard.

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. In2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will increase the cost of construction
The cost increase would largely be from the time and labor for the owner (or their agent) to conduct the annual visual inspection and/or hire an engineer or architect if needed for a more detailed evaluation. There would also be a cost to replace a damaged component for an impact-resistant door or window, or other impact-protective system (e.g. hurricane shutter) or the entire assembly if deemed necessary.

BCAC PMGCAC Item 35 coordination with IMC 401.2 (6492)

IBC: 1202.1

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Joseph Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

2021 International Building Code

Revise as follows:

1202.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1202.5, or mechanical ventilation in accordance with the *International Mechanical Code*.~~Where the air infiltration rate in a *dwelling unit* is less than 5 air changes per hour where tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section R402.4.1.2 of the International Energy Conservation Code—Residential Provisions, the *dwelling unit* .~~ Dwelling units complying with the air leakage requirements of the *International Energy Conservation Code* or ASHRAE 90.1 shall be ventilated by mechanical means in accordance with Section 403 of the *International Mechanical Code*. *Ambulatory care facilities* and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407 of the I*nternational Mechanical Code*.

Reason: This proposal is to align the IBC code text with requirements that already exist in the 2021 IMC as a result of M20-18 AS:
401.2 Ventilation required. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. *Dwelling units* complying with the air leakage requirements of the *International Energy Conservation Code* or ASHRAE 90.1 shall be ventilated by mechanical means in accordance with Section 403. Ambulatory care facilities and Group I-2 *occupancies* shall be ventilated by mechanical means in accordance with Section 407.No requirements are being added or deleted. This is simply a language coordination proposal.

This proposal is a BCAC proposal that was developed with the PMGCAC.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC). The PMG CAC 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 2020, the PMG CAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMG CAC website at: PMGCAC

Bibliography: M20-18 AS

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The requirements already exist in the 2021 codes (2021 IMC). This proposal only makes the language for those requirements in both codes read the same. There are no increased or decreased of material or labor associated with this proposal as the requirements have not changed. Thus there is no impact to the cost of construction.

BCAC PMGCAC Section 603.1.2 (6544)

IBC: 603.1.2

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Joseph Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

2021 International Building Code

Revise as follows:

603.1.2 Piping <u>and plumbing fixtures</u>. The use of combustible piping materials <u>and plumbing fixtures</u> shall be permitted where installed in accordance with the limitations of the *International Mechanical Code* and the *International Plumbing Code*.

Reason: This change is to clarify that plastic plumbing fixtures are acceptable to be installed in Type I and Type II buildings. Fiberglass and acrylic shower compartments are often chosen for these types of buildings to speed construction and lower the cost of construction. Plastic water closets, bathtubs and lavatories are more durable than those of vitreous china and thus are more cost effective in the long run. However, not all jurisdictions are uniformly enforcing the building code because of the misconception that such fixtures are as combustible as common plastic materials. This is not true as the standards for plastic plumbing fixtures require testing for ignitability.
This proposal is submitted by the ICC Building Code Action Committee (BCAC) and developed in cooperation with the PMGCAC.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The PMG CAC 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 2020, the PMG CAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMG CAC website.

Cost Impact: The code change proposal will decrease the cost of construction
Fiberglass and acrylic shower compartments are much more economical to install because there is a significant installation labor savings over field-constructed tile showers. Other plastic plumbing fixtures generally have a lower cost than their vitreous china counterparts and, being of lighter weight, may provide for some installation labor savings in handling alone.

BCAC ADM 13 Proposal 2 Scope coordination (6545)

IBC: 305.2.2, 305.2.3, 308.5.3, 308.5.4, 310.1.1

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

2021 International Building Code

SECTION 305 EDUCATIONAL GROUP E

305.2 Group E, day care facilities. This group includes buildings and structures or portions thereof occupied by more than five children older than $2^1/_2$ years of age who receive educational, supervision or *personal care services* for fewer than 24 hours per day.

305.2.1 Within places of religious worship. Rooms and spaces within *places of religious worship* providing such day care during religious functions shall be classified as part of the primary occupancy.

Revise as follows:

305.2.2 Five or fewer children. A facility having five or fewer children receiving such day care shall be classified as part of the primary occupancy. Such a facility, located within a dwelling unit that is within the scope of the International Residential Code, shall be permitted to be constructed in accordance with this code or the International Residential Code.

Delete without substitution:

~~**305.2.3 Five or fewer children in a dwelling unit.** A facility such as the above within a *dwelling unit* and having five or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.~~

SECTION 308 INSTITUTIONAL GROUP I

308.5 Institutional Group I-4, day care facilities. Institutional Group I-4 occupancy shall include buildings and structures occupied by more than five persons of any age who receive *custodial care* for fewer than 24 hours per day by persons other than parents or guardians; relatives by blood, marriage or adoption; and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

- Adult day care
- Child day care

308.5.1 Classification as Group E. A child day care facility that provides care for more than five but not more than 100 children $2^1/_2$ years or less of age, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

308.5.2 Within a place of religious worship. Rooms and spaces within *places of religious worship* providing such care during religious functions shall be classified as part of the primary occupancy.

Revise as follows:

308.5.3 Five or fewer persons receiving care. A facility having five or fewer persons receiving *custodial care* shall be classified as part of the primary occupancy. Such a facility, located within a dwelling unit that is within the scope of the International Residential Code, shall be permitted to be constructed in accordance with this code or the International Residential Code.

Delete without substitution:

~~**308.5.4 Five or fewer persons receiving care in a dwelling unit.** A facility such as the above within a *dwelling unit* and having five or fewer persons receiving *custodial care* shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.~~

SECTION 310 RESIDENTIAL GROUP R

Revise as follows:

~~**310.4.1**~~ **310.1.1 Care facilities within a dwelling.** Care facilities for five or fewer persons receiving care or a day care that are located within a ~~single-family~~ dwelling unit ~~are permitted to comply~~ that is within the scope of the *International Residential Code*, shall be permitted to be constructed in accordance with this code or with the *International Residential Code*. ~~provided~~ Facilities constructed using the *International Residential Code* shall be protected by an

automatic sprinkler system ~~is~~ installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

Reason: The purpose of this change is to remove a technical glitch for where Group R-2 townhouses or apartments may also have a small day care facility. Day care facilities can occur in apartments, townhouses and single family homes. By allowing for 5 or fewer to match the main occupancy, this would still allow for those Group R-3 as a classification in single-family, duplex and Group R-3 townhouses – which is permitted in the current text. This change will also allow for similar facilities in apartments or Group R-2 townhouses. The literal text in 305.2.3 and 308.5.4 says a day care in a dwelling unit make this an R-3 even though the building may be Group R-2.
For facilities that meet the scoping of the IRC (single family, duplex and townhouse), the day care and small care facilities can continue to be constructed under the IRC.

The move of 310.4.1 is because this is no longer just a Group R-3 consideration.

This is one of a group of proposals intended to coordinate the scoping items in IBC Section 101.2 and IRC 101.2. While the proposals work together, then also work separately. The proposal for coordination will be in Group B.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is basically a coordination item for what facilities can use IRC. This should not change construction requirements.

BCAC ADM 13 Proposal 3 Scope coordination (6549)

IBC: 308.2.4, 308.3.2, 310.1.1

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

2021 International Building Code

SECTION 308 INSTITUTIONAL GROUP I

Revise as follows:

308.2.4 Five or fewer persons receiving custodial care. A facility with five or fewer persons receiving *custodial care* shall be classified as Group R-2 or Group R-3 based on the primary occupancy of the building. ~~or shall comply~~ Such a facility, located within a dwelling unit that is within the scope of the *International Residential Code*, shall be permitted to be constructed in accordance with this code or with the *International Residential Code*. ~~provided~~ Facilities constructed using the International Residential Code shall be protected by an *automatic sprinkler system* ~~is~~ installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

308.3.2 Five or fewer persons receiving medical care. A facility with five or fewer persons receiving *medical care* shall be classified as Group R-2 or Group R-3, based on the primary occupancy of the building. ~~or shall comply~~ Such a facility, located within a dwelling unit that is within the scope of the *International Residential Code*, shall be permitted to be constructed in accordance with this code or with the *International Residential Code*. ~~provided~~ Facilities constructed using the *International Residential Code* shall be protected by an automatic sprinkler system ~~is~~ installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

SECTION 310 RESIDENTIAL GROUP R

Revise as follows:

~~**310.4.1**~~ **310.1.1 Care facilities within a dwelling.** Care facilities for five or fewer persons receiving medical care or custodial care that are located within a ~~single-family~~ dwelling unit ~~are permitted to comply~~ that is within the scope of the *International Residential Code*, shall be permitted to be constructed in accordance with this code or with the *International Residential Code*. ~~provided~~ Facilities constructed using the International Residential Code shall be protected by an *automatic sprinkler system* ~~is~~ installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

Reason: The intent of this proposal is to clarify the allowance for when a care facility fits into the residential requirements in the IBC or IRC.
Sticking with the current intent in the codes, these facilities should be permitted in a home environment – be it detached single family, townhouse or apartment – thus the reference to Group R-3 and R-2. The IRC reference allows for the facility to use IRC if the dwelling unit it is in is scoped to the IRC.

The relocation of Section 310.4.1 is because this is no longer just a Group R-3 consideration.

This proposal does not change what facilities can currently be constructed under the IRC, however, in the past there has been arguments that these facilities should not be permitted under the IRC. A facility of 5 or fewer persons could be in a detached dwelling, a townhouse or an apartment building. The Fair Housing Act does not allow for family to be defined by blood or marriage. Multiple court cases have confirmed that people have the right to live in a home environment instead of an institutional facility if they so choose. If this is a business, this small group home is most likely operating as a family; and would fall below the licensure rules of most states. However, in most cases, this will be couple with foster children or someone taking care of a friend who needs assistance - not a business. The IBC does not typically go into issues on licensure or who is paying what – we look at the use of the space.

This is one of a group of proposals intended to coordinate the scoping items in IBC Section 101.2 and IRC 101.2. While the proposals work together, then also work separately. The proposal for coordination will be in Group B.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of use group, not a change to construction requirements.

BCAC ADM 13 Proposal 4 Scope coordination (6552)

IBC: 310.4, 310.4.2

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

2021 International Building Code

[BG] GUESTROOM. A room used or intended to be used by one or more guests for living or sleeping purposes.

[BG] LODGING HOUSE. A one-family dwelling where one or more occupants are primarily permanent in nature and rent is paid for guest rooms.

SECTION 310 RESIDENTIAL GROUP R

Revise as follows:

310.4 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two *dwelling units*
- Care facilities that provide accommodations for five or fewer persons receiving care
- *Congregate living facilities* (nontransient) with 16 or fewer occupants
    - *Boarding houses* (nontransient)
    - Convents
    - *Dormitories*
    - Fraternities and sororities
    - Monasteries
- *Congregate living facilities* (*transient*) with 10 or fewer occupants
    - *Boarding houses* (*transient*)
- *Lodging houses* ~~(*transient*)~~ with five or fewer *guest rooms* ~~and 10 or fewer occupants~~

310.4.2 Lodging houses. Owner-occupied *lodging houses* with five or fewer *guest rooms* ~~and 10 or fewer total occupants~~ shall be permitted to be constructed in accordance with this code or the *International Residential Code*~~, provided~~ Facilities constructed using the *International Residential Code* shall be protected by that an *automatic sprinkler system* ~~is~~ installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code.*

Reason: The intent of this change is to coordinate with IRC scoping for lodging houses. G40-12 added the defined term 'lodging house' and 'guestroom' and Section 310.4.2 for coordination with the scoping in the 2012 IRC. G40-15 added 'transient' and '10 or fewer occupants'. Since the owner or proprietor lives in the lodging house (see the definition), this is not 'transient', so that language should be deleted in Section 310.4. The reason given for adding "and 10 or fewer occupants" was consistency with the occupancy load for transient boarding houses. However, this does not take into consideration that owner's family as well as the 10 transient occupants. Occupant load is not addressed in the IRC, so this does not match the IRC Scoping in Section 101.2 Exception 2.

If the committee feels that 5 or fewer guestrooms is not a sufficient limitation, a maximum occupant load or either 10 transient occupants, or 16 total occupants could be considered.

The last change to Section 310.4.2 is to allow for a small bed-n-breakfast style hotel to be constructed in accordance with IBC if they so choose.

This is one of a group of proposals intended to coordinate the scoping items in IBC Section 101.2 and IRC 101.2. While the proposals work together, then also work separately. The proposal for coordination will be in Group B.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of requirements, not a change to construction requirements. Removal of the 10 occupant load from

Lodging house, might allow for some small additional B-n-B facilities to be constructed under the IRC.

BCAC ADM 13 Proposal 5 Scope coordination (6554)

IBC: 508.5, 508.5.6

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

2021 International Building Code

Revise as follows:

508.5 Live/work units A *live/work unit* shall comply with Sections 508.5 .1 through 508.5.11. Live/work units complying with the requirements of Section 508.5.1 through 508.5.11 for the non-residential portion of the unit and that are within the scope of the *International Residential Code*, shall be permitted to be constructed in accordance with this code or the *International Residential Code*.

Exception: *Dwelling or sleeping units* that include an office that is less than 10 percent of the area of the *dwelling unit* ~~are~~ shall be permitted to be classified as *dwelling units* with accessory occupancies in accordance with Section 508.2.

508.5.1 Limitations. The following shall apply to live/work areas:

1. The *live/work unit* is permitted to be not greater than 3,000 square feet (279 m^2) in area.
2. The nonresidential area is permitted to be not more than 50 percent of the area of each *live/work unit*.
3. The nonresidential area function shall be limited to the first or main floor only of the *live/work unit*.
4. Not more than five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.

508.5.2 Occupancies. *Live/work units* shall be classified as a Group R-2 occupancy. Separation requirements found in Sections 420 and 508 shall not apply within the *live/work unit* where the *live/work unit* is in compliance with Section 508.5. Nonresidential uses that would otherwise be classified as either a Group H or S occupancy shall not be permitted in a *live/work unit*.

Exception: Storage shall be permitted in the *live/work unit* provided that the aggregate area of storage in the nonresidential portion of the *live/work unit* shall be limited to 10 percent of the space dedicated to nonresidential activities.

508.5.3 Means of egress. Except as modified by this section, the *means of egress* components for a *live/work unit* shall be designed in accordance with Chapter 10 for the function served.

508.5.4 Egress capacity. The egress capacity for each element of the *live/work unit* shall be based on the *occupant load* for the function served in accordance with Table 1004.5.

508.5.5 Spiral stairways. *Spiral stairways* that conform to the requirements of Section 1011.10 shall be permitted.

Revise as follows:

508.5.6 Vertical openings. Floor openings between floor levels of a *live/work unit* ~~are~~ shall be permitted without enclosure.

[F] 508.5.7 Fire protection. The *live/work unit* shall be provided with a monitored *fire alarm* system where required by Section 907.2.9 and an *automatic sprinkler system* in accordance with Section 903.2.8.

508.5.8 Structural. Floors within a *live/work unit* shall be designed for the *live loads* in Table 1607.1, based on the function within the space.

508.5.9 Accessibility. *Accessibility* shall be designed in accordance with Chapter 11 for the function served.

508.5.10 Ventilation. The applicable *ventilation* requirements of the *International Mechanical Code* shall apply to each area within the *live/work unit* for the function within that space.

508.5.11 Plumbing facilities. The nonresidential area of the *live/work unit* shall be provided with minimum plumbing facilities as specified by Chapter 29, based on the function of the nonresidential area. Where the nonresidential area of the *live/work unit* is required to be accessible by Section 1108.6.2.1, the plumbing fixtures specified by Chapter 29 shall be accessible.

Reason: The intent of the proposal is to coordinate the IRC and IBC scoping. IRC Section 101.2 Exception 1 allows for live/work units to be constructed under the IRC. However, the IBC does not state this option in IBC Section 101.2 or this

section.
During the discussions, there were concerns that the current requirements for complying with the IRC and the IBC could be a conflict for several of the items listed, such as means of egress, fire protection, structural and accessibility. The addition of 'for the non-residential portion of the unit' should help clarify that the means of egress, fire protection, structural loading and plumbing facilities for the business/mercantile portion of the unit needs to look at the IBC for requirements.
This is one of a group of proposals intended to coordinate the scoping items in IBC Section 101.2 and IRC 101.2. While the proposals work together, then also work separately. The proposal for coordination will be in Group B.
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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a coordination of scoping requirements and references in the IBC and IRC, not a change to construction requirements.

BCAC ADM Item 15 IFC temporary structures (6558)

IFC: SECTION 105, 105.5, 105.5.38, 105.5.49, [A] 105.6, [A] 105.6.21, [A] 105.6.24, SECTION 3103, 3103.2, 3103.4, SECTION 3105, 3105.2, 3105.3, SECTION 3106, 3106.2.2

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Fire Code

SECTION 105 PERMITS

105.5 Required operational permits. The *fire code official* is authorized to issue operational permits for the operations set forth in Sections 105.5.2 through 105.5.52.

105.5.38 Outdoor assembly event. An operational permit is required to conduct an *outdoor assembly event* where planned attendance exceeds 1,000 persons.

Revise as follows:

105.5.49 Temporary membrane structures, temporary special event structures and tents. An operational permit is required to operate an air-supported temporary membrane structure, a temporary *special event structure* or a tent having an area in excess of 400 square feet (37 m^2).

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Funeral tents and curtains, or extensions attached thereto, when used for funeral services.
3. Tents open on all sides, which comply with all of the following:

   3.1. Individual tents having a maximum size of 700 square feet (65 m^2).

   3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m^2) total.

   3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

[A] 105.6 Required construction permits. The *fire code official* is authorized to issue construction permits for work as set forth in Sections 105.6.1 through 105.6.24.

Revise as follows:

[A] 105.6.21 Temporary Special event structure. A single construction permit is required to erect and take down a *temporary special event structure* as set forth in Section 105.5.49.

[A] 105.6.24 Temporary membrane structures and tents. A construction permit is required to erect an air-supported temporary membrane structure, ~~a temporary stage canopy~~ or a tent ~~having an area in excess of 400 square feet (37 m^2)~~ as set forth in Section 105.5.49.

~~Exceptions:~~

1. ~~Tents used exclusively for recreational camping purposes.~~
2. ~~Funeral tents and curtains, or extensions attached thereto, when used for funeral services.~~
3. ~~Tents and awnings open on all sides, which comply with all of the following:~~

   ~~3.1. Individual tents shall have a maximum size of 700 square feet (65 m^2).~~

   ~~3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m^2) total.~~

   ~~3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.~~

SECTION 3103 TEMPORARY TENTS AND MEMBRANE STRUCTURES

Revise as follows:

3103.2 Approval required. *Tents* and *membrane structures* required to have a permit as set forth in Sections 105.5 and 105.6 ~~having an area in excess of 400 square feet (37 m^2)~~ shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the *fire code official*.

~~**Exceptions:**~~

~~1. *Tents* used exclusively for recreational camping purposes.~~

~~2. *Tents* open on all sides that comply with all of the following:~~

~~2.1. Individual *tents* having a maximum size of 700 square feet (65 m^2).~~

~~2.2. The aggregate area of multiple *tents* placed side by side without a fire break clearance of 12 feet (3658 mm), not exceeding 700 square feet (65 m^2) total.~~

~~2.3. A minimum clearance of 12 feet (3658 mm) to all structures and other *tents*.~~

Delete without substitution:

~~**3103.4 Permits.** Permits shall be required as set forth in Sections 105.5 and 105.6.~~

SECTION 3105 TEMPORARY SPECIAL EVENT STRUCTURES

Revise as follows:

3105.2 Approval. Temporary special event structures structures required to have a permit as set forth in Sections 105.5 and 105.6 ~~in excess of 400 square feet (37 m^2)~~ shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the *fire code official* and the building official.

Delete without substitution:

~~**3105.3 Permits.** Permits shall be required as set forth in Sections 105.5 and 105.6.~~

SECTION 3106 OUTDOOR ASSEMBLY EVENTS

3106.2.2 Permits. An operational permit shall be required as set forth in Section 105.5.

Reason: The intent of this proposal is to eliminate duplication of code language and consistent use of the defined terms and approach to references. In looking at requirements for temporary membrane structures, temporary special event structures and tents in Permits and Chapter 31 has indicated an inconsistency in terminology. This deletion of text will not change requirements, but instead put the criteria in one location so it will remain consistent over time.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and ICC Fire Code Action Committee (FCAC). 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is an editorial revision that is only removing redundant text.

BCAC Egress Item 7 – exceptions for dwelling units (6568)

IBC: 1108.7, 1108.7.1

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

2021 International Building Code

Revise as follows:

1108.7 General exceptions. Where specifically permitted by Section 1108.5 or 1108.6, the required number of *Type A units* ~~and *Type B units*~~ is permitted to be reduced in accordance with ~~Sections 1108.7.1 through~~ Section 1108.7.5 and the required number of Type B units is permitted to be reduced in accordance with Sections 1108.7.1 through 1108.7.5.

1108.7.1 Structures without elevator service. Where elevator service is not provided in a structure, only the *dwelling units* and *sleeping units* that are located on stories indicated in Sections 1108.7.1.1 and 1108.7.1.2 are required to be ~~*Type A units* and *Type B units*, respectively~~. ~~The number of *Type A units* shall be determined in accordance with Section 1108.6.2.2.1.~~

Reason: The intent of this proposal is a clarification on which exceptions are applicable to Type A units and which exceptions are applicable to Type B units. The current text could be misread to believe that all the exceptions apply to both Type A units and Type B units.
Section 1108.7 –The current language does not clearly indicate that only the exception in 1108.7.5 is allowed to be used for the reduction of the number of required Type A units. The proposed language is more specific as to which exception is applicable by dividing the allowances for Type A units and Type B units.

Section 1108.7.1 - The language regarding Type A units is not needed in this exception because this exception does not allow for a reduction in the number of Type A units. The last sentence is only a pointer that is not needed.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification. There are no changes in requirements.

BCAC Egress Item 8 Proposal 1 IPMC (6570)

IPMC: 304.18, 304.18.1

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

2021 International Property Maintenance Code

304.18 Building security. Doors, windows or hatchways for *dwelling units*, room units or *housekeeping units* shall be provided with devices designed to provide security for the *occupant*s and property within.

Revise as follows:

304.18.1 Doors. Doors providing access to ~~a~~ an individual *dwelling unit, rooming unit* or *housekeeping unit* that is rented, leased or let ~~shall be~~ where equipped with a deadbolt lock, the deadbolt lock shall be designed to be readily openable from the side from which egress is to be made without the need for keys, special knowledge or effort and shall have a minimum lock throw of 1 inch (25 mm). Such deadbolt locks shall be installed according to the manufacturer's specifications and maintained in good working order. For the purpose of this section, a sliding bolt shall not be considered an acceptable deadbolt lock.

Reason: The intent of this provisions is to remove a requirement in the IPMC that exceeds the IBC and the IEBC. IPMC Section 304.18.1 requires deadbolts on doors. The IBC does not require deadbolts on doors but allows for them in Section 1010.2.4. So once a building is constructed with doors that comply with Sections 716 for opening protectives, the question of altering the doors to provide deadbolts can be an issue. IEBC does not address adding locks. The proposal resolves a disconnect between the IBC and IPMC.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
Security locks are typically provided on these types of doors. The requirement for these not to be key operated is in IBC, so there is no change to requirements for the locks.

BCAC Egress Item 8 Proposal 2 1010.2.4 (6571)

IBC: 1010.2.4 (IFC[BE]1010.2.4)

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

2021 International Building Code

Revise as follows:

1010.2.4 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exist:

1. Places of detention or restraint.
2. In Group I-1, Condition 2 and Group I-2 occupancies where the clinical needs of persons receiving care require containment or where persons receiving care pose a security threat, provided that all clinical staff can readily unlock doors at all times, and all such locks are keyed to keys carried by all clinical staff at all times or all clinical staff have the codes or other means necessary to operate the locks at all times.
3. In buildings in occupancy Group A having an *occupant load* of 300 or less, Groups B, F, M and S, and in *places of religious worship*, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

    3.1. The locking device is readily distinguishable as locked.

    3.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

    3.3. The use of the key-operated locking device is revocable by the *building official* for due cause.

4. Where egress doors are used in pairs, *approved* automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts does not have a doorknob or surface-mounted hardware.
5. Doors from individual *dwelling* or *sleeping units* of Group R occupancies ~~having an *occupant load* of 10 or less~~ permitted to have a single exit in accordance with Section 1006.2.1 or 1006.3.4 are permitted to be equipped with a night latch, dead bolt or security chain, that require second releasing motion, provided such devices are openable from the inside without the use of a key or tool.
6. *Fire doors* after the minimum elevated temperature has disabled the unlatching mechanism in accordance with *listed fire door* test procedures.
7. Doors serving roofs not intended to be occupied shall be permitted to be locked preventing entry to the building from the roof.
8. Other than egress *courts*, where occupants must egress from an exterior space through the building for *means of egress*, exit access doors shall be permitted to be equipped with an approved locking device where installed and operated in accordance with all of the following:

    8.1. The maximum *occupant load* shall be posted where required by Section 1004.9. Such signage shall be permanently affixed inside the building and shall be posted in a conspicuous space near all the exit access doorways.

    8.2. A weatherproof telephone or two-way communication system installed in accordance with Sections 1009.8.1 and 1009.8.2 shall be located adjacent to not less than one required exit access door on the exterior side.

    8.3. The egress door locking device is readily distinguishable as locked and shall be a key-operated locking device.

    8.4. A clear window or glazed door opening, not less than 5 square feet (0.46 m^2) in area, shall be provided at each exit access door to determine if there are occupants using the outdoor area.

    8.5. A readily visible, durable sign shall be posted on the interior side on or adjacent to each locked required exit access door serving the exterior area stating, "THIS DOOR TO REMAIN UNLOCKED WHEN THE OUTDOOR AREA IS OCCUPIED." The letters on the sign shall be not less than 1 inch (25.4 mm) high on a contrasting background.

    8.6. The *occupant load* of the occupied exterior area shll not exceed 300 occupants in accordance with Section 1004.

9. Locking devices are permitted on doors to balconies, decks or other exterior spaces serving individual dwelling or sleeping units.

10. Locking devices are permitted on doors to balconies, decks or other exterior spaces of 250 square feet (23.23 m^2) or less serving a private office space.

Reason: The intent of this provision is to coordinate with the change in Table 1006.2 for single exit dwelling units in E17-15 which changed R-2, R-3 and R-4 requirements for single exit dwelling units from 10 to 20 occupants. This was essentially moving an existing exception for sprinklered dwelling units into the table since all Group R are sprinklered. It is appropriate to coordinate Section 1010.2.4 with this allowance to allow deadbolts to be installed for security on these doors. In order to not have a conflict in the future if this changes again, rather than change the number of occupant for individual dwelling units it is more appropriate to reference the section. The reference to Section 1006.3.4 is to allow for the individual dwelling units addressed in Exceptions 4 and 5.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a coordination of current requirement.

BCAC Egress Item 12 1011.2 (6572)

IBC: 1011.2 (IFC [BE] 1011.2)

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

2021 International Building Code

Revise as follows:

1011.2 Width and capacity. The required capacity of *stairways* shall be determined as specified in Section 1005.1, but the minimum width shall be not less than 44 inches (1118 mm). ~~See Section 1009.3 for *accessible means of egress stairways*.~~ The minimum width for stairways that serve as part of the accessible means of egress shall comply with Section 1009.3.

Exceptions:

1. *Stairways* serving an *occupant load* of less than 50 shall have a width of not less than 36 inches (914 mm).
2. *Spiral stairways* as provided for in Section 1011.10.
3. Where an incline platform lift or *stairway* chairlift is installed on *stairways* serving occupancies in Group R-3, or within *dwelling units* in occupancies in Group R-2, a clear passage width not less than 20 inches (508 mm) shall be provided. Where the seat and platform can be folded when not in use, the distance shall be measured from the folded position.

Reason: The revised language would make the terminology consistent between this reference and the referenced Section 1009.3. Stairways are never considered to be part of an accessible route. They can serve as part of an accessible means of egress with assistance by emergency responders. As it is currently written the language could be interpreted to be read as if the stairway is expected to be accessible. Adding “minimum width’ would clarify why you need to go to Section 1009.3 – which could require 48” between handrails.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This a terminology clarification.

BCAC Egress Item 22 Proposal 2 1010.1.1 Exp. 11 (6573)

IBC: 1010.1.1 (IFC[BE] 1010.1.1)

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

2021 International Building Code

Revise as follows:

1010.1.1 Size of doors. The required capacity of each door opening shall be sufficient for the *occupant load* thereof and shall provide a minimum clear opening width of 32 inches (813 mm). The clear opening width of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear opening width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 32 inches (813 mm). In Group I-2, doors serving as means of egress doors where used for the movement of beds shall provide a minimum clear opening width of $41^1/_2$ inches (1054 mm). The minimum clear opening height of doors shall be not less than 80 inches (2032 mm).

Exceptions:

1. In Group R-2 and R-3 *dwelling and sleeping units* that are not required to be an *Accessible unit*, *Type A unit* or *Type B unit*, the minimum width shall not apply to door openings that are not part of the required *means of egress*.
2. In Group I-3, door openings to resident *sleeping units* that are not required to be an *Accessible unit* shall have a minimum clear opening width of 28 inches (711 mm).
3. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum clear opening width.
4. The maximum width of door leaves in revolving doors that comply with Section 1010.3.1 shall not be limited.
5. The maximum width of door leaves in *power-operated doors* that comply with Section 1010.3.2 shall not be limited.
6. Door openings within a *dwelling unit* or *sleeping unit* shall have a minimum clear opening height of 78 inches (1981 mm).
7. In *dwelling and sleeping units* that are not required to be *Accessible*, Type A or *Type B units*, exterior door openings other than the required *exit* door shall have a minimum clear opening height of 76 inches (1930 mm).
8. In Groups I-1, R-2, R-3 and R-4, in *dwelling and sleeping units* that are not required to be Accessible, Type A or *Type B units*, the minimum clear opening widths shall not apply to interior egress doors.
9. Door openings required to be *accessible* within *Type B units* intended for user passage shall have a minimum clear opening width of 31.75 inches (806 mm).
10. Doors to walk-in freezers and coolers less than 1,000 square feet (93 m^2) in area shall have a maximum width of 60 inches (1524 mm) nominal.
11. Doors serving ~~nonaccessible single-user shower or~~ sauna compartments, toilet ~~stalls~~ compartments or dressing, fitting or changing ~~rooms~~ compartments that are not required to be accessible shall have a minimum clear opening width of 20 inches (508 mm).
12. Door serving shower compartments in other than Accessible units or Type A units are not required to provide a minimum clear opening width.

Reason: The intent of this proposal clarify which spaces the exception applies to, and remove a conflict for shower compartments with sliding shower compartment doors.

E40-18 was a proposal that added an exception for non-accessible dressing rooms or fitting rooms. This was Disapproved during the Committee Action Hearings because it could be applied to a large changing room that accommodates several individuals, such as a bridal fitting room where the 32” clear width door opening is necessary. The revision to Exception #11 would clarify that this applies to compartments, not rooms.The Proponent submitted a Public Comment revising and combining some of the exceptions into one exception for doors serving non-accessible single-user showers, toilet stalls, and dressing rooms, and allowed for a minimum clear opening width of 20”. The Reason Statement stated that the 20” width came from research to address doors serving these types of individual uses, and that it would address the needs of non-accessible dressing rooms, single-use toilet rooms, and shower compartments — all for single-person use rooms. Exception #11 currently requires a 20” minimum clear opening for doors serving non-accessible single shower

compartments. But that minimum clear opening width would conflict with the width of a sliding door on a standard 36”x36” shower compartments.

Revising exception #11 would remove shower compartments from the list of spaces where a 20” clear width opening requirement would apply to the door opening and move that to exception #12. Shower compartments in Accessible and Type A units would comply with 2017 ICC A117.1 requirements in Section 608.7. Type B units do not have a requirement for an opening width of the shower compartment door (2017 ICC A117.1 Section 1104.5.2 and 1004.11.3.1.3.3). This change to the exceptions in this section would protect remodelers who do work on Type B or non-accessible bathrooms with limited space and without having to make adjustments such as moving the walls of a shower unit to accommodate a 20” clear width door opening or to change to enclosure to a swinging instead of a sliding door. This would be an unnecessary additional cost. This width has never been identified as a safety hazard.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will decrease the cost of construction
This will allow for standard sliding shower doors instead of requiring swinging doors on shower compartments. Swinging doors typically also need a larger room size.

BCAC Egress Item 9 – Scoping for lighting (6578)

IBC: 1008.1, 1008.3, 1008.3.1 (IFC[BE] 1008.1, 1008.3, 1008.3.1)

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

2021 International Building Code

SECTION 1008 MEANS OF EGRESS ILLUMINATION

Revise as follows:

1008.1 Means of egress illumination. Illumination shall be provided in the *means of egress* in accordance with Section 1008.2. ~~Under emergency power.~~ In the event of power supply failure, *means of egress* illumination shall comply with Section 1008.3.

1008.2 Illumination required. The *means of egress* serving a room or space shall be illuminated at all times that the room or space is occupied.

Exceptions:

1. Occupancies in Group U.
2. *Aisle accessways* in Group A.
3. *Dwelling units* and *sleeping units* in Groups R-1, R-2 and R-3.
4. *Sleeping units* of Group I occupancies.

1008.2.1 Illumination level under normal power. The *means of egress* illumination level shall be not less than 1 footcandle (11 lux) at the walking surface. Along *exit access stairways*, exit stairways and at their required landings, the illumination level shall not be less than 10 footcandles (108 lux) at the walking surface when the *stairway* is in use.

Exception: For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the walking surface is permitted to be reduced during performances by one of the following methods provided that the required illumination is automatically restored upon activation of a premises' *fire alarm system*:

1. Externally illuminated walking surfaces shall be permitted to be illuminated to not less than 0.2 footcandle (2.15 lux).
2. Steps, landings and the sides of *ramps* shall be permitted to be marked with *self-luminous* materials in accordance with Sections 1025.2.1, 1025.2.2 and 1025.2.4 by systems *listed* in accordance with UL 1994.

1008.2.2 Group I-2. In Group I-2 occupancies where two or more *exits* are required, on the exterior landings required by Section 1010.1.5, means of egress illumination levels for the exit discharge shall be provided such that failure of a single lamp in a luminaire shall not reduce the illumination level on that landing to less than 1 footcandle (11 lux).

1008.2.3 Exit discharge. Illumination shall be provided along the path of travel for the exit discharge from each exit to the *public way*.

Exception: Illumination shall not be required where the path of the exit discharge meets both of the following requirements:

1. The path of exit discharge is illuminated from the exit to a safe dispersal area complying with Section 1028.5.
2. A dispersal area shall be illuminated to a level not less than 1 footcandle (11 lux) at the walking surface.

Revise as follows:

~~1008.3~~ 1008.2.3 ~~Emergency power~~ Power for illumination. The power supply for *means of egress* illumination shall normally be provided by the premises' electrical supply.

~~1008.3.1~~ 1008.3 ~~General~~ Illumination required with the emergency electrical system. In the event of power supply failure in rooms and spaces that require two or more *exits* or access to exits, an emergency electrical system shall automatically illuminate all of the following areas:

1. *Aisles*.

2. *Corridors*.

3. *Exit access stairways* and *ramps*.

~~**1008.3.2**~~ **1008.3.1 Buildings.** In the event of power supply failure in buildings that require two or more *exits* or access to exits, an emergency electrical system shall automatically illuminate all of the following areas:

1. *Interior exit access stairways* and *ramps*.
2. *Interior* and *exterior exit stairways* and *ramps*.
3. *Exit passageways*.
4. Vestibules and areas on the level of discharge used for *exit discharge* in accordance with Section 1028.2.
5. Exterior landings as required by Section 1010.1.5 for *exit doorways* that lead directly to the *exit discharge*.

~~**1008.3.3**~~ **1008.3.2 Rooms and spaces.** In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Electrical equipment rooms.
2. Fire command centers.
3. Fire pump rooms.
4. Generator rooms.
5. Public restrooms with an area greater than 300 square feet (27.87 m^2).

~~**1008.3.4**~~ **1008.3.3 Duration.** The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 2702.

~~**1008.3.5**~~ **1008.3.4 Illumination level under emergency power.** Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded. In Group I-2 occupancies, failure of a single lamp in a luminaire shall not reduce the illumination level to less than 0.2 footcandle (2.2 lux).

Reason: The intent of this proposal is to split this section into requirements for general means of egress illumination (1008.2) and emergency lighting (1008.3). To truly accomplish this, the sections should be re-arranged as indicated. Section 1008.3 is currently titled '*Emergency power for illumination*.' However, that section really deals with general MOE lighting requirements, not emergency lighting requirements. Emergency lighting power requirements are addressed Sections 1008.3.3 and 1008.3.4. So we relocated it from 1008.3 to 1008.2.3 to group the lighting requirements appropriately.

The text change in Section 1008.1 will match the scoping phrase used in 1008.3, 1008.3.1 and 1008.3.2.Title changes in Section 1008.2.3 and 1008.3 will reinforce the idea of two different requirements – one for regular lighting and one for emergency lighting.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a reorganization of existing text.

BCAC Egress Item 10 Accessible vs. Access (to) (6593)

PART I - IBC: SECTION 202 (New), 703.5, 1607.9.1, 1607.14.4.4, 1704.2.2, 2111.3.1, 2113.9.2, 2405.3, 2406.4.3, 3008.9, F101.5.1, H110.1; IPMC: [BF] 703.3

PART II - IFC: SECTION 202, 504.1, 509.2, 701.6, 2309.5.2.1, 3206.10.1.1, L104.6, L104.14.1, D102.1; IBC: [F] 415.11.7.4, [F] 914.1.1; ICCPC: [F] 2001.3.6

PART III - IFGC: SECTION 202, 403.11.7, 409.5.3, 409.6, 501.7.3, 503.5.9, 503.12.6, 404.8.2, 404.14.2, 411.1.6

PART IV - IPC: SECTION 202, 1302.9; IBC: [P]1210.2.2; ICCPC: [P]1204.3.3

PART V - IMC: 306.1, 506.3.2.2; IFGC: [M]306.1; ICCPC: SECTION 202 (New)

PART VI - ISPSC: SECTION 202, SECTION 202 (New), [A]110.1, 303.1.1, 306.9, 313.4, 314.5, 324.2, 409.4.3, 504.1, 603.2, 612.5.1, 1001.6, 704.7.3, 704.7.2

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Joseph Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

THIS IS AN 6 PART CODE CHANGE. PART I WILL BE HEARD BY THE GENERAL CODE COMMITTEE. PART II WILL BE HEARD BY THE FIRE CODE COMMITTEE. PART III WILL BE HEARD BY THE FUEL GAS CODE COMMITTEE. PART IV WILL BE HEARD BY THE PLUMBING CODE COMMITTEE. PART V WILL BE HEARD BY THE MECHANICAL CODE COMMITTEE. PART VI WILL BE HEARD BY THE SWIMMING POOL AND SPA CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Building Code

Add new definition as follows:

ACCESS (TO). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel or similar obstruction [see also Ready access (to)].

READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel or similar obstruction [see Access (to)].

Revise as follows:

[F] 415.11.7.4 Installations in corridors and above other occupancies. The installation of HPM piping and tubing within the space defined by the walls of corridors and the floor or roof above, or in concealed spaces above other occupancies, shall be in accordance with Sections 415.11.7.1 through 415.11.7.3 and the following conditions:

1. Automatic sprinklers shall be installed within the space unless the space is less than 6 inches (152 mm) in the least dimension.
2. *Ventilation* not less than six air changes per hour shall be provided. The space shall not be used to convey air from any other area.
3. Where the piping or tubing is used to transport HPM liquids, a receptor shall be installed below such piping or tubing. The receptor shall be designed to collect any discharge or leakage and drain it to an *approved* location. The 1-hour enclosure shall not be used as part of the receptor.
4. HPM supply piping and tubing and nonmetallic waste lines shall be separated from the corridor and from occupancies other than Group H-5 by *fire barriers* or by an approved method or assembly that has a *fire-resistance rating* of not less than 1 hour. Access openings into the enclosure shall be protected by approved fire-protection-rated assemblies.
5. ~~Readily accessible manual~~ Ready access to manual or automatic remotely activated fail-safe emergency shutoff valves , that are provided with ready access, shall be installed on piping and tubing other than waste lines at the following locations:

    5.1. At branch connections into the *fabrication area*.

    5.2. At entries into *corridors*.

Exception: Transverse crossings of the *corridors* by supply piping that is enclosed within a ferrous pipe or tube for

the width of the *corridor* need not comply with Items 1 through 5.

703.5 Marking and identification. Where there is ~~an accessible~~ access to a concealed floor, floor-ceiling or *attic* space, *fire walls*, *fire barriers*, *fire partitions*, *smoke barriers* and *smoke partitions* or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or stenciling in the concealed space. Such identification shall:

1. Be located within 15 feet (4572 mm) of the end of each wall and at intervals not exceeding 30 feet (9144 mm) measured horizontally along the wall or partition.
2. Include lettering not less than 3 inches (76 mm) in height with a minimum $^3/_8$-inch (9.5 mm) stroke in a contrasting color incorporating the suggested wording, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS," or other wording.

[F] 914.1.1 Exterior access to shaftways. Outside openings ~~accessible~~ with access to the fire department and that open directly on a hoistway or shaftway communicating between two or more floors in a building shall be plainly marked with the word "SHAFTWAY" in red letters not less than 6 inches (152 mm) high on a white background. Such warning signs shall be placed so as to be readily discernible from the outside of the building.

[P] 1210.2.2 Walls and partitions. Walls and partitions within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

Exception: This section does not apply to the following buildings and spaces:

1. Dwelling units and *sleeping units*.
2. Toilet rooms that are not ~~accessible to the~~ for use by the general public and that have not more than one water closet.

Accessories such as grab bars, towel bars, paper dispensers and soap dishes, provided on or within walls, shall be installed and sealed to protect structural elements from moisture.

1607.9.1 Handrails and guards. *Handrails* and *guards* shall be designed to resist a linear *load* of 50 pounds per linear foot (plf) (0.73 kN/m) in accordance with Section 4.5.1.1 of ASCE 7. Glass *handrail* assemblies and *guards* shall comply with Section 2407.

Exceptions:

1. For one- and two-family dwellings, only the single concentrated *load* required by Section 1607.9.1.1 shall be applied.
2. In Group I-3, F, H and S occupancies, for areas that are not ~~accessible to~~ for use by the general public and that have an *occupant load* less than 50, the minimum *load* shall be 20 pounds per foot (0.29 kN/m).

1607.14.4.4 Ground-mounted photovoltaic (PV) panel systems. or modules installed as an independent structure. Ground-mounted photovoltaic (PV) panel systems that are independent structures and do not have ~~accessible/~~ an easily accessed or occupied space underneath are not required to accommodate a roof photovoltaic *live load*. Other *loads* and combinations in accordance with Section 1605 shall be accommodated.

1704.2.2 Access for special inspection. The construction or work for which *special inspection* or testing is required shall remain ~~accessible and~~ exposed and with access for *special inspection* or testing purposes until completion of the required *special inspections* or tests.

2111.3.1 Ash dump cleanout. Cleanout openings, located within foundation walls below fireboxes, where provided, shall be equipped with ferrous metal or masonry doors and frames constructed to remain tightly closed, except when in use. Cleanouts shall ~~be accessible~~ provide access to and be located so that ash removal will not create a hazard to combustible materials.

2113.9.2 Spark arrestors. Where a spark arrestor is installed on a masonry chimney, the spark arrestor shall meet all of the following requirements:

1. The net free area of the arrestor shall be not less than four times the net free area of the outlet of the chimney flue it serves.

2. The arrestor screen shall have heat and *corrosion resistance* equivalent to 19-gage galvanized steel or 24-gage stainless steel.
3. Openings shall not permit the passage of spheres having a diameter greater than $^1/_2$ inch (12.7 mm) nor block the passage of spheres having a diameter less than $^3/_8$ inch (9.5 mm).
4. The spark arrestor shall ~~be accessible~~ provide access for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue.

2405.3 Screening. Where used in monolithic glazing systems, annealed, heat-strengthened, fully tempered and wired glass shall have broken glass retention screens installed below the glazing material. The screens and their fastenings shall be: capable of supporting twice the weight of the glazing; firmly and substantially fastened to the framing members; and installed within 4 inches (102 mm) of the glass. The screens shall be constructed of a noncombustible material not thinner than No. 12 B&S gage (0.0808 inch) with mesh not larger than 1 inch by 1 inch (25 mm by 25 mm). In a corrosive atmosphere, structurally equivalent noncorrosive screen materials shall be used. Annealed, heat-strengthened, fully tempered and wired glass, where used in multiple-layer glazing systems as the bottom glass layer over the walking surface, shall be equipped with screening that conforms to the requirements for monolithic glazing systems.

Exception: In monolithic and multiple-layer sloped glazing systems, the following applies:

1. Fully tempered glass installed without protective screens where glazed between intervening floors at a slope of 30 degrees (0.52 rad) or less from the vertical plane shall have the highest point of the glass 10 feet (3048 mm) or less above the walking surface.
2. Screens are not required below any glazing material, including annealed glass, where the walking surface below the glazing material is permanently protected from the risk of falling glass or the area below the glazing material is not a walking surface.
3. Any glazing material, including annealed glass, is permitted to be installed without screens in the sloped glazing systems of commercial or detached noncombustible *greenhouses* used exclusively for growing plants and not open to the public, provided that the height of the *greenhouse* at the ridge does not exceed 30 feet (9144 mm) above grade.
4. Screens shall not be required in individual *dwelling units* in Groups R-2, R-3 and R-4 where fully tempered glass is used as single glazing or as both panes in an insulating glass unit, and the following conditions are met:
   4.1. Each pane of the glass is 16 square feet (1.5 m^2) or less in area.
   4.2. The highest point of the glass is 12 feet (3658 mm) or less above any walking surface ~~or other accessible area~~.
   4.3. The glass thickness is $^3/_{16}$ inch (4.8 mm) or less.
5. Screens shall not be required for laminated glass with a 15-mil (0.38 mm) polyvinyl butyral (or equivalent) interlayer used in individual *dwelling units* in Groups R-2, R-3 and R-4 within the following limits:
   5.1. Each pane of glass is 16 square feet (1.5 m^2) or less in area.
   5.2. The highest point of the glass is 12 feet (3658 mm) or less above a walking surface ~~or other accessible area~~.

2406.4.3 Glazing in windows. Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered to be a hazardous location:

1. The exposed area of an individual pane is greater than 9 square feet (0.84 m^2).
2. The bottom edge of the glazing is less than 18 inches (457 mm) above the floor.
3. The top edge of the glazing is greater than 36 inches (914 mm) above the floor.
4. One or more walking surface(s) are within 36 inches (914 mm), measured horizontally and in a straight line, of the plane of the glazing.

Exceptions:

1. Decorative glazing.

2. Where a horizontal rail is installed on the ~~accessible~~ walking surface side(s) of the glazing adjacent to and 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal *load* of 50 pounds per linear foot (730 N/m) without contacting the glass and be not less than $1^1/_2$ inches (38 mm) in cross-sectional height.
3. Outboard panes in insulating glass units or multiple glazing where the bottom exposed edge of the glass is 25 feet (7620 mm) or more above any grade, roof, walking surface or other horizontal or sloped (within 45 degrees of horizontal) (0.79 rad) surface adjacent to the glass exterior.

3008.9 Emergency voice/alarm communication system. The building shall be provided with an *emergency voice/alarm communication system*. The *emergency voice/alarm communication system* shall ~~be accessible to~~ allow access for the fire department. The system shall be provided in accordance with Section 907.5.2.2.

F101.5.1 Rodent ~~accessible~~ attainable openings. Windows and other openings for the purpose of light and ventilation in the *exterior walls* not covered in this chapter, ~~accessible~~ attainable to rodents by way of exposed pipes, wires, conduits and other appurtenances, shall be covered with wire cloth of at least 0.035-inch (0.89 mm) wire. In lieu of wire cloth covering, said pipes, wires, conduits and other appurtenances shall be blocked from rodent usage by installing solid sheet metal guards 0.024 inch (0.61 mm) thick or heavier. Guards shall be fitted around pipes, wires, conduits or other appurtenances. In addition, they shall be fastened securely to and shall extend perpendicularly from the *exterior wall* for not less than 12 inches (305 mm) beyond and on either side of pipes, wires, conduits or appurtenances.

H110.1 General. Roof signs shall be constructed entirely of metal or other approved noncombustible material except as provided for in Sections H106.1.1 and H107.1. Provisions shall be made for electric grounding of metallic parts. Where combustible materials are permitted in letters or other ornamental features, wiring and tubing shall be kept free and insulated therefrom. Roof signs shall be so constructed as to leave a clear space of not less than 6 feet (1829 mm) between the roof level and the lowest part of the sign and shall have not less than 5 feet (1524 mm) clearance between the vertical supports thereof. Roof sign structures shall not project beyond an *exterior wall*.

Exception: Signs on flat roofs with every part of the roof ~~accessible~~ allowing access.

2021 International Code Council Performance Code

Add new definition as follows:

[M] ACCESS (TO). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel, door or similar obstruction [see also “Ready access (to)”].

Revise as follows:

[P] 1204.3.3 ~~Accessibility~~ Access. The drainage system shall ~~be accessible~~ have access for maintenance and clearing of blockages.

[F] 2001.3.6 Water supply. Water supply for fire department operations shall be from a reliable~~, readily accessible~~ source with ready access acceptable to the fire department and capable of supporting fire-fighting operations.

2021 International Fire Code

OCCUPANCY CLASSIFICATION. For the purposes of this code, certain occupancies are defined as follows:

Revise as follows:

504.1 Required access. Exterior doors and openings required by this code or the *International Building Code* shall be maintained ~~readily accessible~~ with ready access for emergency access by the fire department. An *approved* access walkway leading from fire apparatus access roads to exterior openings shall be provided where required by the *fire code official*.

509.2 Equipment access. *Approved* access shall be provided and maintained for all *fire protection system* equipment to permit immediate safe operation and maintenance of such equipment. Storage, trash and other materials or objects shall not be placed or kept in such a manner that would prevent such equipment from ~~being readily accessible~~ ready access.

701.6 Owner’s responsibility. The *owner* shall maintain an inventory of all required *fire-resistance-rated* construction, construction installed to resist the passage of smoke and the construction included in Sections 703 through 707 and Sections 602.4.1 and 602.4.2 of the *International Building Code*. Such construction shall be visually inspected by the *owner* annually and properly repaired, restored or replaced where damaged, altered, breached or penetrated. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the *owner* unless the concealed space is ~~accessible~~ available by the removal or movement of a panel, access door, ceiling tile or similar movable entry to the space.

2309.5.2.1 Identification. Manual emergency shutoff valves shall be identified and the location shall be clearly visible, ~~accessible~~ have access and be indicated by means of a sign.

3206.10.1.1 Sprinklered buildings. Aisles in sprinklered buildings shall be not less than 44 inches (1118 mm) wide. Aisles shall be not less than 96 inches (2438 mm) wide in *high-piled storage areas* exceeding 2,500 square feet (232 m^2) in area, that are ~~accessible~~ open to the public and designated to contain high-hazard commodities.

Aisles shall be not less than 96 inches (2438 mm) wide in areas open to the public where mechanical stocking methods are used.

Exceptions:

1. Aisles in *high-piled storage areas* exceeding 2,500 square feet (232 m^2) in area, that are open to the public and designated to contain high-hazard commodities, and that are protected by a sprinkler system designed for multiple-row racks of high-hazard commodities, shall be not less than 44 inches (1118 mm) wide.
2. Aisles that are in *high-piled storage areas* exceeding 2,500 square feet (232 m^2) in area, not open to the public and protected by a sprinkler system designed for multiple-row racks, shall be not less than 24 inches (610 mm) wide.

L104.6 Isolation valves. System isolation valves that ~~are accessible to~~ have access for the fire department shall be installed on the system riser to allow piping beyond any air cylinder refill panel to be blocked.

MULTIPLE-LEVEL BOOTH. An exhibit that has a second level or tier constructed on top of the exhibit or portion of the exhibit that is ~~accessible~~ open to the public, or includes a live load above the exhibit area floor level.

L104.14.1 Location. The location of the external mobile air connection shall ~~be accessible to~~ have access for mobile air apparatus and *approved* by the *fire code official*.

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall ~~be accessible to~~ allow access for the fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds (34 050 kg).

2021 International Fuel Gas Code

Revise as follows:

[M] ACCESS (TO). That which enables a device,*appliance* or *equipment* to be reached by ready *access* or by a means that first requires the removal or movement of a panel~~, door~~ or similar obstruction (see also "Ready access").

[M] READY ACCESS (TO). That which enables a device,*appliance* or *equipment* to be directly reached, without requiring the removal or movement of any panel~~, door~~ or similar obstruction (see *"Access"*).

[M] 306.1 Access for maintenance and replacement. Appliances, control devices, heat exchangers and HVAC components that utilize energy shall ~~be accessible~~ have access for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances, or any other *piping* or ducts not connected to the *appliance* being inspected, serviced, repaired or replaced. A level working space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be provided in front of the control side to service an *appliance*.

403.11.7 Lapped flanges. Lapped flanges shall be used only above ground or in exposed locations ~~accessible~~ with access for inspection.

409.5.3 Located at manifold. Where the *appliance* shutoff valve is installed at a manifold, such shutoff valve shall be located within 50 feet (15 240 mm) of the *appliance* served and shall ~~be readily accessible~~ have ready access and be permanently identified. The *piping* from the manifold to within 6 feet (1829 mm) of the *appliance* shall be designed, sized and installed in accordance with Sections 401 through 408.

409.6 Shutoff valve for laboratories. Where provided with two or more fuel gas outlets, including table-, bench- and hood-mounted outlets, each laboratory space in educational, research, commercial and industrial *occupancies* shall be provided with a single dedicated shutoff valve through which all such gas outlets shall be supplied. The dedicated shutoff valve shall ~~be readily accessible~~ have ready access, be located within the laboratory space served, be located adjacent to the egress door from the space and shall be identified by *approved* signage stating "Gas Shutoff."

501.7.3 Connection to masonry fireplace flue. A connector shall extend from the *appliance* to the flue serving a

masonry *fireplace* such that the flue gases are exhausted directly into the flue. The connector shall ~~be accessible~~ have access or be removable for inspection and cleaning of both the connector and the flue. *Listed* direct connection devices shall be installed in accordance with their listing.

503.5.9 Cleanouts. Where a chimney that formerly carried flue products from liquid or solid fuel-burning appliances is used with an *appliance* using fuel gas, ~~an accessible~~ a cleanout with access shall be provided. The cleanout shall have a tight-fitting cover and shall be installed so its upper edge is not less than 6 inches (152 mm) below the lower edge of the lowest chimney inlet opening.

503.12.6 Positioning. Draft hoods and draft regulators shall be installed in the position for which they were designed with reference to the horizontal and vertical planes and shall be located so that the relief opening is not obstructed by any part of the *appliance* or adjacent construction. The *appliance* and its draft hood shall be located so that the relief opening ~~is accessible~~ has access for checking vent operation.

404.8.2 Conduit with both ends terminating indoors. Where the conduit originates and terminates within the same building, the conduit shall originate and terminate in ~~an accessible~~ a portion of the building with access and shall not be sealed. The conduit shall extend not less than 2 inches (51 mm) beyond the point where the pipe emerges from the floor.

404.14.2 Conduit with both ends terminating indoors. Where the conduit originates and terminates within the same building, the conduit shall originate and terminate in ~~an accessible~~ a portion of the building with access and shall not be sealed. The conduit shall extend not less than 2 inches (51 mm) beyond the point where the pipe emerges from the floor.

411.1.6 Unions. A union fitting shall be provided for *appliances* connected by rigid metallic pipe. Such unions shall ~~be accessible~~ have access and be located within 6 feet (1829 mm) of the *appliance*.

2021 International Plumbing Code

Revise as follows:

[M] ACCESS (TO). That which enables a fixture, appliance or equipment to be reached by*ready access* or by a means that first requires the removal or movement of a panel~~, door~~ or similar obstruction (see “Ready access”).

[M] READY ACCESS. That which enables a fixture, appliance or equipment to be directly reached without requiring the removal or movement of any panel~~, door~~ or similar obstruction and without the use of a portable ladder, step stool or similar device.

1302.9 Pumping and control system. Mechanical equipment including pumps, valves and filters shall be ~~easily accessible~~ have easy access and removable in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be appropriate for the application and in accordance with Section 604 .

2021 International Property Maintenance Code

Revise as follows:

[BF] 703.3 Maintenance. The required fire-resistance rating of fire-resistance-rated construction, including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and joint systems, shall be maintained. Such elements shall be visually inspected annually by the *owner* and repaired, restored or replaced where damaged, altered, breached or penetrated. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the *owner* unless the concealed space ~~is accessible~~ has access by the removal or movement of a panel, access door, ceiling tile or entry to the space. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer and any other reason shall be protected with *approved* methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self- or automatic-closing doors of *approved* construction meeting the fire protection requirements for the assembly.

2021 International Mechanical Code

Revise as follows:

306.1 Access. *Appliances*, controls devices, heat exchangers and HVAC system components that utilize energy shall ~~be accessible~~ provide access for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances, venting systems or any other piping or ducts not connected to the *appliance* being inspected, serviced, repaired or replaced. A level working space not less than 30 inches deep and 30 inches wide (762 mm by 762 mm) shall be provided in front of the control side to service an

appliance.

506.3.2.2 Duct-to-hood joints. Duct-to-hood joints shall be made with continuous internal or external liquid-tight welded or brazed joints. Such joints shall be smooth, ~~accessible~~ available for inspection, and without grease traps.

Exceptions: This section shall not apply to:

1. A vertical duct-to-hood collar connection made in the top plane of the hood in accordance with all of the following:
   1.1. The hood duct opening shall have a 1-inch-deep (25 mm), full perimeter, welded flange turned down into the hood interior at an angle of 90 degrees (1.57 rad) from the plane of the opening.
   1.2. The duct shall have a 1-inch-deep (25 mm) flange made by a 1-inch by 1-inch (25 mm by 25 mm) angle iron welded to the full perimeter of the duct not less than 1 inch (25 mm) above the bottom end of the duct.
   1.3. A gasket rated for use at not less than 1,500ºF (816ºC) is installed between the duct flange and the top of the hood.
   1.4. The duct-to-hood joint shall be secured by stud bolts not less than $^1/_4$ inch (6.4 mm) in diameter welded to the hood with a spacing not greater than 4 inches (102 mm) on center for the full perimeter of the opening. The bolts and nuts shall be secured with lockwashers.
2. *Listed* and *labeled* duct-to-hood collar connections installed in accordance with Section 304.1.

2021 International Swimming Pool and Spa Code

Delete without substitution:

~~**ACCESSIBLE.** Signifies access that requires the removal of an access panel or similar removable obstruction.~~

Add new definition as follows:

ACCESS (TO). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel or similar obstruction [see also Ready access (to)].

READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel or similar obstruction [see Access (to)].

Revise as follows:

[A] 110.1 General. Construction or work for which a permit is required shall be subject to inspection by the *code official* and such construction or work shall remain visible and able to be accessed for inspection purposes until *approved*. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain ~~accessible~~ available and exposed for inspection purposes. Neither the *code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

303.1.1 Heaters. The electric power to heaters shall be controlled by ~~a readily accessible~~ an on-off switch with ready access that is an integral part of the heater, mounted on the exterior of the heater or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with continuously burning ignition pilots.

306.9 Valves under decks. Valves installed in or under decks shall be ~~accessible~~ provided access or operation, service, and maintenance. Where access through the deck walking surface is required, an access cover shall be provided for the opening in the deck. Such access covers shall be slip resistant and secured.

313.4 Location. Pumps and motors shall be ~~accessible~~ provided access for inspection and service in accordance with the manufacturer's specifications.

314.5 Vacuum fittings. Where installed, *submerged vacuum fittings* shall be ~~accessible~~ provided access and shall be located not greater than 12 inches (305 mm) below the water level.

324.2 Requirements. The equipment area or room floor shall be of concrete or other suitable material having a smooth slip-resistant finish and have positive drainage, including a sump drain pump, if necessary. Floors shall have a slope toward the floor drain or sump drain pump adequate to prevent standing water at all times. The opening to the equipment room or area shall be designed to provide access for all anticipated equipment. At least one hose bibb with backflow

preventer shall be located in the equipment room or ~~be accessible~~ allow for access within an adequate distance of the equipment room so that a hose can service the entire room.

409.4.3 Emergency response units. Pools covered by this chapter shall be provided with first aid equipment, including a first aid kit. First aid equipment and kits shall be located in ~~an accessible location~~ to allow access.

504.1 Emergency shutoff switch. One emergency shutoff switch shall be provided to disconnect power to circulation and jet system pumps and air blowers. Emergency shutoff switches shall ~~be accessible~~ provide access, be located within sight of the spa and shall be located not less than 5 feet (1524 mm) but not greater than 10 feet (3048 mm) horizontally from the inside walls of the spa.

603.2 Class D-2 pools. Where a Class D-2 pool has a bather ~~accessible~~ depth greater than $4^1/_2$ feet (1372 mm), the floor shall have a distinctive marking at the $4^1/_2$ feet (1372 mm) water depth.

612.5.1 Water collection and treatment tank. Interactive water play features shall drain to a collection and treatment tank. The inside of the tank shall ~~be accessible~~ provide access for cleaning and inspection. The access hatch or lid shall be locked or require a tool to open.
The tank capacity shall be not less than 1000 gallons or ten times the number of gallons in a minute when all nozzles are operating simultaneously, whichever is greater. The volume water in the tank, at the design water level, shall not decrease more than 15% of that volume when all pumps and discharge piping fill with water to the discharge points of all nozzles.
Tanks shall be provided with a means to empty all water in the tank for the purposes of servicing or cleaning.

1001.6 Access. Electrical components that require placement or servicing shall be ~~accessible~~ located with access.

704.7.3 Pump shutoff valves. An ~~*accessible*~~ available means of ~~shut~~ shutting off ~~of~~ the suction and discharge piping for the pump shall be provided for maintenance and removal of the pump and be located with access.

2021 International Code Council Performance Code

Add new definition as follows:

[M] READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel, door or similar obstruction [see “Access (to)”].

2021 International Swimming Pool and Spa Code

Revise as follows:

704.7.2 ~~Accessible~~ Access to pumps and motors. Pumps and motors shall be ~~accessible~~ provided access for inspection and service in accordance with the pump and motor manufacturer’s instructions.

Reason: This effort was started by the CACs in 2015/16 code change cycle, and continued in 2018/19. This proposal is to provide coordination with the action taken with -P84-15, M2-15, RB2-16, F12-16, CE137-16 Part 1, CE29-19 Part 1 and 2 . Because the term ‘accessible’ is most commonly understood as requiring access for persons with disabilities we are making the changes to delete the word accessible from the remaining codes and replace it with other words, defined terms or phrases that are not attributed to requiring access for the physically disabled. Many of the codes use the defined term ‘access (to)’ or ‘ready access (to)’ for access by maintenance and service personnel or fire departments. This proposal provides clarity and consistency in the remaining codes where those coordination modifications missed or came in as part of new code changes.

Code change proposal M2-15 removed ‘door’ from the definitions for ‘access (to)’ and ‘ready access (to)’. That coordination item did not happen across codes and this proposal seeks to complete that effort.

Similar proposals will be submitted for the Group B cycle for IRC, IECC and IEBC.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (BCAC), and ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).
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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The PMG CAC 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 2020, the PMG CAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMG CAC website at: PMGCAC.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There is no change to any of the requirements. This is only a clarification in terminology.

IBC Egress Item 19 Accessible hotel bathrooms – tubs and showers (6598)

IBC: TABLE 1108.6.1.1

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

2021 International Building Code

1108.6.1 Group R-1. *Accessible units* and *Type B units* shall be provided in Group R-1 occupancies in accordance with Sections 1108.6.1.1 and 1108.6.1.2.

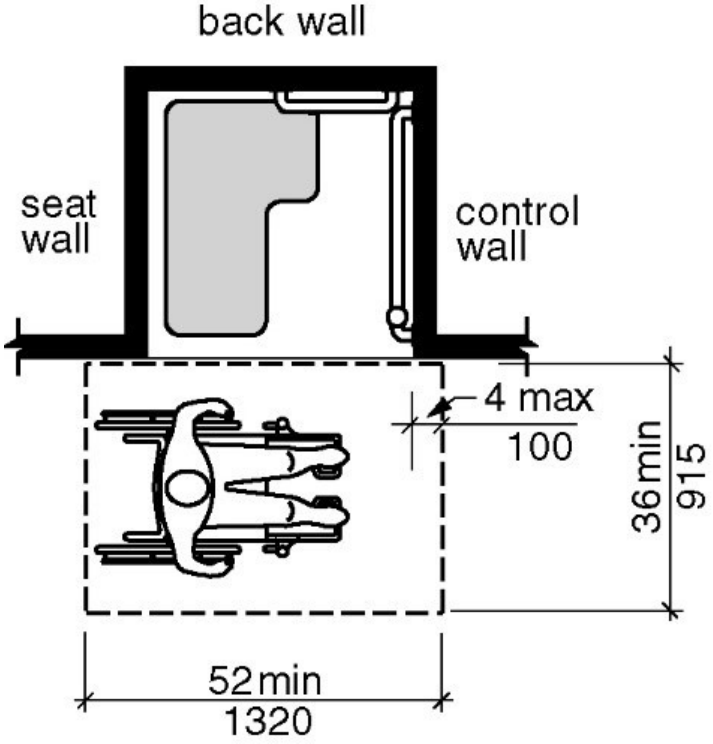
1108.6.1.1 Accessible units. *Accessible dwelling units* and *sleeping units* shall be provided in accordance with Table 1108.6.1.1. On a multiple-building site, where structures contain more than 50 *dwelling units* or *sleeping units*, the number of *Accessible units* shall be determined per structure. On a multiple-building site, where structures contain 50 or fewer *dwelling units* or *sleeping units*, all *dwelling units* and *sleeping units* on a site shall be considered to determine the total number of *Accessible units*. *Accessible units* shall be dispersed among the various classes of units.

Revise as follows:

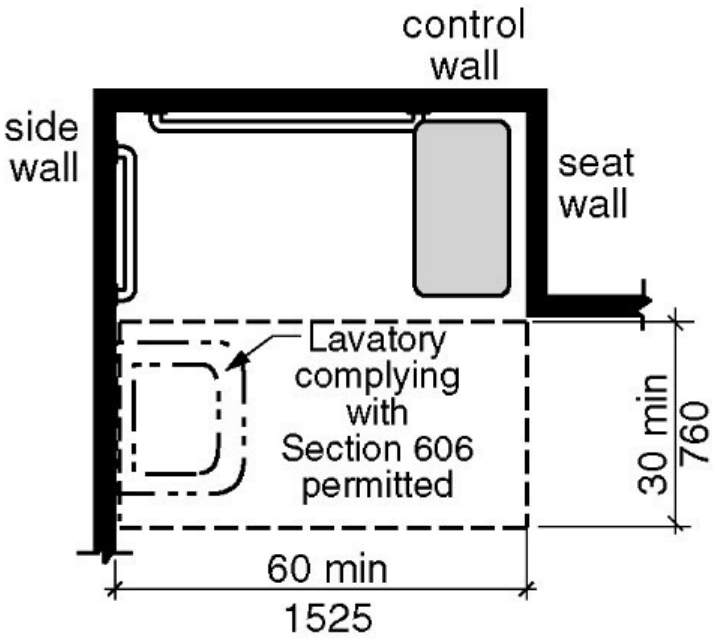
TABLE 1108.6.1.1
ACCESSIBLE DWELLING UNITS AND SLEEPING UNITS

TOTAL NUMBER OF UNITS PROVIDED	~~MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS~~	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS WITH ROLL-IN SHOWERS	TOTAL NUMBER OF REQUIRED ACCESSIBLE UNITS
1 to 25	~~1~~	0	1
26 to 50	~~2~~	0	2
51 to 75	~~3~~	1	4
76 to 100	~~4~~	1	5
101 to 150	~~5~~	2	7
151 to 200	~~6~~	2	8
201 to 300	~~7~~	3	10
301 to 400	~~8~~	4	12
401 to 500	~~9~~	4	13
501 to 1,000	~~2% of total~~	1% of total	3% of total
Over 1,000	~~20, plus 1 for each 100, or fraction thereof, over 1,000~~	10 plus 1 for each 100, or fraction thereof, over 1,000	30 plus 2 for each 100, or fraction thereof, over 1,000

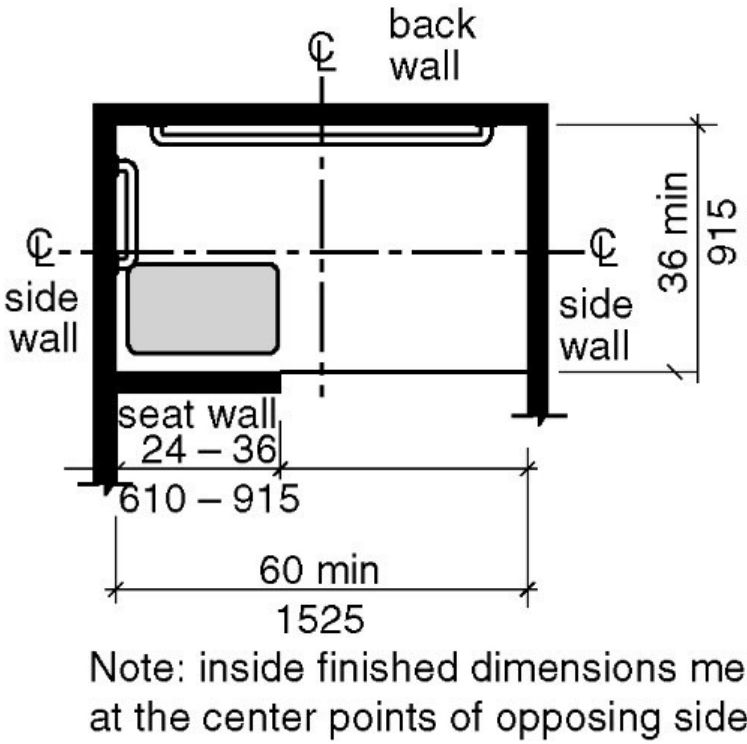
Reason: If a hotel has all showers, Table 1107.6.1.1 could be read to force bathtubs in Accessible rooms. What is the reasoning/justification for this? A roll-in shower with a seat is doing double duty as transfer and roll-in. The table was written originally with the intent to require at least some roll-in showers when hotels typically provided all bathtubs. Designs for bathrooms have changed. Providing showers instead of tubs has been shown to reduce accidental falls in the bathrooms; while continuing to provide accessible options.



Transfer shower



Roll-in shower (also serves as transfer shower)



Alternate roll-in shower (also serves as transfer shower)

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This would increase design options for hotels.

BCAC Egress Item 2 EERO coordination (6599)

IBC: 1031.2.1, 1031.3, 1031.3.3, 1031.4, 1031.6 (IFC[BE]1031.2.1, 1031.3, 1031.3.3, 1031.4, 1031.6)

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

2021 International Building Code

Revise as follows:

1031.2.1 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 and fall prevention devices complying with F2090—17 shall be permitted for use on windows serving as a required *emergency escape and rescue opening*.

1031.3 Emergency escape and rescue openings. *Emergency escape and rescue openings* shall ~~comply~~ have minimum dimensions in accordance with Sections 1031.3.1 through 1031.3.3.

1031.3.3 Maximum height from floor. Where a window is provided as the emergency ~~*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.

1031.4 Emergency escape and rescue doors. Where a door is provided as the required *emergency escape and rescue opening*, it shall be a ~~swinging~~ side hinged door or a sliding door.

1031.6 Bars, grilles, covers and screens. Where bars, grilles, covers, screens or similar devices are placed over *emergency escape and rescue openings* or area wells that serve such openings, the minimum net clear opening size shall comply with Sections 1031.3 through 1031.3.2 and ~~1031.5~~ 1031.5.1. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the *emergency escape and rescue opening*.

Reason: The intent of this code change is to complete the coordination for EERO in IBC and IRC where appropriate. There were multiple proposals during the last cycle and this was split between Group A and B, so some items remain to be coordinated There will be proposals in Group B for IRC and IEBC.
1031.2.1 – It was pointed out during the IRC changes that ASTM F2090 was applicable to control devices and fall prevention devices. This revision would also coordinate with IRC Section R310.1.1.

1031.3 – This is a more specific description of the referenced sections. This will coordinate with R310.2.

1031.3.3 - EEROs can be doors or windows. The prosed revision in text would clarify that the bottom of the opening applies to windows. This change is also proposed to IRC R310.2.3.

1031.4 – During the IRC changes it was suggested that ‘side-hinged’ door was better code language and more consistent with other code text. This change would coordinate with IRC R310.31031.4 - The change in the references provides a more specific reference for the covers by just referencing the section on area well size. This will coordinate with IRC 310.4.3.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There are not changes to construction requirements. These are clarifications only.

BCAC Egress Item 18 Proposal 2 bleachers amoe (6601)

IBC: 1009.1, 1030.8 (IFC[BE]1009.1, 1030.8)

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

2021 International Building Code

Revise as follows:

1009.1 Accessible means of egress required. *Accessible* means of egress shall comply with this section. *Accessible* spaces shall be provided with not less than one accessible means of egress. Where more than one *means of egress* is required by Section 1006.2 or 1006.3 from any accessible space, each *accessible* portion of the space shall be served by not less than two accessible means of egress.

Exceptions:

1. One *accessible means of egress* is required from an *accessible mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5.
2. In assembly areas with ramped *aisles* or stepped *aisles*, one *accessible means of egress* is permitted where the *common path of egress travel* is *accessible* and meets the requirements in Section 1030.8. The common path of travel shall be measured from the wheelchair spaces along an accessible route to that point where the occupants have a choice of two accessible routes to accessible means of egress.

1030.8 Common path of egress travel. The *common path of egress travel* shall not exceed 30 feet (9144 mm) from any seat to a point where an occupant has a choice of two paths of egress travel to two *exits*.

Exceptions:

1. For areas serving less than 50 occupants, the *common path of egress travel* shall not exceed 75 feet (22 860 mm).
2. For *smoke-protected* or *open-air assembly seating*, the *common path of egress travel* shall not exceed 50 feet (15 240 mm).

Reason: The intent of this proposal is to emphasize an existing requirement for accessible ways out of assembly spaces. Assemble seating is required to have at least one accessible route into a space. Wheelchair spaces have to be provided, integrated and dispersed. In space with 50 or more occupants, at least two accessible means of egress are required. Section 1009.1 allows for persons with mobility devices to return back the way out the along the same route they used to get to their seats up so the length of the common path of travel. This provides for an equivalent level of safety for everyone in the assembly seating.
This can apply to spaces such as theaters, stadiums, bleachers, grandstands and folding and telescopic seating. Where this is currently being missed the most in is raised bleacher seating. The designers provide one ramp to get in, but commonly only have one steps on the other ends of the bleachers. Very often, this common path of travel could be met by one ramp the ends at the center of the bleachers.

ICC 300 Standard for Bleachers, Folding and Telescopic Seating, and Grandstands had similar criteria for common path of egress travel –

407.4.1 Path of egress travel. For rows of seating served by only one path of egress travel, the common path of egress travel shall not exceed 30 feet (9144 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

Exceptions:

1. In smoke-protected or open-air assembly seating, the common path of egress travel shall not exceed 50 feet (15 240 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

2. For areas serving less than 50 occupants, the common path of egress travel shall not exceed 75 feet (22 860 mm) from any seat to a point where a person has a choice of two paths of egress travel to two exits.

3. Where bench-type seating without backrests is utilized and the top of the bench is no more than 7 inches (178 mm) above the footrest immediately behind, the common path of egress travel shall not exceed 75 feet (22 860 mm) from

any seat to a point where a person has a choice of two paths of egress travel to two exits.

Example of ramp access to center of raised bleachers.

Example with ramp only at one end of bleachers.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification. It is not a change in the requirements for bleachers, grandstands or folding and telescopic seating.

BCAC Egress Item 22 Proposal 1 frame stop (6603)

IBC: 1010.1.1, 1010.1.1.1, 1003.3.1 (IFC[BE]1010.1.1, 1010.1.1.1, 1003.3.1)

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

2021 International Building Code

Revise as follows:

1010.1.1 Size of doors. The required capacity of each door opening shall be sufficient for the *occupant load* thereof and shall provide a minimum clear opening width of 32 inches (813 mm). The clear opening width of doorways with swinging doors shall be measured between the face of the door and the frame stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear opening width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 32 inches (813 mm). In Group I-2, doors serving as means of egress doors where used for the movement of beds shall provide a minimum clear opening width of $41^1/_2$ inches (1054 mm). The minimum clear opening height of doors shall be not less than 80 inches (2032 mm).

Exceptions:

1. In Group R-2 and R-3 *dwelling and sleeping units* that are not required to be an *Accessible unit*, *Type A unit* or *Type B unit*, the minimum width shall not apply to door openings that are not part of the required *means of egress*.
2. In Group I-3, door openings to resident *sleeping units* that are not required to be an *Accessible unit* shall have a minimum clear opening width of 28 inches (711 mm).
3. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum clear opening width.
4. The maximum width of door leaves in revolving doors that comply with Section 1010.3.1 shall not be limited.
5. The maximum width of door leaves in *power-operated doors* that comply with Section 1010.3.2 shall not be limited.
6. Door openings within a *dwelling unit* or *sleeping unit* shall have a minimum clear opening height of 78 inches (1981 mm).
7. In *dwelling and sleeping units* that are not required to be *Accessible*, Type A or *Type B units*, exterior door openings other than the required *exit* door shall have a minimum clear opening height of 76 inches (1930 mm).
8. In Groups I-1, R-2, R-3 and R-4, in *dwelling and sleeping units* that are not required to be Accessible, Type A or *Type B units*, the minimum clear opening widths shall not apply to interior egress doors.
9. Door openings required to be *accessible* within *Type B units* intended for user passage shall have a minimum clear opening width of 31.75 inches (806 mm).
10. Doors to walk-in freezers and coolers less than 1,000 square feet (93 m^2) in area shall have a maximum width of 60 inches (1524 mm) nominal.
11. Doors serving nonaccessible single-user shower or sauna compartments, toilet stalls or dressing, fitting or changing rooms shall have a minimum clear opening width of 20 inches (508 mm).

1010.1.1.1 Projections into clear opening. There shall not be projections into the required clear opening width lower than 34 inches (864 mm) above the floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the floor or ground shall not exceed 4 inches (102 mm).

Exception: Door closers, overhead door stops, frame stops, power door operators, and electromagnetic door locks shall be permitted to project into the door opening height not lower than ~~be~~ 78 inches (1980 mm) minimum above the floor.

1003.3.1 Headroom. Protruding objects are permitted to extend below the minimum ceiling height required by Section 1003.2 where a minimum headroom of 80 inches (2032 mm) is provided over any circulation paths, including walks, *corridors*, *aisles* and passageways. Not more than 50 percent of the ceiling area of a *means of egress* shall be reduced in height by protruding objects.

Exception: ~~Door closers and stops shall not reduce headroom to less than 78 inches (1981 mm).~~ Door closers, overhead door stops, frame stops, power door operators, and electromagnetic door locks shall be permitted to project into the door opening height not lower than 78 inches (1980 mm) minimum above the floor.

A barrier shall be provided where the vertical clearance above a *circulation path* is less than 80 inches (2032 mm) high

above the finished floor. The leading edge of such a barrier shall be located 27 inches (686 mm) maximum above the finished floor.

Reason: The intent of this proposal is to remove some confusing text. The last sentence of main paragraph, was changed (E47-15 by BCAC) for consistent terminology. However, by changing the door height to “clear opening” instead of “opening”, now has code officials asking if the threshold and overhead stop need to be considered in the 80” height or not? (Door stops are excluded for the width of door openings in the 2nd sentence of Section 1010.1.1.) With the clarification in Section 1010.1.1.1 as part of E41-18, door stops at the top are permitted into the opening height.
The proposed revision in Section 1003.3.1 correlation with Section 1010.1.1.1.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of requirement, not a change in door size or door opening size.

BCAC Egress Item 22 Proposal 3 Overhead Door Stop (6604)

IBC: SECTION 202 (New) [IFC[BE]SECTION 202 (New)]

Proponents: THIS CODE CHANGE WILL BE HEARD BY THE MEANS OF EGRESS CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Building Code

Add new definition as follows:

OVERHEAD DOOR STOP. Door hardware mounted at the top of the door and / or to the door frame which limits the opening of the door.

Reason: Proposal E41-18 revised the 2021 IBC to permit installation of overhead door stops where the overhead door stop encroaches into the door opening at the top of the opening. See the exception to 2021 IBC Section 1010.1.1.1. During review of the changes to the 2021 IBC, it was noted a definition (and picture) of an overhead door stop would be helpful with differentiating this door hardware item from the stop of the door frame at the top of the door opening.
An “overhead door stop” is door hardware mounted at the top of a swinging door and / or to the door frame which limits opening of the door. Overhead door stops are an alternative to door stops screwed to the floor or to the wall. Most overhead door stops encroach slightly into the top of the doorway opening. Overhead door stops may also incorporate friction or damping to dampen the swinging of a door. An overhead door stop may have a “catch” to help hold the door in an open position.

Overhead door stop.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is not a change in requirements - just a definition for a term already used in the code.

BCAC Egress Item 28 two-way communication in elevator lobbies (6605)

IBC: 3001.5 (New)

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

2021 International Building Code

Add new text as follows:

3001.5 Two way communication. Where required by Section 1009.8, a two-way communication system shall be provided at the landing serving each elevator or elevator group.

Reason: Two-way communication is required at the passenger elevators in sprinklered buildings with elevators. This is so that there is a way for people on those floors to communicate when they cannot use the stairways and there is not an area of refuge. This is needed and required even when elevators do not have standby power. The reference in Section 3006.5 is to reinforce this requirement.

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Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a reference, not a change in requirements.

BCAC Egress Item 30 Communication units and Accessible Units (6606)

IBC: E104.2.1

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

2021 International Building Code

E104.2 Communication features. *Accessible* communication features shall be provided in accordance with Sections E104.2.1 through E104.2.4.

Revise as follows:

E104.2.1 Transient lodging. In *transient lodging* facilities, dwelling units or *sleeping units* with accessible communication features shall be provided in accordance with Table E104.2.1. Units ~~required to comply with Table E104.2.1~~ with accessible communication features shall be dispersed among the various classes of units. At least one Accessible unit required by Section 1108.6.1.1 shall also provide accessible communication features. Not more than 10 percent of Accessible units required by Section 1108.6.1.1 shall be used to satisfy the minimum number of units required to provide accessible communication features.

TABLE E104.2.1
DWELLING OR SLEEPING UNITS WITH ACCESSIBLE COMMUNICATION FEATURES

TOTAL NUMBER OF DWELLING OR SLEEPING UNITS PROVIDED	MINIMUM REQUIRED NUMBER OF DWELLING OR SLEEPING UNITS WITH ACCESSIBLE COMMUNICATION FEATURES
1	1
2 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

Reason: The first paragraph is revised to make the text match the table. The text only talks about sleeping units, but the table talks about dwelling and sleeping units. A hotel can have rooms with kitchen (dwelling units) or room without kitchens (sleeping units).
The 2nd paragraph in this code change is intended to help coordinate the appendix requirements related to Accessible units (i.e. hotel rooms) with communications features to the requirements in the ADA for these types of units. This does not increase the number of units required. It just addresses dispersion of those units.

Coordinates with the ADA requirement (ADA 224.5) limiting the number of units with communications features (rooms for persons with hearing impairments) that may also be constructed as Accessible (rooms for persons who use wheelchairs or scooters) spaces. This ensures better dispersion so that people that only need communication features to accommodate their needs are not kept from having access to the rooms that serve their needs and so that not all communication feature rooms are also constructed to provide mobility access.

To make it easier to see how the proposed language meshes with the ADA, here is the text from the 2010 federal standard which we are trying to coordinate with:**224.5 Dispersion.** Guest rooms required to provide mobility features complying with 806.2 and guest rooms required to provide communication features complying with 806.3 shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. Where the minimum number of guest rooms required to comply with 806 is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds, and amenities. At least one guest room required to provide mobility features complying with 806.2 shall also provide communication features complying with 806.3. Not more than 10 percent of guest rooms required to provide mobility features complying with 806.2 shall be used to satisfy the minimum number of guest rooms required to provide communication features complying with 806.3.

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Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is already a requirement under the 2010 ADA.

BCAC Egress Item 33 maximum door width Section 1010.1.1 (6607)

IBC: 1010.1.1, 1010.4 (IFC[BE]1010.1.1, 1010.4)

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

2021 International Building Code

Revise as follows:

1010.1.1 Size of doors. The required capacity of each door opening shall be sufficient for the *occupant load* thereof and shall provide a minimum clear opening width of 32 inches (813 mm). The clear opening width of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear opening width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 32 inches (813 mm). In Group I-2, doors serving as means of egress doors where used for the movement of beds shall provide a minimum clear opening width of $41^1/_2$ inches (1054 mm). The minimum clear opening height of doors shall be not less than 80 inches (2032 mm).

Exceptions:

1. In Group R-2 and R-3 *dwelling and sleeping units* that are not required to be an *Accessible unit*, *Type A unit* or *Type B unit*, the minimum width shall not apply to door openings that are not part of the required *means of egress*.
2. In Group I-3, door openings to resident *sleeping units* that are not required to be an *Accessible unit* shall have a minimum clear opening width of 28 inches (711 mm).
3. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum clear opening width.
4. ~~The maximum width of door leaves in revolving doors that comply with Section 1010.3.1 shall not be limited.~~
5. ~~The maximum width of door leaves in *power-operated doors* that comply with Section 1010.3.2 shall not be limited.~~
6. Door openings within a *dwelling unit* or *sleeping unit* shall have a minimum clear opening height of 78 inches (1981 mm).
7. In *dwelling and sleeping units* that are not required to be *Accessible*, Type A or *Type B units*, exterior door openings other than the required *exit* door shall have a minimum clear opening height of 76 inches (1930 mm).
8. In Groups I-1, R-2, R-3 and R-4, in *dwelling and sleeping units* that are not required to be Accessible, Type A or *Type B units*, the minimum clear opening widths shall not apply to interior egress doors.
9. Door openings required to be *accessible* within *Type B units* intended for user passage shall have a minimum clear opening width of 31.75 inches (806 mm).
10. ~~Doors to walk-in freezers and coolers less than 1,000 square feet (93 m^2) in area shall have a maximum width of 60 inches (1524 mm) nominal.~~
11. Doors serving nonaccessible single-user shower or sauna compartments, toilet stalls or dressing, fitting or changing rooms shall have a minimum clear opening width of 20 inches (508 mm).

1010.4 Gates. Gates serving the *means of egress* system shall comply with the requirements of this section. Gates used as a component in a *means of egress* shall conform to the applicable requirements for doors.

~~**Exception:** Horizontal sliding or swinging gates exceeding the 4-foot (1219 mm) maximum leaf width limitation are permitted in fences and walls surrounding a stadium.~~

Reason: E39-18 deleted the maximum width requirements from the base provisions, therefore Exceptions 4 and 5 are no longer needed. There's no need to limit the size of doors for power-operated doors or power-operated revolving doors. The standards referenced for power-operated doors and and power-operated revolving doors require safety features for all these doors.

The only exception remaining that deals with the maximum door size is Exception 10. With the maximum size deleted from the base paragraph, this exception is technically no longer an exception to the main text, so it should be deleted for both technical reasons and consistency. If the doors do not have a maximum width, the size limit for gates is not needed in the exception.

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Cost Impact: The code change proposal will not increase or decrease the cost of construction
There is no technical changes to requirements for power operated or revolving doors because this is regulated by the standard. This may allow additional design options for walk-in coolers and freezers.

BCAC Egress Item 23 pool gates (6618)

IBC: 1010.2.3 (IFC[BE]1010.2.3)

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

2021 International Building Code

Revise as follows:

1010.2.3 Hardware height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. ~~Locks used only for security purposes and not used for normal operation are permitted at any height.~~

Exceptions: ~~**Exception:** Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the latch release on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided that the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.~~

1. Locks used only for security purposes and not used for normal operation are permitted at any height.
2. Where the ISPSC requires restricting access to a pool, spa, or hot tub, on the ingress side of the door or gate providing access to a pool, spa, or hot tub, the operable parts of the latch release on self-latching devices shall be permitted to be at 54 inches (1370 mm) maximum above the finished floor or ground, provided that the self-latching device is not a self-locking devices operated by means of a key, electronic opener or integral combination lock.

Reason: It should be noted this 2nd exception – current, and as revised – does not include self-locking hardware operated by a key or similar device on the ingress side of a door or gate providing access to a pool, spa, or hot tub, which are required to comply with the 34” to 48” AFF requirement. Why? Occupants that may be at risk because of the pool, spa, or hot tub (i.e. children) would not have access to the key, magnetic card, code, etc. needed to unlock the door or gate controlling access to a pool, spa, or hot tub.
The last sentence of the charging language is actually an exception to the first sentence.

What was an exception is now the 2nd exception with revisions to communicate the context: the access side (ingress side) of doors or gates restricting access to a pool, spa, or hot tub. The context is a big part of the challenge of understanding this “shall be permitted” language allowing the operable devices of non-locking door hardware on doors or gates providing access to pools, spas, or hot tubs to be up to 54” above the floor. Our “code brains” are conditioned to look at door locking provisions from the egress side perspective. BUT, these “shall be permitted” provisions are on the ingress side of the door which provides access to the pool, spa, or hot tub.

The revised exception to 1010.2.3 retains the option of installing non-locking latching hardware on the access side (ingress side) of a door or gate providing access to a pool, spa, or hot tub up to 54” above the finished floor, which may be out of reach to smaller children.

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Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification, no technical change is intended.

BCAC Egress Item 31 Coordination between single occupant spaces and stories. (6619)

IBC: TABLE 1006.3.4(1), TABLE 1006.3.4(2), 1031.2 (IFC[BE] TABLE 1006.3.4(1), TABLE 1006.3.4(2), 1031.2)

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

2021 International Building Code

1006.3.4 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 exit access travel distance do not exceed the values in Table 1006.3.4(1) or 1006.3.4(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*.

Revise as follows:

TABLE 1006.3.4(1)
STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES[a]

STORY	OCCUPANCY	MAXIMUM NUMBER ~~OF DWELLING UNITS~~	MAXIMUM EXIT ACCESS TRAVEL DISTANCE
Basement, first, second or third story above grade plane	R-2[a, b] consisting of dwelling units	4 dwelling units	125 feet
	R-2 consisting of sleeping units	20 occupants per story	125 feet
Fourth 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 *a*utomatic 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 1031.

~~b. This table is used for R-2 occupancies consisting of dwelling units. For R-2 occupancies consisting of sleeping units, use Table 1006.3.4(2).~~

TABLE 1006.3.4(2)
STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

STORY	OCCUPANCY	MAXIMUM OCCUPANT LOAD PER STORY	MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)
First story above or below grade plane	A, B[a b], E, F[a b], M, U	49	75
	H-2, H-3	3	25
	H-4, H-5, I, R-1, ~~R-2[a, c]~~	10	75
	S[a, b, ~~d~~]	29	75
Second story above grade plane	B, F, M, S[b ~~d~~]	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 1031.~~

~~b.~~ a. Group B, F and S occupancies in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 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 1006.3.4(1).~~

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

1031.2 Where required. In addition to the *means of egress* required by this chapter, *emergency escape and rescue openings* shall be provided in the following occupancies:

1. Group R-2 occupancies located in stories with only one *exit* or *access* to only one *exit* as permitted by ~~Tables~~ Table 1006.3.4(1) ~~and 1006.3.4(2)~~.
2. Group R-3 and R-4 occupancies.

Basements and sleeping rooms below the fourth *story above grade plane* shall have not fewer than one *emergency escape and rescue opening* in accordance with this section. Where *basements* contain one or more sleeping rooms, an *emergency escape and rescue opening* shall be required in each sleeping room, but shall not be required in adjoining areas of the *basement*. Such openings shall open directly into a *public way* or to a *yard* or *court* that opens to a *public way*.

Exceptions:

1. *Basements* with a ceiling height of less than 80 inches (2032 mm) shall not be required to have *emergency escape and rescue openings*.
2. *Emergency escape and rescue openings* are not required from *basements* or sleeping rooms that have an *exit* door or *exit access* door that opens directly into a *public way* or to a *yard*, court or exterior egress balcony that opens to a *public way*.
3. *Basements* without *habitable spaces* and having not more than 200 square feet (18.6 m^2) in floor area shall not be required to have *emergency escape and rescue openings*.
4. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.

5. Within individual *dwelling* and *sleeping units* in Groups R-2 and R-3, where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, *sleeping rooms* in *basements* shall not be required to have *emergency escape and rescue openings* provided that the basement has one of the following:

    5.1. One *means of egress* and one *emergency escape and rescue opening*.

    5.2. Two *means of egress*.

Reason: The purpose of this code change is to coordinate and consolidate requirements for R-2 units in Tables 1006.2.1 (single exit space), 1006.3.4(1) and 1006.3.4(2) (singe exit buildings).
Proposal E17-15 increased the maximum occupant load for R-2 Occupancies from 10 to 20 occupants for single exit spaces stating that it's appropriate since Group R-2 occupancies require sprinkler protection per Section 903.3.1.1 or 903.3.1.2. and that the exit access travel distance is 125' in both Table 1006.2.1 and 1006.3.4(1).

There is no logic for a unit on the 1st floor of single exit building to have a lower occupant load or a shorter travel distance. In addition, if 4 single exit dwelling units are permitted on the 2nd and 3rd floor of a Group R-2 building, why is a single exit dwelling not permitted at the 2nd floor of a mixed-use building? Please note that emergency escape and rescue openings would be required in the single exit building.

The change to 1031.2 is editorial to recognize that R-2 is only in one table.

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Cost Impact: The code change proposal will decrease the cost of construction
This will only affect dwelling units on the basement, 1st or 2nd floor of a mixed-use building. This will most likely be no change in units less than 2,000 sq.ft. This will allow for a single exit in some apartments between 2,000 and 4,000 sq.ft., provided they can meet the exit access travel distance.

BCAC Egress Item 3 Occupied roofs Proposal 2A (6620)

IBC: 1009.2.1 (IFC [BE] IBC: 1009.2.1)

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

2021 International Building Code

Revise as follows:

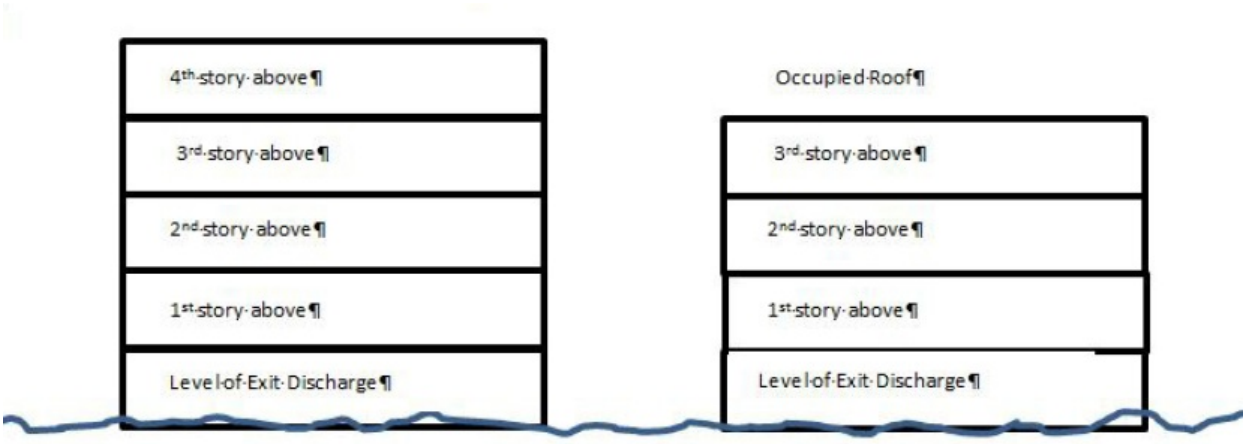
1009.2.1 Elevators required. In buildings where a required accessible floor ~~or occupied roof~~ is four or more stories above or below a *level of exit discharge* or where an accessible occupied roof is above a story that is three or more stories above the level of exit discharge, not less than one required *accessible means of egress* shall ~~be~~ include 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 as part of the accessible means of egress 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 intent of this proposal is a clarification in terminology.
The new language added by E30-18 is confusing. An occupied roof is not a story. Therefore, to be clear, the requirement for an occupied roof should be dealt with separately from the number of stories in a building. It is not the intent of this proposal 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 for height and area limitations, with the 2018 text, it could have been interpreted that standby power was not required to an occupied roof on a 4 story building. Therefore, this does have a significant cost for a 4 story building that decides to have an occupied roof.



Height at which standby power would be required on the elevator for accessible MOE

The addition of "as part of the means of egress" added into the exceptions will clarify this limitation all the exception. The elevator is part of the accessible means of egress, not the only piece. When an elevator is required as part of an accessible means of egress, Section 1009.4 would require standby power.

This is one of a series of three independent proposals for this section. If all three are passed, the result will be this. The proposals each stand on their own.

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* or where an accessible occupied roof is above a story that is three or more stories above the 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 as part of an accessible means of egress 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 as part of an accessible means of egress on floors or occupied roofs provided with a *ramp* conforming to the provisions of Section 1012.

3. 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 as part of an accessible means of egress for an occupied roof where the floors located at or above the level of exit discharge are provided with a horizontal exit.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of the text and has no technical changes to construction requirements.

BCAC Egress Item 3 Proposal 2B Occupied roofs (6622)

IBC: 1009.2.1 (IFC[BE] 1009.2.1)

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

2021 International Building Code

Revise as follows:

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 <u>as part of an accessible means of egress</u> on floors <u>or occupied roofs</u> provided with a *ramp* conforming to the provisions of Section 1012.

Reason: The intent of this proposal is to allow for ramps to serve as an accessible route off an occupied roof instead of requiring standby power on the elevator for that occupied roof. (This is **<u>not</u>** an exception for the accessible route requirements to these spaces in Chapter 11.) Ramps are is already permitted to serve as the accessible means of egress for all floors below the roof. E30-18 added that occupied roofs to the main text, but did not add it to the exception. Ramps to all levels is commonly used in parking garages and large stadiums.
The addition of “as part of the means of egress” added into the exceptions will clarify this limitation all the exception. The elevator is part of the accessible means of egress, not the only piece. When an elevator is required as part of an accessible means of egress, Section 1009.4 would require standby power.

This is one of a series of three independent proposals for this section. They work together, but could be approved separately.

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Cost Impact: The code change proposal will decrease the cost of construction
If on occupied roof is provided on a building with ramp access to the levels, such as a parking garage are large sports arena, this revision will clarify that standby power is not required to the elevator.

BCAC Egress Item 3 Proposal 2C Occupied roofs (6623)

IBC: 1009.2.1 (IFC[BE] IBC: 1009.2.1)

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

2021 International Building Code

Revise as follows:

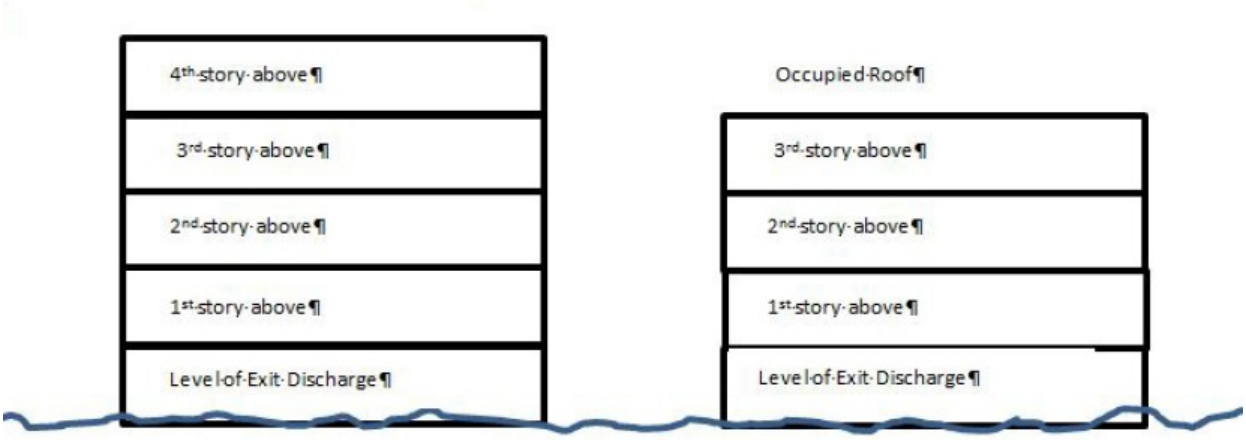
1009.2.1 Elevators required. In buildings where a required accessible floor or occupied roof is four or more stories above or below a *level of exit discharge*, not less than one required *accessible means of egress* shall be an elevator complying with Section 1009.4.

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 as part of an accessible means of egress 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.
3. 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 as part of an accessible means of egress for an occupied roof where the floors located at or above the level of exit discharge are provided with a horizontal exit.

Reason: The intent of this proposal is to provide an allowance for building that have a horizontal exit on all floors and an occupied roof.

Code change E30-18 added standby power for a 4 story building that has an occupied roof.



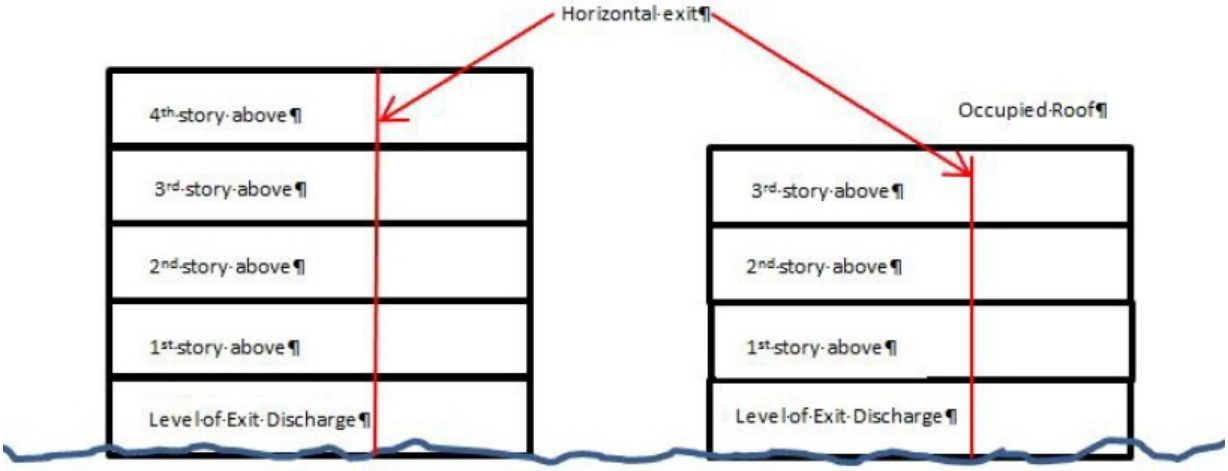
Height at which standby power would be required on the elevator for accessible MOE

This allowances being asked for is a very minimal exception for standby power to elevators. (This is **not** an exception for the accessible route requirements to these spaces in Chapter 11.) Horizontal exits as an option for elevators to serve as part on an accessible means of egress is already permitted in Exception 1, however, Exception 1 this does not address buildings with occupied roofs.

The new Exception 3 is to allow for buildings that have horizontal exits on all floors below and occupied roof, to not have elevators are part of the accessible means of egress (and then have to add standby power to the elevator) just because there is an occupied roof area. Roofs technically cannot provide horizontal exits because then cannot be subdivided with fire barriers. The purpose of horizontal exits are to provide refuge areas on the floor for protection of occupants from smoke. By being open to the outside air, the occupant on the roof are also protected from smoke.

It is important to note that the purpose of the standby power to the roof is for fire department assisted rescue – not self evacuation. Since the building occupants may not know where the fire is in the building, using the elevator on their own could result in them delivering themselves to the fire location. The fire department could choose to use the elevators for

assisted evacuation in any building under fire department recall, so this option is still open. And in a building with horizontal exits, the fire department also has the option to temporarily relocate occupants who cannot use stairways on the occupied roof to a safe area on the floor below rather then needing to transport them all the way out of the building immediately.The following is a diagram for illustration of this exception.



Exception for occupied roof on a building with a horizontal exit.

This is one of a series of three independent proposals for this section. The proposals can work together and work separately.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will decrease the cost of construction
This would be a cost savings for building with horizontal exits by not also requiring standby power to the elevator for just the occupied roof.

BCAC Egress Item 3 Proposal 3 Occupied roofs (6624)

IBC: 503.1.4.1

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

2021 International Building Code

Revise as follows:

503.1.4.1 Enclosures over occupied roof areas. Elements or structures enclosing the occupied roof areas shall not extend more than 48 inches (1220 mm) above the surface of the occupied roof.

~~**Exception:**~~ **Exceptions:**

1. Penthouses constructed in accordance with Section 1511.2 and towers, domes, spires and cupolas constructed in accordance with Section 1511.5.
2. Required guards shall be permitted to be greater than 48 inches (1219 mm) above the surface of the occupied roof where the roof deck is located more than 75 feet (22 860 mm) above the level of fire department vehicle access.

Reason: The limit on the guard height was based on fire department access to the roof. Once the roof deck is higher than fire ladder access, this is no longer justification for this limitation. There has been concerns that higher guards are needed on higher roofs to prevent people from jumping off the roof deck and/or to allow for wind breaks to limit items blowing off the roof deck and falling on people below.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This allows additional design options for guards around roof decks.

BCAC Egress Item 3 Proposal 1 occupied roofs (6625)

IBC: TABLE 1006.3.3, TABLE 1006.3.4(1), TABLE 1006.3.4(2) [IFC[BE] TABLE 1006.3.3, TABLE 1006.3.4(1), TABLE 1006.3.4(2)]

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

2021 International Building Code

1006.3.3 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 1006.3.3. A single *exit* or access to a single *exit* shall be permitted in accordance with Section 1006.3.4. 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*.

Revise as follows:

TABLE 1006.3.3
MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY OR OCCUPIED ROOF

OCCUPANT 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

1006.3.4 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 exit access travel distance do not exceed the values in Table 1006.3.4(1) or 1006.3.4(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*.

Revise as follows:

TABLE 1006.3.4(1)
STORIES AND OCCUPIED ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM EXIT ACCESS TRAVEL DISTANCE
Basement, first, second or third story above grade plane	R-2[a, b, c]	4 dwelling units	125 feet
Fourth 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 *a*utomatic 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 1031.

b. This table is used for R-2 occupancies consisting of dwelling units. For R-2 occupancies consisting of sleeping units, use Table 1006.3.4(2).

c. This table is for occupied roofs accessed through and serving individual dwelling units in Group R-2 occupancies. For Group R-2 occupancies with occupied roofs that are not access through and serving individual units, use Table 1006.3.4(2).

TABLE 1006.3.4(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	MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)
First story above or below grade plane and occupied roofs over the first story above grade plane	A, B[b], E, F[b], M, U	49	75
	H-2, H-3	3	25
	H-4, H-5, I, R-1, R-2[a, c]	10	75
	S[b, d]	29	75
Second story above grade plane	B, F, M, S[d]	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 1031.

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 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 1006.3.4(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: The change to the title and heading in Table 1006.3.3 is for consistency with the text.
The proposed modifications to Section 1006 includes adding 'occupied roofs' to Table 1006.3.4(1) to clarify the conditions in which one exit or access to one exit is allowed for rooftop decks or balconies for individual units in Group R-2 occupancies. Footnote c sends you to other occupancies for shared roof decks because you are now a mixed use occupancy. While the occupied roof is not a story for height and area, the allowance for a single exit is set at the 3rd story.Similarly this proposal adds 'occupied roofs' to Table 1006.3.4(2) to clarify the conditions in which one exit or access to one exit is allowed for the other occupancies, including a shared occupied roof on an apartment building. While Group A, E, H, I, R-1, R-2 and S are limited to a first story with a single exit, allowing for one exit from the roof of these buildings is comparable, and probably safer, to being able to travel up from the basements (which is currently permitted). 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at 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.

FCAC 5.8.1 Fire Protection for Distilleries (6855)

IFC: SECTION 4005, 4005.1, 4005.1 (New), 4005.1.1 (New), 4005.1.2 (New), 4005.1.3 (New), 4005.1.3.1 (New), 4005.1.3.1.1 (New), 4005.1.3.1.2 (New), Table 4005.1.4 (New), 4005.1.3.1.3 (New), 4005.1.4 (New), 4005.1.4.1 (New), 4005.1.4.2 (New), 4005.1.4.3 (New), 4005.1.4.4 (New), 4005.1.4.5 (New), 4005.1.4.6 (New), Table 4005.1.4.6.3 (New), 4005.1.4.6.1 (New), 4005.1.4.6.2 (New), 4005.1.4.6.3 (New), 4005.2 (New), 4005.2.1 (New), 4005.2.1.1 (New), 4005.2.2 (New), 4005.2.3 (New), 4005.2.3.1 (New), 4005.2.3.2 (New), 4005.2.3.6 (New), 4005.2.3.3 (New), 4005.2.3.4 (New), 4005.2.3.5 (New), Table 4005.2.3.6 (New), Figure 4005.2.3.6(1) (New), FIGURE 4005.2.3.6(2) (New), FIGURE 4005.2.3.6(6) (New), FIGURE 4005.2.3.6(3) (New), , FIGURE 4005.2.3.6(4) (New), FIGURE 4005.2.3.6(5) (New), 4005.3 (New); IBC: 306.2, 311.2, 306.3, 311.3

Proponents: Michael O'Brian, representing FCAC (fcac@iccsafe.org); Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org)

2021 International Fire Code

SECTION 4005 FIRE PROTECTION

Delete without substitution:

~~**4005.1 Automatic sprinkler system.** The storage of distilled spirits and wines shall be protected by an *approved automatic sprinkler system* as required by Chapter 9.~~

Add new text as follows:

4005.1 Palletized storage of distilled spirits in wooden barrels. The palletized storage of distilled spirits shall be protected by an *approved automatic sprinkler system* installed throughout the building in accordance with Section 903.3.1.1 as modified in this section.

4005.1.1 Storage height. Palletized storage arrays of barrels stored on-end shall be limited to a maximum of 7 pallets high.

4005.1.2 Flue spaces. Flue spaces with a minimum width of 6 inches (152 mm) shall be maintained between adjacent pallets.

4005.1.3 Loading aisles. Palletized storage that is provided with a defined loading aisle between pallet storage areas shall be arranged using one of the following:

1. Draft curtains, installed in accordance with Section 4005.1.3.1, shall be provided along the side of palletized storage facing the loading aisle to separate the quick response sprinklers and standard response sprinklers.
2. A trench drain shall be provided on each side of the loading aisle, arranged to capture any spilled distilled spirits in the aisle space and remove them from the building to prevent spills from spreading into the barrel storage area.
3. Barrels shall be banded on each pallet to prevent barrels from falling off pallets during transportation and loading into the storage racks.

4005.1.3.1 Draft curtains. Where installed in accordance with Section 4005.1.3, Item 1, draft curtains shall be designed and construction in accordance with Sections 4005.1.3.1.1 through 4005.1.3.1.3.

4005.1.3.1.1 Construction. Draft curtains shall be constructed of sheet metal, lath and plaster, gypsum board or other approved noncombustible materials that provide equivalent performance to resist the passage of smoke. Joints and connections shall be designed to resist the passage of smoke.

4005.1.3.1.2 Location. Draft curtains shall be located along loading aisles serving storage areas.

Table 4005.1.4
Palletized Storage of Distilled Spirits with up to 75% Alcohol by Volume in Wooden Barrels

Protection Area	Sprinkler System Type	Maximum Ceiling Height (feet)	Maximum Storage Height	Ceiling Sprinkler Protection		
				Response / Nominal Temperature Rating / Orientation	K-factor gpm/psi$^{1/2}$	Design[a], # of Sprinklers @ Pressure (psi)
Barrel Storage	Wet-pipe	30	24 feet or 7 barrels	QR / 165ºF / Pendent	14.0	12 @ 18
	Dry-pipe			SR / 286ºF / Upright	16.8	24 @ 13
	Wet-pipe	30	1 barrel	Any / 165ºF / Any	11.2	30 @ 7
	Dry-pipe			SR / 286ºF / Upright	11.2	50 @ 7
	Wet-pipe	30	2 barrels	SR / 286ºF / Any	11.2	50 @ 29
Loading Aisle w/ Draft Curtain	Wet-pipe or Dry-pipe	30	NA	SR / 286ºF / Any	5.6	100 @ 13
					> 8.0	100 @ 7
Loading Aisle w/ Trench Drains or Banded Barrels or No Permanent Loading Aisle	Provide the barrel storage design across the entire roof area (i.e., storage area and loading aisle)					

For SI: 1 foot = 304.8 mm; 1 pound per square inch (psi) = 6.895 kPa; K-Factor of 1 gpm/psi0.5 = 14.395 L/min/bar0.5; °C = [(°F)-32]/1.8.

Notes: QR = quick response sprinkler; SR = standard response sprinkler.

a. Sprinklers shall have a maximum coverage area of 100 square feet (9.3 m²).

4005.1.3.1.3 Depth. Draft curtains shall extend vertically downward from the ceiling for a minimum distance of 20 percent of the ceiling height measured from the floor, with a minimum depth of 6 feet (1829 mm).

4005.1.4 Automatic sprinkler system design. Storage heights and automatic sprinkler densities for palletized on-end barrels shall in accordance with Table 4005.1.4 and Sections 4005.1.4.1 through 4005.1.4.6.

4005.1.4.1 Protected product. The storage and automatic sprinkler requirements in Table 4005.1.4 apply to alcohol-water mixtures greater than 20 percent and up to 75 percent alcohol by volume in wooden barrel sizes not exceeding 130 gallons (492 L).

4005.1.4.2 Hose stream allowance. The automatic sprinkler design shall include a 500 gallons per minute (1900 L/min) hose stream allowance.

4005.1.4.3 Water supply duration. The automatic sprinkler system water supply duration, including hose stream demand, shall be a minimum of one hour.

4005.1.4.4 Automatic sprinkler system balancing. Where a permanent loading aisle is provided with a separate automatic sprinkler system on the ceiling, the barrel storage automatic sprinkler design and the loading aisle automatic sprinkler design are not required to be balanced at the point of connection.

4005.1.4.5 Dry pipe sprinkler systems. Where dry-pipe sprinkler systems are installed, the sprinkler system shall be designed to deliver water to the most remote 4 sprinklers within 40 seconds.

4005.1.4.6 Small distilled spirits facilities. Fire protection for palletized storage of distilled spirits in small distilled spirits facilities not greater than 7,500 square feet (697 m²) is permitted to be in accordance with Sections 4005.1.4.6.1 through 4005.1.4.6.3.

Table 4005.1.4.6.3
Palletized Storage of Distilled Spirits in Wooden Barrels in Small Distilled Spirits Facilities

Protection Area	Sprinkler System Type	Maximum Ceiling Height (feet)	Maximum Storage Height (feet)	Ceiling Sprinkler Protection			
				Response / Temperature Rating / Orientation	K-factor ($gpm/psi^{1/2}$)	Sprinkler Density (gpm/ft^2)	Area (square feet)
Barrel Storage	Wet-pipe	24	12	SR / 286ºF / Any	≥ 11.2	0.35	4000
				SR / 165ºF / Any	≥ 11.2	0.35	7500

For SI: 1 foot = 304.8 mm; 1 pound per square inch (psi) = 6.895 kPa; K-Factor of 1 gpm/psi0.5 = 14.395 L/min/bar0.5; °C = [(°F)-32]/1.8; 1 gallon per minute per square foot = 40.75 L/min/m².

Notes: SR = standard response sprinkler.

4005.1.4.6.1 Ceiling clearance The clearance from the top of storage to the deflector of the automatic sprinklers at the ceiling shall be a minimum of 18 inches (457 mm) and a maximum of 10 feet (3048 mm).

4005.1.4.6.2 Automatic sprinkler coverage area. The automatic sprinkler coverage area shall not exceed 80 square feet (7.4 m2) per sprinkler.

4005.1.4.6.3 Fire protection scheme. The storage arrangement and automatic sprinkler system design shall be in accordance with Table 4005.1.4.6.3.

4005.2 Rack storage in wooden barrels. The rack storage of distilled spirits and wine greater than 20 percent alcohol shall be protected by an approved automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 and Sections 4005.2.1 through 4005.2.3.5.2.

4005.2.1 Flues spaces for on-side wooden barrels. Rack storage for on-side wooden barrels shall be provided with a minimum width of 8 inches (203 mm) between adjacent rows of barrels.

4005.2.1.1 Elevated walkways. Where provided, elevated walkways between barrels shall be constructed in accordance with one of the following:

1. Noncombustible materials that are 50 percent open.
2. Noncombustible materials that are open less than 50 percent provided the walkway has a maximum width of 1 foot (0.3 m) and a minimum gap of 3 inches (76 mm) is provided between the walkway and the barrel storage.
3. Combustible materials and provided with a row of automatic sprinklers directly beneath each walkway.

4005.2.2 Flues spaces for on-end wooden barrels Rack storage arrangements with on-end wooden barrels shall be provided with transverse and longitudinal flue spaces with a minimum width of 6 inches (15 cm).

4005.2.3 Fire protection for rack storage. Rack storage arrangements of alcohol-water mixtures up to 75 percent alcohol in wooden barrel with sizes not exceeding 130 gallons (492 L) shall be protected in accordance with Sections 4005.2.3.1 through 4005.2.3.5.2.

4005.2.3.1 Hose stream allowance. The automatic sprinkler system design shall include a 500 gallons per minute (1900 L/min) hose stream allowance.

4005.2.3.2 Water supply duration. The automatic sprinkler system water supply duration, including hose stream demand, shall be a minimum of one hour.

4005.2.3.6 Automatic sprinkler system design. The design of the automatic sprinkler system at the ceiling and the in-rack sprinkler system shall be in accordance with Table 4005.2.3.6.

4005.2.3.3 Dry-pipe automatic sprinkler system. Where dry-pipe automatic sprinkler systems are installed, the automatic sprinkler system shall be designed to deliver water to the most remote 4 sprinklers within 40 seconds.

4005.2.3.4 Ceiling automatic sprinkler systems. The automatic sprinkler systems installed at the ceiling shall be designed with a minimum density of 0.2 gallons per minute per square foot (0.8 L/min) with an operating area of 2,000 square feet (186 m2).

4005.2.3.5 Automatic sprinkler system balancing. The automatic sprinkler system installed at the ceiling and the in-rack sprinkler system shall be balanced at the point of connection.

Table 4005.2.3.6
Rack Storage of Distilled Spirits in Wooden Barrels

Barrel Arrangement	Sprinkler System Type	Maximum Ceiling Height (feet)	Maximum Storage Height	Minimum Aisle Width (feet)	Ceiling Sprinkler Protection			In-Rack Sprinkler	
					Response / Nominal Temperature Rating / Orientation	K-factor (gpm/psi$^{1/2}$)	Design, # of Sprinklers @ Pressure (psi)	Layout	Res Non Tem Rati
On-Side	Wet	40	33 feet / 9 barrels	NA	QR / 165ºF / Pendent	14.0	12 @ 37	None	
					SR / 286ºF / Any	≥ 11.2	20 @ 7	Figures 4005.2.3.6(1) and 4005.2.3.6(2)	QR / Any
	Dry	40	33 feet / 9 barrels	NA	SR / 286ºF / Upright	16.8	24 @ 25	None	
					SR / 286ºF / Upright	≥ 11.2	20 @ 7	Figures 4005.2.3.6(1) and 4005.2.3.6(2)	QR / Upri
On-End	Wet	30	25 feet / 5 barrels	8	SR / 286ºF / Any	≥ 11.2	50 @ 7	Figures 4005.2.3.6(3), 4005.2.3.6(4), 4005.2.3.6(5) and 4005.2.3.6(6)	QR / Any

For SI: 1 foot = 304.8 mm; 1 pound per square inch (psi) = 6.895 kPa; K-Factor of 1 gpm/psi0.5 = 14.395 L/min/bar0.5; °C = [(°F)-32]/1.8; 1 gallon per minute per square foot = 40.75 L/min/m².

Notes: QR – quick response sprinkler; SR – standard response sprinkler.

a. Sprinklers shall have a maximum coverage area of 100 square feet (9.3 m²).

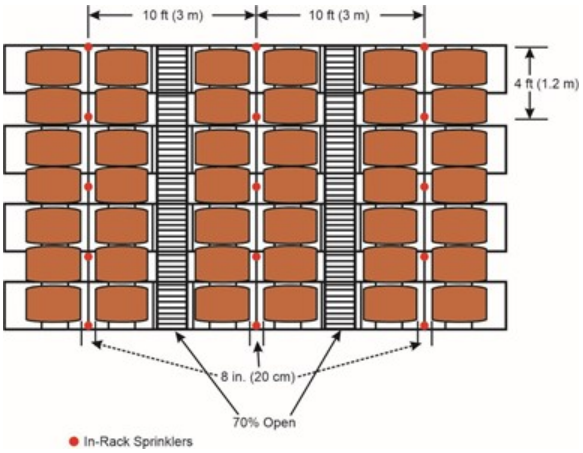


Figure 4005.2.3.6(1)
In-rack sprinkler layout for wooden barrels on their sides (plan view)

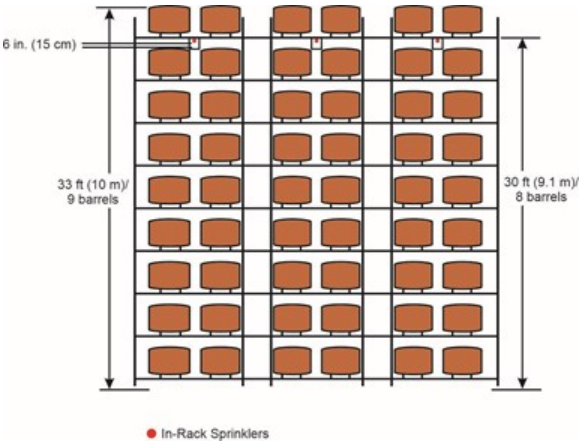


FIGURE 4005.2.3.6(2)

IN-RACK SPRINKLER LAYOUT FOR WOODEN BARRELS ON THEIR SIDES (ELEVATION VIEW)

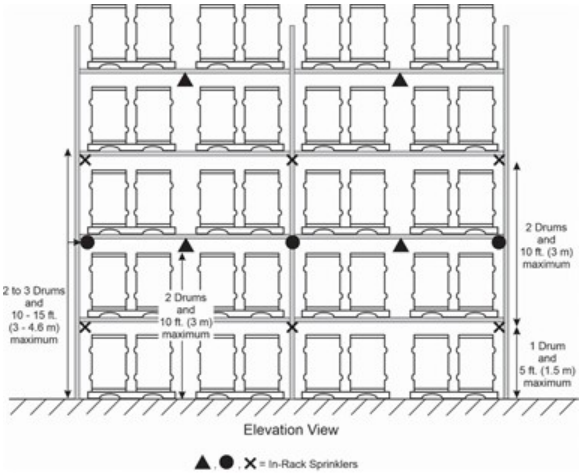


FIGURE 4005.2.3.6(6)
IN-RACK SPRINKLER LAYOUT FOR MULTIPLE ROW RACK OF ON-END WOODEN BARRELS

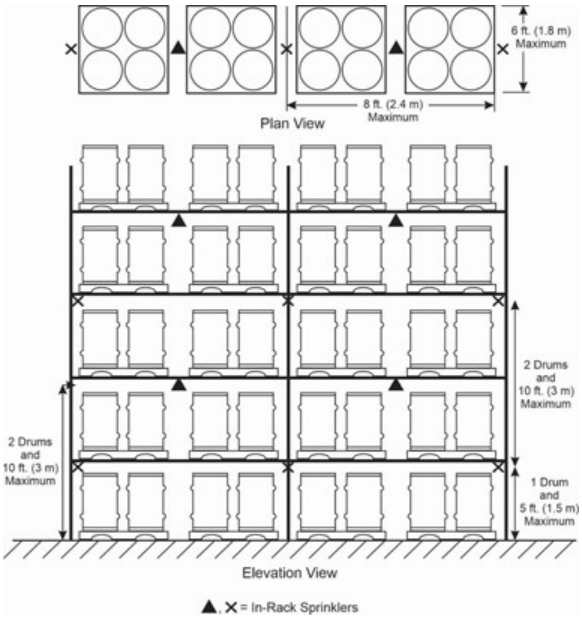


FIGURE 4005.2.3.6(3)
IN-RACK SPRINKLER LAYOUT FOR SINGLE ROW RACK OF ON-END WOODEN BARRELS

Revise as follows:

~~4005.2~~ 4005.4 Portable fire extinguishers. *Approved* portable fire extinguishers shall be provided in accordance with Section 906.

Add new text as follows:

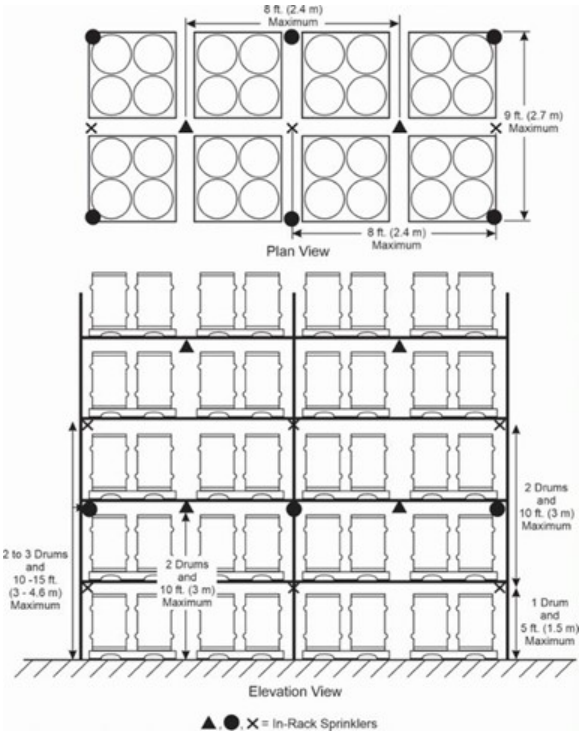


FIGURE 4005.2.3.6(4)
IN-RACK SPRINKLER LAYOUT FOR DOUBLE ROW RACK OF ON-END WOODEN BARRELS

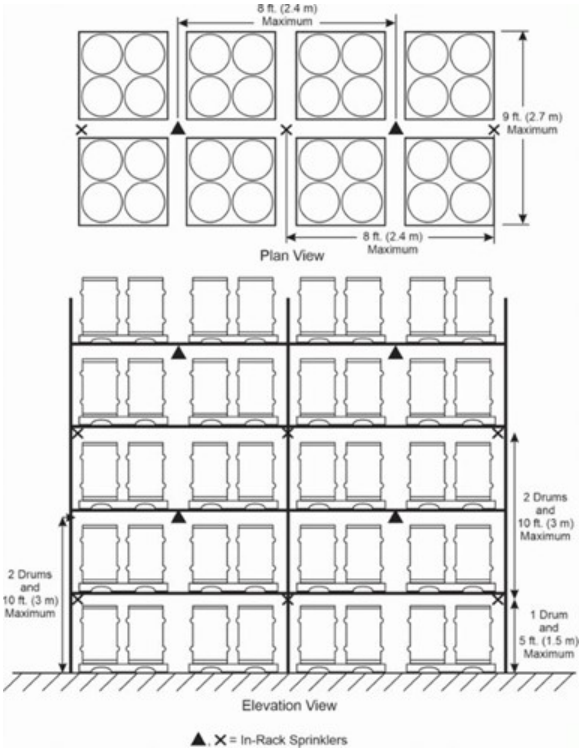


FIGURE 4005.2.3.6(5)
IN-RACK SPRINKLER LAYOUT FOR DOUBLE ROW RACK OF ON-END WOODEN BARRELS

Revise as follows:

4005.3 Wine 20 percent or less alcohol content. The storage of wine in barrels with an alcohol content of 20 percent or less shall be protected by an approved automatic sprinkler system installed throughout in accordance with Section 903.3.1.1.

2021 International Building Code

Revise as follows:

306.2 Moderate-hazard factory industrial, Group F-1. Factory industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

- Aircraft (manufacturing, not to include repair)
- Appliances
- Athletic equipment
- Automobiles and other motor vehicles
- Bakeries
- Beverages: over ~~16 percent~~ 20 percent alcohol content
- Bicycles
- Boats
- Brooms or brushes
- Business machines
- Cameras and photo equipment
- Canvas or similar fabric
- Carpets and rugs (includes cleaning)
- Clothing
- Construction and agricultural machinery
- Disinfectants
- Dry cleaning and dyeing
- Electric generation plants
- Electronics
- Energy storage systems (ESS) in dedicated use buildings
- Engines (including rebuilding)
- Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar

dining facilities more than 2,500 square feet (232 m^2) in area
- Furniture
- Hemp products
- Jute products
- Laundries
- Leather products
- Machinery
- Metals
- Millwork (sash and door)
- Motion pictures and television filming (without spectators)
- Musical instruments
- Optical goods
- Paper mills or products
- Photographic film
- Plastic products
- Printing or publishing
- Recreational vehicles
- Refuse incineration
- Shoes
- Soaps and detergents
- Textiles
- Tobacco
- Trailers
- Upholstering
- Water/sewer treatment facilities
- Wood; distillation
- Woodworking (cabinet)

311.2 Moderate-hazard storage, Group S-1. Storage Group S-1 occupancies are buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

- *Aerosol products*, Levels 2 and 3
- Aircraft hangar (storage and repair)
- Bags: cloth, burlap and paper
- Bamboos and rattan
- Baskets
- Belting: canvas and leather
- Beverages over ~~16-percent~~ 20 percent alcohol content
- Books and paper in rolls or packs
- Boots and shoes
- Buttons, including cloth covered, pearl or bone
- Cardboard and cardboard boxes
- Clothing, woolen wearing apparel
- Cordage
- Dry boat storage (indoor)
- Furniture
- Furs
- Glues, mucilage, pastes and size
- Grains
- Horns and combs, other than celluloid
- Leather
- Linoleum
- Lumber
- Motor vehicle *repair garages* complying with the maximum allowable quantities of *hazardous materials* specified in Table 307.1(1) (see Section 406.8)
- Photo engravings
- Resilient flooring
- *Self-service storage facility* (mini-storage)
- Silks
- Soaps
- Sugar
- Tires, bulk storage of
- Tobacco, cigars, cigarettes and snuff

- Upholstery and mattresses
- Wax candles

306.3 Low-hazard factory industrial, Group F-2. Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials that during finishing, packing or processing do not involve a significant fire hazard shall be classified as F-2 occupancies and shall include, but not be limited to, the following:

- Beverages: up to and including ~~16-percent~~ 20 percent alcohol content
- *Brick* and masonry
- Ceramic products
- Foundries
- Glass products
- Gypsum
- Ice
- Metal products (fabrication and assembly)

311.3 Low-hazard storage, Group S-2. Storage Group S-2 occupancies include, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products are permitted to have a negligible amount of plastic *trim*, such as knobs, handles or film wrapping. Group S-2 storage uses shall include, but not be limited to, storage of the following:

- Asbestos
- Beverages up to and including ~~16-percent~~ 20 percent alcohol
- Cement in bags
- Chalk and crayons
- Dairy products in nonwaxed coated paper containers
- Dry cell batteries
- Electrical coils
- Electrical motors
- Empty cans
- Food products
- Foods in noncombustible containers
- Fresh fruits and vegetables in nonplastic trays or containers
- Frozen foods
- Glass
- Glass bottles, empty or filled with noncombustible liquids
- *Gypsum board*
- Inert pigments
- Ivory
- Meats
- Metal cabinets
- Metal desks with plastic tops and *trim*
- Metal parts
- Metals
- Mirrors
- Oil-filled and other types of distribution transformers
- Public parking garages, open or enclosed
- Porcelain and pottery
- Stoves
- Talc and soapstones
- Washers and dryers

Reason: This proposal provides guidance for storage and associated fire protection of alcoholic beverages both in warehouse and in small distillery facilities.
One of the conceptual changes is the threshold at which the percentage of alcohol results in a higher classification of hazard. Traditionally, beverages with an alcohol content greater than 16% were considered to present a higher level of hazard and were therefore placed into Group F-1 for manufacturing and packaging and Group S-1 for storage. Recent testing by FM Global demonstrates that the 16% threshold was too conservative and the threshold is being revised to 20%. Even recent revisions to Ch 32 list beverages in glass or ceramic containers with up to 20% alcohol content as a Class I commodity. The alcohol content does not raise the flammability of the liquid to an extent where additional levels of protection are necessary, and for the most part can be considered nonflammable or noncombustible. As a result, the manufacturing, packaging and storage of beverages with an alcohol content up to 20% will be classified as Group F-2 or S-2 as appropriate. This results in revisions to IBC Chapter 3 and the IFC occupancy definitions in Chapter 2.

The fire protection section provides specific sprinkler system design criteria. The requirements are based on the storage configuration:

- Palletized storage in Section 4005.1
- Rack storage in Section 4005.2

Palletized storage is then provided with design options in Section 4005.1.3:

- Provide draft curtains along the loading aisles
- Provide trench drains along each side of the loading aisles
- Provide straps to secure the barrels to the pallet
- There is a 4th option, which is to not provide a loading aisle at all. As stated in the charging sentence "palletized storage provided with a defined loading aisle…" In other words, the building or room is solid storage; it will have walkways to access the barrels but will not have a forklift loading aisle.

Each of these three designs provides a method of mitigating the spread of liquid or fire during a fire incident. These three protection features are again reference in Table 4005.1.4, and have an impact on the fire sprinkler system design.

The fire sprinkler design criteria is core of this code change. Table 4005.1.4 provides criteria for sprinkler system densities, storage heights and sprinkler selection. This design criteria is based on full-scale fire testing conducted by FM Global and presented in FM Data Sheet 7-29.

Section 4005.1.4 provides for a reduced level of sprinkler protection. Because of reduced level of protection, this section is limited to facilities no greater than 7,500 square feet and with a ceiling height of no more than 24 feet. The intent of this reduction is to allow the small distilleries with a reasonable level of protection based on the reduced fire load per square foot and limited size.

Rack storage is covered in Section 4005.2. This section contains specific requirements again based on storage method:

- Barrels stored on their side
- Barrels stored on-end

The difference in configuration results in different sprinkler design criteria in Table 4005.2.3.6. Rack storage is allowed up to 33 feet in height. Figures have been included to depict the in-rack sprinkler locations.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC) and 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Bibliography: FM Global Property Loss Prevention Data Sheet 7-29, Ignitable Liquid Storage in Portable Containers, October 2020
Factory Mutual Insurance Company, Johnson, RI

Cost Impact: The code change proposal will not increase or decrease the cost of construction
Chapter 40 of the Fire Code already requires an approved fire sprinkler system for new distilleries and storage facilities for distilled spirits. This code change does not increase that requirement but will provide guidance and consistency in how jurisdictions apply the fire sprinkler requirement.

BCAC Egress Item 35 EERO yards and courts (6861)

IBC: 1031.2 (IFC[BE]1031.2)

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

2021 International Building Code

Revise as follows:

1031.2 Where required. In addition to the *means of egress* required by this chapter, *emergency escape and rescue openings* shall be provided in the following occupancies:

1. Group R-2 occupancies located in stories with only one *exit* or *access* to only one *exit* as permitted by Tables 1006.3.4(1) and 1006.3.4(2).
2. Group R-3 and R-4 occupancies.

Basements and sleeping rooms below the fourth *story above grade plane* shall have not fewer than one *emergency escape and rescue opening* in accordance with this section. Where *basements* contain one or more sleeping rooms, an *emergency escape and rescue opening* shall be required in each sleeping room, but shall not be required in adjoining areas of the *basement*. Such openings shall open directly into a *public way* or to a *yard* or *court* that opens <u>into or has access</u> to a *public way*.

Exceptions:

1. *Basements* with a ceiling height of less than 80 inches (2032 mm) shall not be required to have *emergency escape and rescue openings*.
2. *Emergency escape and rescue openings* are not required from *basements* or sleeping rooms that have an *exit* door or *exit access* door that opens directly into a *public way* or to a *yard*, court or exterior egress balcony that opens to a *public way*.
3. *Basements* without *habitable spaces* and having not more than 200 square feet (18.6 m^2) in floor area shall not be required to have *emergency escape and rescue openings*.
4. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.
5. Within individual *dwelling* and *sleeping units* in Groups R-2 and R-3, where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, *sleeping rooms* in *basements* shall not be required to have *emergency escape and rescue openings* provided that the basement has one of the following:

    5.1. One *means of egress* and one *emergency escape and rescue opening*.

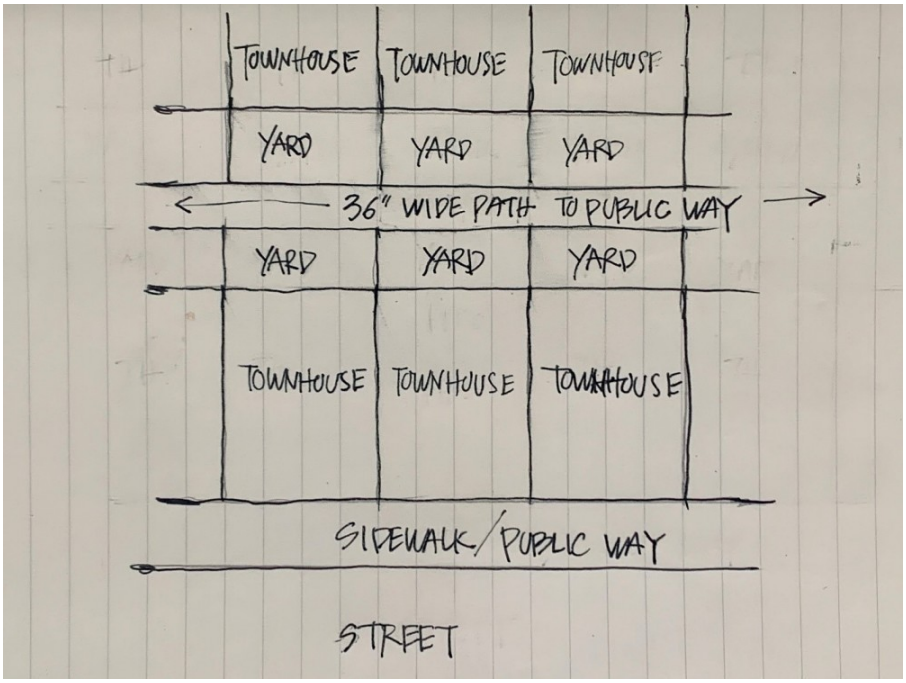
    5.2. Two *means of egress*.

Reason: The purpose of this code change is to allow an EERO to discharge into a fenced yard that does not directly open onto a public way if a path can be provided from the fenced yard to the public way. In many cities, new townhouses are being constructed on infill lots with tight space limitations.

Locating an EERO while also wanting to provide fenced yards is becoming challenging. In some cases, a builder may want to construct two rows of townhouses that are tight up to the street but that have fenced backyards for each unit. Under the current code, the builder would either have to construct a window well in the sidewalk to access a basement EERO or in the backyard and forgo the private fenced yards as there will likely not be enough space to provide a 10 foot wide “public way”.

The issue with placing an EERO in the front to allow a fenced yard in the back include coordinating the location with entry doors and front steps, coordinating the location with utilities, and providing a cover over the window well that prevents passers-by from dropping trash into the window well or getting high heels stuck in the openings of a grate. The problem with forgoing fenced yards is obviously the loss of privacy.

While a 10-foot wide path between back-to-back fenced yards is almost certainly not feasible, a narrower path will be in many cases. The new exception would allow such a path, that occupants could use to get out of their yard after escaping through an EERO, or that firefighters could use to access the fenced yard for firefighting and rescue operations without having to demolish or scale over a series of fences. The assumption is that the yard opens via a gate with access to the public way. Note that an emergency escape and rescue opening is a means of escape, not an 'exit,' so the provisions for 'egress courts' are not applicable. Yards and courts are both defined as spaces open to the sky.



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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The code change does not change the requirement to provide an EERO for sleeping rooms and for basements (including each sleeping room in a basement). Thus, there should be no increase in cost as a result of this proposal. There may be a modest savings from the added ability to locate a basement EERO in the rear of the home, where covers may not be required and coordination with utilities is easier.

BCAC Egress Item 32 Control vestibules (6862)

IBC: SECTION 202 (New), 1010.2.15 (New) [IFC[BE] SECTION 202 (New), 1010.2.15 (New)]

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

2021 International Building Code

Add new definition as follows:

CONTROL VESTIBULE. A space with doors in series such that when one door is open the other door is interlocked and cannot be opened.

Add new text as follows:

1010.2.15 Control vestibule. Control vestibules shall be permitted for security, clinical needs or environmental control in Groups F, H-5, and S and in Groups B, I-1, I-2, and M where the occupant load of the room or space served by the control vestibule is less than 50. Where doors in the means of egress are configured as a control vestibule, the control vestibule door locking system shall provide for egress. The control vestibule shall comply with all of the following:

1. On the egress side of each door of the control vestibule, an approved override shall be provided which deactivates the interlock of the door when that door is interlocked. Signage shall be provided with instructions on the use of the override.
2. Where an automatic sprinkler system or automatic fire detection system is provided, upon activation of such system the interlock function of the door locking system of the control vestibule shall deactivate.
3. Upon loss of power to the interlock function of the doors, the interlock function of the door locking system of the control vestibule shall deactivate.
4. The egress path from any point shall not pass through more than one control vestibule.
5. The control vestibule door interlocking system units shall be listed in accordance with UL 294.

Reason: This proposal includes a definition for “control vestibule” and offers detailed requirements for control vestibules. This vestibule system controls egress temporarily. One door must be closed for the other to open. Control vestibules – which have doors in series which are interlocked – are being incorporated in the means of egress in a variety of occupancies. The IBC is currently silent regarding requirements and guidance for control vestibules. This proposal offers requirements (guidance) for control vestibules in the means of egress.

The significant difference between typical doors in series in the means of egress (i.e. one after the other) and doors in the means of egress configured as a control vestibule is the doors of a control vestibule are interlocked such that when one door of a control vestibule is open, the other door in series in the control vestibule is temporarily locked; and conversely, in the means of egress when all doors of a control vestibule are closed, any door may be opened.

Control vestibules are most commonly configured as a space with two doors in series. But, some control vestibules are configured with more than one inner door and / or more than one outer door. For example, where a control vestibule is required to help keep clean rooms clean, there may be inner doors from three different clean rooms opening into the control vestibule, and one outer door for leaving the control vestibule in the direction of egress.

It should be noted that control vestibules on the access (ingress) side of doors controlling access into a building or into a space within a building are more common that control vestibules on the egress side of doors controlling egress from a space or from a building. Requirements for access-side control vestibules is outside the scope of the IBC. Thus access-side control vestibules are not regulated or prohibited by the IBC provided all requirements for egress are complied with. This proposal addresses control vestibules in the means of egress addressing egress-side requirements.

Also, it should be noted that control vestibules may be “stacked” or combined with any of the other “shall be permitted” electrical locking arrangements of the IBC (2021 IBC sections 1010.2.11 through 1010.2.14).For example, assume both doors in the (air lock) control vestibule from an electronics manufacturing clean room are equipped with sensor release of electrically locked egress doors (IBC Section 1010.2.12) to allow no-touch exiting from the clean room through the (air-lock) control vestibule. The electrical locks on the two doors of the (air lock) control vestibule would be interlocked such that only one door is able to be open at a time. In the event of fire in the clean room, Item 2 requires the interlock function of the control vestibule to be deactivated, facilitating egress through the control vestibule with both doors open at the same time.

The proposed requirements for control vestibules are for these reasons:

Control vestibules are recommended to be permitted in the listed occupancy groups: Group B for banks and laboratories. Group F for factories. Group H for operations where contamination or atmospheric control is vital. Groups I-1 and I-2 to facilitate patient care and patient security. Group M for sales rooms for jewelry, gems, drugs, and similar highly valuable items. Group S for storage of valuables.

This proposal has no limits on occupant loads for a factory – access to factories is limited to employees, or visitors escorted by employees. Similar situation for H-5. And for storage, especially large storage areas, the calculated occupant load may be significant although the actual quantity of occupants is typically limited (i.e. employees). The other Groups – the proposed less than 50 occupant load is to be consistent with requirements for panic hardware on doors in the means of egress (occupant loads of 50 or more require panic hardware).

Control vestibules must provide for egress – which is a requirement in the charging language.

The last sentence in the charging language provides needed flexibility. For example, where casinos count money, accepted industry practices may not incorporate all of the requirements of Items 1 through 5 but may incorporate significant other security and safety provisions.

Item 1: A requirement to address the potential situation where one of the doors on the control vestibule is held open (example: a person holds the outer doorway open and other occupants need to be able to egress through the control vestibule in an emergency situation). This item requires, on the egress side of each door of the control vestibule, installation of an approved override which deactivates the interlock on that door. It is common the activation of an override would set off an alarm, and / or the activation of an override without a valid reason results in disciplinary action (i.e. employee gets fired). This item also requires signage with instruction on how to use the override.

Items 2 and 3: Requires the interlock function to be disabled in the event of fire, actuation of the fire detection system, or power loss to the interlock system renders the control vestibule equivalent to two doors in the means of egress allowing unobstructed egress.

Item 4: Requires that egressing through the control vestibule involves no more than two doors. While not common, there are situations where more than one control vestibule may be needed in the means of egress.

Item 5: Requires the units of the control vestibule locking system to be listed in accordance with UL 294, the same standard required for units for other electrical locking system units.

Together, the definition and proposed requirements provide for egress and emergency egress where control vestibules are installed.

Note: a control vestibule is different than a sallyport, which is defined in the IBC and permitted in Group I-3 occupancies. Group I-3 includes correction centers, detention centers, jails, prisons, and similar uses. A sallyport is a security vestibule which prevents unobstructed passage. A control vestibule is intended to allow unobstructed passage, but prevents more than one door of doors in series to be open at the same time.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will increase the cost of construction
Control vestibules are currently not addressed in the code. Where control vestibules are constructed, these requirements may include some locking requirements and interconnectedness currently not incorporated into some control vestibules.

BCAC Egress Item 29 elevator lobby egress (6863)

IBC: 1006.3.4, 3006.4 (IFC[BE] 1006.3.4)

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

2021 International Building Code

Revise as follows:

1006.3.4 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 exit access travel distance do not exceed the values in Table 1006.3.4(1) or 1006.3.4(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. Elevator lobbies shall be permitted to have one exit in accordance with Section 3006.4.

~~3.~~ 4. Parking garages where vehicles are mechanically parked shall be permitted to have one *exit* or access to a single *exit*.

~~4.~~ 5. Group R-3 and R-4 occupancies shall be permitted to have one *exit* or access to a single *exit*.

~~5.~~ 6. 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.~~ 6.1. The *dwelling unit* complies with Section 1006.2.1 as a space with one *means of egress*.

~~5.2.~~ 6.2. 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*.

3006.4 Means of egress. Elevator lobbies shall ~~be provided with not less than one *means of egress* complying with Chapter 10 and other provisions in this code~~ have direct access from the elevator lobby to an enclosure for an interior exit stairway or ramp. Egress through an enclosed elevator lobby shall be permitted in accordance with Item 1 of Section 1016.2.

Exception: Access to an interior exit stairway or ramp shall be permitted to be through a protected path of travel enclosed with a smoke barrier having a fire-resistance rating of not less than 1 hour.

Reason: This proposal is intended to be a clarification of current exit requirements for secure elevator lobbies. The allowance for one exit from an elevator lobby is buried in Chapter 30 so it is often missed. The current language in Section 3006.4 can appear to be a conflict with Section 1006.3.
The original intent of the allowance for one exit from an elevator lobby is to address secure lobby situations where the 2nd stairway is through a tenant space.The language in the exception is using the language for fire service access elevators in Section 3007 so that access to the stairway can be from the lobby to the exit stairway via a protected corridor.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of requirements, not a change.

BCAC Egress Item 20 Automatic door mixed use (6864)

IBC: 1105.1.1, TABLE 1105.1.1

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

2021 International Building Code

Revise as follows:

1105.1.1 Automatic doors. In facilities with the occupancies and building *occupant loads* indicated in Table 1105.1.1, *public entrances* that are required to be *accessible* shall have one door be either a full *power-operated* door or a *low-energy power-operated door*. Where the *public entrance* includes a vestibule, at least one door into and one door out of the vestibule shall meet the requirements of this section.

Exception: In mixed-use facilities, where the total building occupant load for the occupancies listed in the table is calculated as the sum of the ratios of the actual occupant load of each occupancy divided by the building occupant load threshold of each occupancy in Table 1105.1.1, and the sum of the ratios does not exceed 1, the requirements of Section 1105.1.1 do not apply. Where the sum of the ratios is greater than or equal to 1, the requirements of Section 1105.1.1 are applicable.

TABLE 1105.1.1
PUBLIC ENTRANCE WITH POWER-OPERATED DOOR[a]

OCCUPANCY	BUILDING OCCUPANT LOAD GREATER THAN
A-1, A-2, A-3, A-4	300
B, M, R-1	500

~~a. In mixed-use facilities where the total sum of the building occupant load is greater than those listed, the most restrictive building occupant load shall apply.~~

Reason: The intent of this proposal is to replace the footnote (a) to Table 1105.1.1 with an exception to 1105.1.1. Footnote "a" was added to Table 1105.1.1 by E115-18, Public Comment 2. The reason from the proponent for this public comment was that the table did not address mixed occupancies.
The effect of the existing footnote with "most restrictive occupant load shall apply" is that a hotel (Group R-1) that offers breakfast (Group A-2), an exercise room or a swimming pool (Group A-3) as an amenity would be required to provide automatic doors with an occupant load of 300 instead of 500. Another example would be a retail store (Group M) that includes a small coffee shop or fast food establishment (Group A-2).

In addition, the footnote could be read to apply to all mixed use buildings that include one of the occupancies listed and other occupancies not listed in the table. For example: an apartment building (Group R-2) with a one or two-person on-site rental office (Group B), could be required to provide automatic doors.

The proposed exception text is borrowed from 508.4.2 – allowable building area – and revised to be applicable to the application. This would allow for a balanced approach. This would balance the two occupant loads rather than using the most restrictive.

Example:

Hotel with small restaurant, pool or exercise room:

A-3 (75 /300 occupants) + R-1 (350 /500 occupants) = .0.25 + 0.7 = 0.95

IBC **508.4.2 Allowable building area.** In each *story*, the *building area* shall be such that the sum of the ratios of the actual *building area* of each separated occupancy divided by the allowable *building* area of each separated occupancy shall not exceed 1.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There may be a reduction in the cost of construction. For mixed-use buildings, the requirement for automatic door openers at doors required to be accessible may be "triggered" at a slightly higher building occupant load depending on how the original footnote "a" is interpreted, applied, and enforced.

BCAC Egress Item 20 Automatic door strip mall (6865)

IBC: 1105.1.1, TABLE 1105.1.1

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

2021 International Building Code

Revise as follows:

1105.1.1 Automatic doors. In facilities with the occupancies and building *occupant loads* indicated in Table 1105.1.1, *public entrances* that are required to be *accessible* shall have one door be either a full *power-operated* door or a *low-energy power-operated door*. Where the *public entrance* includes a vestibule, at least one door into and one door out of the vestibule shall meet the requirements of this section.

Exception: Accessible public entrances to individual tenant spaces within a building are not required to be provided with a power-operated door or a low-energy power-operated door provided the occupant load of that tenant space does not exceed the occupant load in Table 1105.1.1.

TABLE 1105.1.1
PUBLIC ENTRANCE WITH POWER-OPERATED DOOR[a]

OCCUPANCY	BUILDING OCCUPANT LOAD GREATER THAN
A-1, A-2, A-3, A-4	300
B, M, R-1	500

a. In mixed-use facilities where the total sum of the building occupant load is greater than those listed, the most restrictive building occupant load shall apply.

Reason: For strip malls, mixed use buildings with multiple small restaurants and retail stores, and other buildings with multiple tenant spaces with public entrances on the exterior, the existing code can be interpreted as requiring each of those individual tenants to provide a full power-operated door or a low-energy power-operated door. This exception ensures individual tenants with less than the occupant load specified in table 1105.1.1 are not required to provide such doors, which have a significant cost.
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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will decrease the cost of construction
Small stores in a strip mall will not be require to provide automatic doors on each tenant space.

BCAC Egress Item 20 Automatic door definitions (6866)

IBC: SECTION 202

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

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

2021 International Building Code

Revise as follows:

[BE] PUBLIC-USE AREAS. Interior or exterior rooms or spaces that are made available to the general public. A public entrance may be a door, or two or more doors in one opening such as a pair of doors or a bank of doors.

[BE] RESTRICTED ENTRANCE. An entrance that is made available for common use on a controlled basis, but not public use, and that is not a*service entrance*. A service entrance may be a door, or two or more doors in one opening such as a pair of doors or a bank of doors.

[BE] SERVICE ENTRANCE. An entrance intended primarily for delivery of goods or services. A restricted entrance may be a door, or two or more doors in one opening such as a pair of doors or a bank of doors.

Reason: The intent of this proposal is to clarify that an entrance may be a door, or may be multiple adjacent doors. This is done by adding to the definitions of public entrance, service entrance, and restricted entrance to address entrances which are a pair of doors or a bank of doors.
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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification.

BCAC Egress Item 20 Automatic door terms (6867)

IBC: 1105.1.1

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

2021 International Building Code

Revise as follows:

1105.1.1 ~~Automatic~~ Power-operated doors at public entrances. In facilities with the occupancies and building *occupant loads* greater than indicated in Table 1105.1.1, each *public entrances* ~~that are~~ required to be *accessible* shall have a minimum of one door be ~~either~~ a ~~full~~ *power-operated* door or a *low-energy power-operated door*. Where the accessible *public entrance* includes a vestibule, ~~at least~~ a minimum of one door into and one door out of the vestibule shall meet the requirements of this section.

Reason: This proposal is intended to clarify which entrances and the number of doors at each entrance are affected by this requirement. The proposed revisions are intended to be editorial improvements of Section 1105.1.1, and are intended to be consistent with the intent of the E115-18. The table column heading says 'greater than', but that phrase is not in the charging text.
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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification.

BCAC Egress Item 11 Coordination with small B ‘n B exception (6868)

IBC: 1103.2.11, 1108.6.3, 1108.6.3.1 (New), 1108.6.3.2 (New)

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

2021 International Building Code

Revise as follows:

1103.2.11 Residential Group R-1 or R-3. Buildings of Group R-1 containing not more than five *sleeping units* for rent or hire that are also occupied as the residence of the proprietor are not required to comply with this chapter. Buildings of Group R-3 congregate living facilities (transient) or boarding houses (transient) containing not more than five sleeping units for rent or hire that are also occupied as the residence of the proprietor are not required to comply with this chapter.

1108.6.3 Group R-3. Accessible units and Type B units shall be provided in Group R-3 occupancies in accordance with Sections 1108.6.3.1 and 1108.6.3.2.
~~In Group R-3 occupancies where there are four or more *dwelling units* or *sleeping units intended to be occupied as a residence* in a single structure, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit.*~~ Bedrooms within *congregate living facilities*, *dormitories*, sororities, fraternities, and *boarding houses* shall be counted as *sleeping units* for the purpose of determining the number of units.

~~**Exception:** The number of *Type B units* is permitted to be reduced in accordance with Section 1108.7.~~

Add new text as follows:

1108.6.3.1 Accessible units. In Group R-3 congregate living facilities (transient) or boarding houses (transient) Accessible sleeping units shall be provided in accordance with Table 1107.6.1.1.

Exceptions:

1. The residence of a proprietor is not required to be an Accessible unit or to be counted towards the total number of units.
2. Facilities as described in Section 1103.2.11 are not required to provide Accessible units.

1108.6.3.2 Type B units. In structures with four or more sleeping units intended to be occupied as a residence, every sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of Type B units is permitted to be reduced in accordance with Section 1108.7.

Reason: Group R-3 includes transient facilities with 10 or fewer occupants. The exception for accessibility is facilities with a non-transient proprietor and 5 or fewer guestrooms. Since this is not based on occupant load, the exempted facility could be Group R-1 or R-3. If very small hotels without the residents of the proprietor would be required to include Accessible units. This would align the IBC with the 2010 ADA.
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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification for the application of the accessibility requirements, not a change in requirement.

BCAC Egress Item 11 proposal 2 (6869)

IBC: 310.2, 310.3, 310.4, 310.4.2

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

2021 International Building Code

SECTION 310 RESIDENTIAL GROUP R

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* . Group R occupancies not constructed in accordance with the *International Residential Code* as permited by Sections 310.4.1 and 310.4.2 shall comply with Section 420.

Revise as follows:

310.2 Residential Group R-1. Residential Group R-1 occupancies containing *sleeping units* where the occupants are primarily *transient* in nature, including:

- *Boarding houses* (*transient*) with more than 10 occupants
- *Congregate living facilities* (*transient*) with more than 10 occupants
- Hotels (*transient*)
- Motels (*transient*)
- Lodging houses with more than 5 guest rooms

310.3 Residential Group R-2. Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

- Apartment houses
- *Congregate living facilities* (nontransient) with more than 16 occupants
    - *Boarding houses* (*nontransient*)
    - Convents
    - *Dormitories*
    - Fraternities and sororities
    - Monasteries
- Hotels (nontransient) with more than 10 occupants
- *Live/work units*
- Motels (nontransient) with more than 10 occupants
- Vacation timeshare properties

310.4 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two *dwelling units*
- Care facilities that provide accommodations for five or fewer persons receiving care
- *Congregate living facilities* (nontransient) with 16 or fewer occupants
    - *Boarding houses* (nontransient)
    - Convents
    - *Dormitories*
    - Fraternities and sororities
    - Monasteries
- *Congregate living facilities* (*transient*) with 10 or fewer occupants
    - *Boarding houses* (*transient*)
- *Lodging houses* ~~(*transient*)~~ with five or fewer *guest rooms* ~~and 10 or fewer occupants~~
- Hotels (nontransient) with 10 or fewer occupants
- Motels (nontransient) with 10 or fewer occupants

310.4.1 Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a

single-family dwelling are permitted to comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

Revise as follows:

310.4.2 Lodging houses. Owner-occupied *lodging houses* with five or fewer *guest rooms* ~~and 10 or fewer total occupants~~ shall be permitted to be constructed in accordance with the *International Residential Code,* provided that an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code.*

Reason: The intent of this proposal is to separate large and small lodging houses and non-transient hotel/motel.
The definition for lodging house does not limit the size of the facility. To be consistent with what can use the IRC, the text in IBC cannot use the standard occupant load limitations. In addition, 5 guest rooms and a proprietors family is most likely to be more than 10 occupants, which is currently in the IBC. In addition, the whole lodging house is not transient.

For small non-transient hotels and motels, the maximum occupant load of 10 is consistent with the current limitations for transient boarding houses.

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of the divisions between large and small lodging houses and does not add any requirements for these facilities.

BCAC Egress Item 11 proposal 3 fire departments (6870)

IBC: 310.3, 310.4

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

2021 International Building Code

Revise as follows:

310.3 Residential Group R-2. Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

- Apartment houses
- *Congregate living facilities* (nontransient) with more than 16 occupants
    - *Boarding houses* (*nontransient*)
    - Convents
    - *Dormitories*
    - Fire station living quarters
    - Fraternities and sororities
    - Monasteries
- Hotels (nontransient)
- *Live/work units*
- Motels (nontransient)
- Vacation timeshare properties

310.4 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two *dwelling units*
- Care facilities that provide accommodations for five or fewer persons receiving care
- *Congregate living facilities* (nontransient) with 16 or fewer occupants
    - *Boarding houses* (nontransient)
    - Convents
    - *Dormitories*
    - Fire station living quarters
    - Fraternities and sororities
    - Monasteries
- *Congregate living facilities* (*transient*) with 10 or fewer occupants
    - *Boarding houses* (*transient*)
- *Lodging houses* (*transient*) with five or fewer *guest rooms* and 10 or fewer occupants

Reason: Fire stations are often mixed use facilities, and sometime include living quarters. There is the question if this is a single family residence, Group R-3, regardless of the number of fireman using the living quarters. This proposal will clarify how these spaces should be classified.
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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of the correct classification for fire stations.

BCAC Egress Item 6 corridor continuity Proposal 4 (6871)

IBC: 707.6

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Building Code

Revise as follows:

707.6 Openings. Openings in a *fire barrier* shall be protected in accordance with Section 716. Openings shall be limited to a maximum aggregate width of 25 percent of the length of the wall, and the maximum area of any single opening shall not exceed 156 square feet (15 m^2). Openings in enclosures for *exit access stairways* and *ramps*, *interior exit stairways* and *ramps* and *exit passageways* shall also comply with Sections 1019, 1023.4 and 1024.5, respectively.

Exceptions:

1. Openings shall not be limited to 156 square feet (15 m^2) where adjoining floor areas are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
2. Openings shall not be limited to 156 square feet (15 m^2) or an aggregate width of 25 percent of the length of the wall where the opening protective is a *fire door* serving enclosures for*exit access stairways* and *ramps,* and*interior exit stairways* and *ramps.*
3. Openings shall not be limited to 156 square feet (15 m^2) or an aggregate width of 25 percent of the length of the wall where the opening protective has been tested in accordance with ASTM E119 or UL 263 and has a minimum *fire-resistance rating* not less than the *fire-resistance rating* of the wall.
4. *Fire window assemblies* permitted in *atrium* separation walls shall not be limited to a maximum aggregate width of 25 percent of the length of the wall.
5. Openings shall not be limited to 156 square feet (15 m^2) or an aggregate width of 25 percent of the length of the wall where the opening protective is a *fire door assembly* in a *fire barrier* separating an enclosure for *exit access stairways* and *ramps*, and *interior exit stairways* and *ramps* from an *exit passageway* in accordance with Section 1023.3.1.
6. Openings providing entrance to an elevator car shall not be limited to 156 square feet (15 m2) or an aggregate width of 25 percent of the length of the wall where the opening protective is a fire door assembly in a fire barrier that is an elevator hoistway enclosure.

Reason: The doors to the elevator in an elevator shaft are limited by the size of the associated cab and addressed by the safety standards in ASME A17.1. The size of the shaft is determined by the car size and the number of cars. While this size and length limitation is a literal requirement in fire barriers, it is not typically applied to elevator shafts.
This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC Fire Code Action Committee (FCAC).

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of existing criteria. This limitation was not typically applied to elevator shafts.

BCAC Egress Item 6 corridor continuity Proposal 1 elevator hoistway (6872)

IBC: 713.14, 716.2.6.1, SECTION 3002, 3002.1, 3002.1.1, 3002.1.2, 3002.2, 3002.6, SECTION 3006, 3006.1, 3006.2, 3006.3

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Building Code

Revise as follows:

713.14 Elevator, dumbwaiter and other hoistways. ~~Elevator, dumbwaiter and other hoistway enclosures shall be constructed in accordance with Sections 712 and~~ A hoistway for elevators, dumbwaiters and other vertical devices shall comply with Section 712. Where the hoistway is required to be enclosed, it shall be constructed as a shaft enclosure in accordance with Section 713, and Chapter 30.

716.2.6.1 Door closing. *Fire doors* shall be latching and self- or automatic-closing in accordance with this section.

Exceptions:

1. *Fire doors* located in common walls separating *sleeping units* in Group R-1 shall be permitted without automatic- or *self-closing* devices.
2. The elevator car doors and the associated elevator hoistway ~~enclosure~~ doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.

SECTION 3002 HOISTWAY ENCLOSURES

Revise as follows:

3002.1 Hoistway ~~enclosure~~ protection. ~~Elevator, dumbwaiter and other hoistway enclosures shall be *shaft enclosures* complying with Sections 712 and 713.~~ A hoistway for elevators, dumbwaiters and other vertical access devices shall be comply with Sections 712 and 713. Where the hoistway is required to be enclosed it shall be constructed as a shaft enclosure in accordance with Section 713.

3002.1.1 Opening protectives. Openings in fire-resistant rated hoistway enclosures shall be protected as required in Chapter 7.

Exception: The elevator car doors and the associated elevator hoistway ~~enclosure~~ doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I Emergency Recall Operation.

3002.1.2 Hardware. Hardware on ~~opening protectives~~ elevator hoistway doors shall be of an *approved* type installed as tested, except that *approved* interlocks, mechanical locks and electric contacts, door and gate electric contacts and door-operating mechanisms shall be exempt from the fire test requirements.

3002.2 Number of elevator cars in a hoistway. Where four or more elevator cars serve all or the same portion of a building, the elevators shall be located in not fewer than two separate fire-resistance rated hoistways. Not more than four elevator cars shall be located in any single fire-resistance rated hoistway enclosure.

3002.6 Prohibited doors or other devices. Doors or other devices, other than ~~hoistway doors and~~ the elevator car door and the associated elevator hoistway doors, shall be prohibited at the point of access to an elevator car unless such doors or other devices are readily openable from inside the car ~~side~~ without a key, tool, special knowledge or effort.

SECTION 3006 ELEVATOR LOBBIES AND HOISTWAY ~~OPENING~~ DOOR PROTECTION

3006.1 General. ~~Elevator hoistway openings and enclosed~~ Enclosed elevator lobbies and elevator hoistway door protection shall be provided in accordance with the following:

1. Where elevator hoistway door ~~opening~~ protection is required by Section 3006.2, such protection shall be provided in accordance with Section 3006.3.
2. Where enclosed elevator lobbies are required for underground buildings, such lobbies shall comply with Section 405.4.3.

3. Where an *area of refuge* is required and an enclosed elevator lobby is provided to serve as an *area of refuge*, the enclosed elevator lobby shall comply with Section ~~1009.6~~ 1009.6.4.
4. Where fire service access elevators are provided, enclosed elevator lobbies shall comply with Section 3007.6.
5. Where occupant evacuation elevators are provided, enclosed elevator lobbies shall comply with Section 3008.6.

3006.2 Elevator hoistway door ~~Hoistway opening~~ protection required. Elevator hoistway ~~door openings~~ doors shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three *stories*, is required to be enclosed within a *shaft enclosure* in accordance with Section 712.1.1 and any of the following conditions apply:

1. The building is not protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
2. The building contains a Group I-1, Condition 2 occupancy.
3. The building contains a Group I-2 occupancy.
4. The building contains a Group I-3 occupancy.
5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) in height. The height of the hoistway shall be measured from the *lowest floor* to the highest floor of the floors served by the hoistway.

Exceptions:

1. Protection of elevator hoistway ~~door openings~~ doors are ~~is~~ not required where the elevator serves only *open parking garages* in accordance with Section 406.5.
2. Protection of elevator hoistway ~~door openings~~ doors are ~~is~~ not required at the level(s) of exit discharge, provided that the level(s) of exit discharge is equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
3. ~~Enclosed elevator lobbies and protection~~ Protection of elevator hoistway ~~door openings~~ doors are not required on levels where the elevator hoistway door opens to the exterior.

3006.3 Elevator hoistway door ~~Hoistway opening~~ protection. Where Section 3006.2 requires protection of the elevator hoistway door ~~opening~~, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway ~~*shaft enclosure*~~ doors from each floor by *fire partitions* in accordance with Section 708. In addition, doors protecting openings in the elevator lobby enclosure walls shall comply with Section 716.2.2.1 as required for *corridor* walls. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1.
2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway ~~*shaft enclosure*~~ doors from each floor by *smoke partitions* in accordance with Section 710 where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. In addition, doors protecting openings in the *smoke partitions* shall comply with Sections 710.5.2.2, 710.5.2.3 and 716.2.6.1. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1.
3. Additional doors or other devices shall be provided at each elevator hoistway door ~~opening~~ in accordance with Section 3002.6. Such door or other devices shall comply with the smoke and draft control door assembly requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal.
4. The elevator hoistway shall be pressurized in accordance with Section 909.21.

Reason: The intent of this proposal is consistent terminology for elevator protection. The current text is very inconsistent. This is not intended to have any technical changes.
The elevator industry considers an elevator hoistway the vertical movement of that device, whether it be in a rated enclosure, in non-rated enclosure, or not enclosed at all. The photos are examples of hoistways that are the non-rated enclosure and the open hoistway.

Example of elevator hoistways that are not in rated enclosures.

The intent of this proposal is consistent terminology for elevator protection. The current text is very inconsistent. This is not intended to have any technical changes.The elevator industry considers an elevator hoistway the vertical movement of that device, whether it be in a rated enclosure, in non-rated enclosure, or not enclosed at all. The photos are

examples of hoistways that are the non-rated enclosure and the open hoistway.

Examples of doors or other devices in front of associated elevator entrance doors – see Section 3002.6 and 3006.3 Item 3

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

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection

of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of the terminology for elevator hoistways, and shaft protection and the associated elevator doors and has no changes to the construction.

BCAC Egress Item 6 corridor continuity Proposal 2 lobby walls (6874)

IBC: SECTION 708, 708.4.1 (New), SECTION 709, SECTION 710, 709.4.2, 710.4.1 (New), SECTION 3006, SECTION 3007, 3006.3, 3007.6.3, 3007.6.2, SECTION 3008, 3008.6.1, 3008.6.2, 3008.6.3, 3008.6.3.1, 3008.6.3.2

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Building Code

SECTION 708 FIRE PARTITIONS

Add new text as follows:

708.4.1 Fire partition walls enclosing elevator lobbies. Fire partition walls used to enclose elevator lobbies in accordance with Section 3006.3 (elevator hoistway protection), shall form an effective enclosure that terminates at a fire barrier or fire partition having a level of fire-resistance-rating not less than 1 hour, or an outside wall.

SECTION 709 SMOKE BARRIERS

SECTION 710 SMOKE PARTITIONS

Revise as follows:

709.4.2 Smoke-barrier walls enclosing areas of refuge or elevator lobbies. *Smoke-barrier* walls used to enclose *areas of refuge* in accordance with Section 1009.6.4, or to enclose elevator lobbies in accordance with Section 405.4.3, 3007.6.2, or 3008.6.2, shall form an effective membrane enclosure that terminates at a *fire barrier* wall having a ~~level of fire protection~~ *resistance rating* not less than 1 hour, another *smoke barrier* wall or an outside wall. A smoke and draft control door assembly as specified in Section 716.2.2.1.1 shall not be required at each elevator hoistway door ~~opening~~ where protected by an elevator lobby, at each exit door opening into a protected lobby or at each exit doorway between an *area of refuge* and the exit enclosure.

Add new text as follows:

710.4.1 Smoke partition walls enclosing elevator lobbies. Smoke partition walls used to enclose elevator lobbies in accordance with Section 3006.3 (elevator hoistway protection), shall form an effective enclosure that terminates at a fire barrier having a level of fire-resistance-rating not less than 1 hour, another smoke partition or an outside wall.

Revise as follows:

SECTION 3006 ELEVATOR LOBBIES AND HOISTWAY ~~OPENING~~ DOOR PROTECTION

SECTION 3007 FIRE SERVICE ACCESS ELEVATOR

Revise as follows:

3006.3 ~~Hoistway opening~~ Elevator hoistway door protection. Where Section 3006.2 requires protection of the elevator hoistway ~~door opening~~ doors, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway ~~*shaft enclosure*~~ doors from each floor ~~by~~ with *fire partitions* in accordance with Section 708. In addition, doors protecting openings in the ~~elevator lobby enclosure walls~~ fire partitions shall comply with Section 716.2.2.1 ~~as required for *corridor* walls~~. Penetrations of the ~~enclosed elevator lobby~~ fire partitions by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1.
2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway ~~*shaft enclosure*~~ doors from each floor ~~by~~ with *smoke partitions* in accordance with Section 710 where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. In addition, doors protecting openings in the *smoke partitions* shall comply with Sections 710.5.2.2, 710.5.2.3 and 716.2.6.1. Penetrations of the ~~enclosed elevator lobby~~ smoke partitions by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1.
3. Additional doors shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such door shall comply with the smoke and draft control door assembly requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal.

4. The elevator hoistway shall be pressurized in accordance with Section 909.21.

3007.6.3 ~~Lobby~~ Elevator lobby doorways. Other than doors to ~~the hoistway,~~ elevator control room or elevator control space, each door ~~doorway to an enclosed fire service access elevator lobby~~ in the fire barrier shall be provided with a $^{3}/_{4}$-hour *fire door assembly* complying with Section 716. ~~The~~ Such *fire door assembly* shall comply with the smoke and draft control door assembly requirements of Section 716.2.2.1.1 and be tested in accordance with UL 1784 without an artificial bottom seal.

3007.6.2 Elevator lobby ~~Lobby~~ enclosure. The fire service access elevator lobby shall be ~~enclosed~~ separated from each floor with a *smoke barrier* in accordance with Section 709 ~~having a *fire-resistance rating* of not less than 1 hour~~, except that lobby doorways shall comply with Section 3007.6.3.

Exception: Enclosed fire service access elevator lobbies are not required at the *levels of exit discharge*.

SECTION 3008 OCCUPANT EVACUATION ELEVATORS

Revise as follows:

3008.6.1 Access to interior exit stairway or ramp. The occupant evacuation elevator lobby shall have *direct access* from the enclosed elevator lobby to an *interior exit stairway or ramp*.

Exceptions:

1. Access to an *interior exit stairway or ramp* shall be permitted to be through a protected path of travel that has a level of fire protection not less than the elevator lobby enclosure. The protected path shall be separated from the enclosed elevator lobby through an opening protected by a smoke and draft control assembly in accordance Section ~~716.2.2.1~~ 716.2.2.1.1.
2. Elevators that only service an *open parking garage* and the elevator lobby of the building shall not be required to provide *direct access*.

3008.6.2 Elevator lobby ~~Lobby~~ enclosure. The occupant evacuation elevator lobby shall be ~~enclosed~~ separated from each floor with a *smoke barrier* in accordance with Section 709 ~~having a *fire-resistance rating* of not less than 1 hour~~, except that lobby doorways shall comply with Section 3008.6.3.

Exception: Enclosed occupant evacuation elevator lobbies are not required at the *levels of exit discharge*.

3008.6.3 Elevator lobby ~~Lobby~~ doorways. Other than the doors to ~~the hoistway,~~ elevator machine rooms, machinery spaces, control rooms and control spaces ~~within the lobby enclosure~~ in the *smoke barrier*, each doorway to an occupant evacuation elevator lobby shall be provided with a $^{3}/_{4}$-hour *fire door assembly* complying with Section 716. ~~The~~ Such *fire door assembly* shall comply with the smoke and draft control assembly requirements of Section 716.2.2.1.1 and be tested in accordance with UL 1784 without an artificial bottom seal.

3008.6.3.1 Vision panel. A vision panel shall be installed in each *fire door assembly* ~~protecting the lobby doorway~~ in the smoke barrier. The vision panel shall consist of fire-protection-rated glazing, shall comply with the requirements of Section 716 and shall be located to furnish clear vision of the occupant evacuation elevator lobby.

3008.6.3.2 Door closing. Each *fire door assembly* ~~protecting the lobby doorway~~ in the smoke barrier shall be automatic-closing upon receipt of any fire alarm signal from the *emergency voice/alarm communication system* serving the building.

Reason: The intent of this proposal is to clarify lobby protection requirements – which walls are fire barriers, fire partitions or smoke barriers. This will also clarify what requirements are applicable for the elevator hoistway doors vs. the doors in the other walls of the lobby protection. The current language is inconsistent for the locations where elevator lobbies are specified.
This protection of elevator lobbies is a combination of the elevator hoistway and exit stairway (direct access to a stairway is required for fire service an occupant evacuation elevator lobbies) shaft enclosure/fire barriers and the fire partitions or smoke barriers required for lobbies (405.4.3, 3006.3, 3007.6.2 and 3008.6.2) The intent of new 708.4.1 and revised 709.4.2 is to clarify that the fire partitions/smoke barrier criteria is not applicable to all the walls of the elevator lobby since the vertical shaft/fire barrier protections is adequate. Fires typically happen in the occupied portions of the buildings, not within the elevator shaft or the stairway. In addition, in situations where an elevator lobby is provided, the elevator shafts are double protected from smoke intrusion from a fire on the floor.

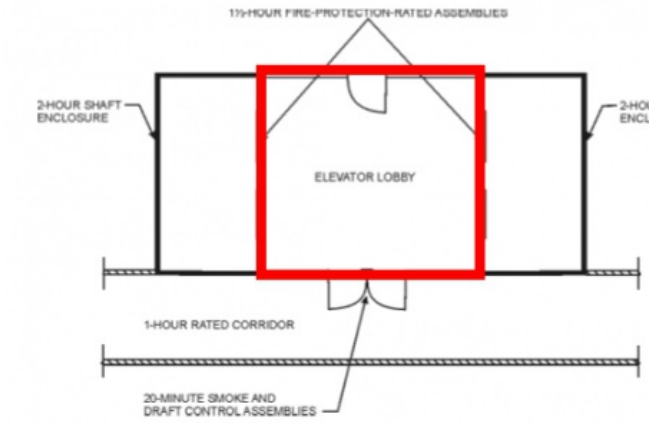


Diagram for elevator lobby

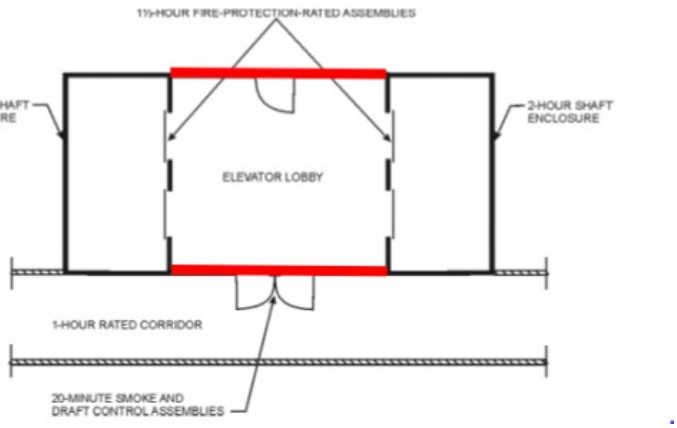


Diagram for which walls are

fire partitions, smoke partitions or smoke barriers

Provisions for horizontal continuity are addressed for smoke barriers that surround elevator lobbies or areas of refuge. The same horizontal continuity should be addressed for elevator lobbies enclosed with fire partitions in Section 3006.3 Item 1 or smoke partitions in Section 3006.3 Item 2. The movement of 'smoke barrier wall' just assures a minimum fire resistance rating. The last sentence in 709.4.2 is not needed with the clarification of which walls meet which requirements in Chapter 30.

The reference to sprinklers is not needed in Section 3006.3 Item 2, because this is already a limitation in Section 3006.2. Taking it out makes this item easier to read. In addition, this could currently be read to not allow smoke barriers to form elevator lobbies in non-sprinklered buildings. Smoke barriers provide equal or better protection than fire partitions.

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

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification for elevator lobby requirements. While technical criteria was added for horizontal continuity for fire partitions and smoke partitions at elevator lobbies, this was implied previously and does not add cost to construction.

BCAC Egress Item 6 corridor continuity Proposal 3 rated coridor and elevator door (6876)

IBC: 3006.2, 3006.2.1, 1020.2.1 (IFC[BE] 1020.2.1)

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

2021 International Building Code

Revise as follows:

3006.2 ~~Hoistway opening protection~~ Elevator hoistway door required. Elevator hoistway doors ~~door openings~~ shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three *stories*, is required to be enclosed within a *shaft enclosure* in accordance with Section 712.1.1 and any of the following conditions apply:

1. The building is not protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
2. The building contains a Group I-1, Condition 2 occupancy.
3. The building contains a Group I-2 occupancy.
4. The building contains a Group I-3 occupancy.
5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) in height. The height of the hoistway shall be measured from the *lowest floor* to the highest floor of the floors served by the hoistway.
6. The elevator hoistway door is located in the wall of a corridor required to be fire-resistance rated in accordance with Section 1020.1.

Exceptions:

1. Protection of elevator hoistway doors ~~door openings~~ is not required where the elevator serves only *open parking garages* in accordance with Section 406.5.
2. Protection of elevator hoistway doors ~~door openings~~ is not required at the level(s) of exit discharge, provided that the level(s) of exit discharge is equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
3. ~~Enclosed elevator lobbies and protection~~ Protection of elevator hoistway doors ~~door openings~~ are not required on levels where the elevator hoistway opens to the exterior.

Delete without substitution:

~~**3006.2.1 Rated corridors.** Where *corridors* are required to be fire-resistance rated in accordance with Section 1020.2, elevator hoistway openings shall be protected in accordance with Section 3006.3.~~

Revise as follows:

1020.2.1 Hoistway ~~opening~~ protection. Elevator hoistway doors in elevators hoistway enclosures required to be fire resistance rated shall be protected in accordance with Section 716. Elevator hoistway doors openings shall also be protected in accordance with Section 3006.2 ~~3006.2.1~~.

Reason: Elevator doors that open into a rated corridor have to meet both the fire partition and fire barrier requirements. The options for elevator door protection in Section 3006.3 would be a viable option, so Section 3006.2.1 could be moved up as Item 6 in Section 3006.2.
The change to 1020.2.1 is a pointer to both the rated corridor and elevator hoistway door protection requirements.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a clarification of current requirements.

FCAC WG1.4 – Proposal 1.4-2A - Occupiable Roof Definition (6949) Part I

PART I - IBC: SECTION 202 (New), 302.1, 503.1.4, 503.1.4.1, 1004.7, 1006.1, 1006.3, 1006.3.1, 1006.3.2, 1006.3.4, 1006.3.3, 1009.2.1, 1011.12, 1011.12.2, 1011.15, 1011.16, 1019.3, 1104.4, 1011.14; (IFC[BE]1004.7, 1006.1, 1006.3, 1006.3.1, 1006.3.2, 1006.3.4, 1006.3.3, 1009.2.1, 1011.12, 1011.12.2, 1011.15, 1011.16, 1019.3, 1104.4, 1011.14)

PART II - IFC: SECTION 202 (New), 903.2.1.6; (IBC[F] 903.2.1.6)

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE GENERAL CODE COMMITTEE. PART II WILL BE HEARD BY THE FIRE CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Building Code

Add new definition as follows:

OCCUPIABLE ROOF. An exterior space on a roof that is designed for human occupancy, other than maintenance, and which is equipped with a means of egress system meeting the requirements of this code.

Revise as follows:

[BG] PENTHOUSE. An enclosed, unoccupiable ~~unoccupied~~ rooftop structure used for sheltering mechanical and electrical equipment, tanks, elevators and related machinery, *stairways,* and vertical *shaft* openings.

302.1 Occupancy classification. Occupancy classification is the formal designation of the primary purpose of the building, structure or portion thereof. Structures shall be classified into one or more of the occupancy groups specified in this section based on the nature of the hazards and risks to building occupants generally associated with the intended purpose of the building or structure. An area, room or space that is intended to be occupied at different times for different purposes shall comply with all applicable requirements associated with such potential multipurpose. Structures containing multiple occupancy groups shall comply with Section 508 . Where a structure is proposed for a purpose that is not specified in this section, such structure shall be classified in the occupancy it most nearly resembles based on the fire safety and relative hazard. Occupiable ~~Occupied~~ roofs shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard, and shall comply with Section 503.1.4 .

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5.
2. Business (see Section 304): Group B.
3. Educational (see Section 305): Group E.
4. Factory and Industrial (see Section 306): Groups F-1 and F-2.
5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5.
6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4.
7. Mercantile (see Section 309): Group M.
8. Residential (see Section 310): Groups R-1, R-2, R-3 and R-4.
9. Storage (see Section 311): Groups S-1 and S-2.
10. Utility and Miscellaneous (see Section 312): Group U.

503.1.4 Occupiable ~~Occupied~~ roofs. A roof level or portion thereof shall be permitted to be used as an occupiable ~~occupied~~ roof provided the occupancy of the roof is an occupancy that is permitted by Table 504.4 for the *story* immediately below the roof. The area of the occupiable ~~occupied~~ roofs shall not be included in the *building area* as regulated by Section 506. An occupiable ~~occupied~~ roof shall not be included in the *building height* or number of *stories* as regulated by Section 504, provided that the *penthouses* and other enclosed *rooftop structures* comply with Section 1511.

Exceptions:

1. The occupancy located on an occupiable ~~occupied~~ roof shall not be limited to the occupancies allowed on the *story* immediately below the roof where the building is equipped throughout with an *automatic sprinker system* in accordance with Section 903.3.1.1 or 903.3.1.2 and occupant notification in accordance with Sections 907.5.2.1 and 907.5.2.3 is provided in the area of the occupiable ~~occupied~~ roof. *Emergency voice/alarm communication* system notification per Section 907.5.2.2 shall also be provided in the area of the occupiable ~~occupied~~ roof where such system is required elsewhere in the building.

2. Assembly occupancies shall be permitted on roofs of open parking spaces of Type I or Type II construction, in accordance with the exception to Section 903.2.1.6.

503.1.4.1 Enclosures over occupiable ~~occupied~~ roof areas. Elements or structures enclosing the occupiable ~~occupied~~ roof areas shall not extend more than 48 inches (1220 mm) above the surface of the occupiable ~~occupied~~ roof.

Exception: *Penthouses* constructed in accordance with Section 1511.2 and towers, domes, spires and cupolas constructed in accordance with Section 1511.5.

1004.7 Outdoor areas. *Yards*, patios, occupiable ~~occupied~~ roofs, *courts* and similar outdoor areas accessible to and usable by the building occupants shall be provided with *means of egress* as required by this chapter. The *occupant load* of such outdoor areas shall be assigned by the *building official* in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, *means of egress* requirements for the building shall be based on the sum of the *occupant loads* of the building plus the outdoor areas.

Exceptions:

1. Outdoor areas used exclusively for service of the building need only have one *means of egress*.
2. Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.

1006.1 General. The number of *exits* or *exit access doorways* required within the *means of egress* system shall comply with the provisions of Section 1006.2 for spaces, including *mezzanines*, and Section 1006.3 for *stories* or occupiable ~~occupied~~ roofs.

1006.3 Egress from stories or occupiable ~~occupied~~ roofs. The *means of egress* system serving any *story* or occupiable ~~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.

1006.3.1 Occupant load. Where *stairways* serve more than one *story*, or more than one *story* and an occupiable ~~occupied~~ roof, only the *occupant load* of each *story* or occupiable ~~occupied~~ roof, considered individually, shall be used when calculating the required number of *exits* or access to *exits* serving that *story*.

1006.3.2 Path of egress travel. 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* within an *atrium* complying with Section 404.
4. *Exit access stairways* and *ramps* in *open parking garages* that serve only the parking garage.
5. *Exit access stairways* and *ramps* serving *open-air assembly seating* complying with the exit access travel distance requirements of Section 1030.7.
6. *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.
7. Exterior *exit access stairways* and *ramps* between occupiable ~~occupied~~ roofs.

1006.3.4 Single exits. A single *exit* or access to a single *exit* shall be permitted from any *story* or occupiable ~~occupied~~ roof where one of the following conditions exists:

1. The *occupant load*, number of *dwelling units* and exit access travel distance do not exceed the values in Table 1006.3.4(1) or 1006.3.4(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 Egress based on occupant load. Each *story* and occupiable ~~occupied~~ roof shall have the minimum number of separate and distinct *exits*, or access to *exits*, as specified in Table 1006.3.3. A single *exit* or access to a single *exit* shall be permitted in accordance with Section 1006.3.4. The required number of *exits*, or *exit access stairways* or *ramps* providing access to *exits*, from any *story* or occupiable ~~occupied~~ roof shall be maintained until arrival at the *exit discharge* or a *public way*.

1009.2.1 Elevators required. In buildings where a required accessible floor or occupiable ~~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 provided with a *ramp* conforming to the provisions of Section 1012.

1011.12 Stairway to roof. In buildings four or more stories above grade plane, one *stairway* shall extend to the roof surface unless the roof has a slope steeper than four units vertical in 12 units horizontal (33-percent slope).

Exception: Other than where required by Section 1011.12.1, in buildings without an occupiable ~~occupied~~ roof access to the roof from the top *story* shall be permitted to be by an *alternating tread device*, a ships ladder or a permanent ladder.

1011.12.2 Roof access. Where a *stairway* is provided to a roof, access to the roof shall be provided through a *penthouse* complying with Section 1511.2.

Exception: In buildings without an occupiable ~~occupied~~ roof, access to the roof shall be permitted to be a roof hatch or trap door not less than 16 square feet (1.5 m^2) in area and having a minimum dimension of 2 feet (610 mm).

1011.15 Ship's ladders. Ship's ladders are permitted to be used in Group I-3 as a component of a *means of egress* to and from control rooms or elevated facility observation stations not more than 250 square feet (23 m^2) with not more than three occupants and for access to unoccupiable ~~unoccupied~~ roofs. The minimum clear width at and below the *handrails* shall be 20 inches (508 mm). Ship's ladders shall be designed for the live loads indicated in Section 1607.17.

1011.16 Ladders. Permanent ladders shall not serve as a part of the *means of egress* from occupied spaces within a building. Permanent ladders shall be constructed in accordance with Section 306.5 of the International Mechanical Code and designed for the live loads indicated in Section 1607.17. Permanent ladders shall be permitted to provide access to the following areas:

1. Spaces frequented only by personnel for maintenance, repair or monitoring of equipment.
2. Nonoccupiable spaces accessed only by catwalks, crawl spaces, freight elevators or very narrow passageways.

3. Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands.
4. Elevated levels in Group U not open to the general public.
5. Nonoccupiable ~~Nonoccupied~~ roofs that are not required to have *stairway* access in accordance with Section 1011.12.1.
6. Where permitted to access equipment and appliances in accordance with Section 306.5 of the International Mechanical Code.

1019.3 Occupancies other than Groups I-2 and I-3. In other than Group I-2 and I-3 occupancies, floor openings containing *exit access stairways* or *ramps* shall be enclosed with a shaft enclosure constructed in accordance with Section 713.

Exceptions:

1. *Exit access stairways* and *ramps* that serve or atmospherically communicate between only two adjacent stories. Such interconnected stories shall not be open to other stories.
2. In Group R-1, R-2 or R-3 occupancies, *exit access stairways* and *ramps* connecting four stories or less serving and contained within an individual dwelling unit or sleeping unit or live/work unit.
3. *Exit access stairways* serving and contained within a Group R-3 congregate residence or a Group R-4 facility are not required to be enclosed.
4. *Exit access stairways* and *ramps* in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, where the area of the vertical opening between stories does not exceed twice the horizontal projected area of the stairway or *ramp* and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13. In other than Group B and M occupancies, this provision is limited to openings that do not connect more than four stories.
5. *Exit access stairways* and *ramps* within an *atrium* complying with the provisions of Section 404.
6. *Exit access stairways* and *ramps* in *open parking garages* that serve only the parking garage.
7. *Exit access stairways* and *ramps* serving smoke-protected or *open-air assembly seating* complying with the exit access travel distance requirements of Section 1030.7.
8. *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.
9. Exterior *exit access stairways* or *ramps* between occupiable ~~occupied~~ roofs.

1104.4 Multistory buildings and facilities. At least one *accessible* route shall connect each accessible *story, mezzanine* and occupiable ~~occupied~~ roofs in multilevel buildings and *facilities*.

Exceptions:

1. An *accessible* route is not required to *stories, mezzanines* and occupiable ~~occupied~~ roofs that have an aggregate area of not more than 3,000 square feet (278.7 m^2) and are located above and below accessible levels. This exception shall not apply to:
   1.1. Multiple tenant facilities of Group M occupancies containing five or more tenant spaces used for the sales or rental of goods and where at least one such tenant space is located on a floor level above or below the accessible levels.
   1.2. *Stories* or *mezzanines* containing offices of health care providers (Group B or I).
   1.3. Passenger transportation facilities and airports (Group A-3 or B).
   1.4. Government buildings.
   1.5. Structures with four or more dwelling units.
2. *Stories*, *mezzanines* or occupiable ~~occupied~~ roofs that do not contain accessible elements or other spaces as determined by Section 1108 or 1109 are not required to be served by an accessible route from an *accessible* level.
3. In air traffic control towers, an *accessible route* is not required to serve the cab and the floor immediately below the cab.

4. Where a two-story building or facility has one *story* or *mezzanine* with an *occupant load* of five or fewer persons that does not contain *public use* space, that *story* or *mezzanine* shall not be required to be connected by an *accessible route* to the *story* above or below.

1011.14 Alternating tread devices. *Alternating tread devices* are limited to an element of a *means of egress* in buildings of Groups F, H and S from a *mezzanine* not more than 250 square feet (23 m^2) in area and that serves not more than five occupants; in buildings of Group I-3 from a guard tower, observation station or control room not more than 250 square feet (23 m^2) in area and for access to unoccupiable ~~unoccupied~~ roofs. *Alternating tread devices* used as a *means of egress* shall not have a rise greater than 20 feet (6096 mm) between floor levels or landings.

2021 International Fire Code

Add new definition as follows:

OCCUPIABLE ROOF. An exterior space on a roof that is designed for human occupancy, other than maintenance, and which is equipped with a means of egress system meeting the requirements of this code.

Revise as follows:

903.2.1.6 Assembly occupancies on roofs. Where an ~~occupied~~ occupiable roof has an assembly occupancy with an *occupant load* exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the ~~occupied~~ occupiable roof and the *level of exit discharge* shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.

Exception: Open parking garages of Type I or Type II construction.

Reason: Over the last several cycles, code provisions have been added to address issues related to occupied/occupiable, vegetative and landscaped roofs. In some cases, the terms have been used interchangeably, in others applying to specific types of roof systems. With the increasing number of provisions, a definition is needed. A proposal last cycle (G7-19) attempted to add a definition for occupiable roof but was disapproved for several reasons including the fact it did not correlate with the fact the code uses “occupied roof” in some sections and “occupiable roof” in others.
This code proposal both adds a definition for “occupiable roof”and. changes terminology throughout the code to be consistent with use of “occupiable roof” rather than “occupied roof”. The definition is intended to parallel the existing code definition for occupiable space:

[BG] OCCUPIABLE SPACE. A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes or in which occupants are engaged at labor, and which is equipped with means of egress and light and ventilation facilities meeting the requirements of this code.

The proposed definition is different in a few key ways: The laundry list of uses is left out, and the one clarification made that access for maintenance of rooftop mechanical equipment or other maintenance does not trigger assembly live load requirements or other provisions related to occupiable roofs. The references to light and ventilation are left out as occupiable roofs are exterior spaces. No mechanical ventilation is necessary, and the code does not require lighting for exterior spaces other than portions of the means of egress.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC) and 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The code change is purely editorial and does not affect how occupiable roofs are designed or constructed.

BCAC Egress Item 6 corridor continuity Proposal 5 exception for low rise (6970)

IBC: 716.2.2.1, 1020.2.1; (IFC[BE] 1020.2.1)

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Building Code

Revise as follows:

716.2.2.1 Door assemblies in corridors and smoke barriers. *Fire door* assemblies required to have a minimum *fire protection rating* of 20 minutes where located in *corridor* walls or *smoke barrier* walls having a *fire-resistance rating* in accordance with Table 716.1(2) shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

Exceptions:

1. Viewports that require a hole not larger than 1 inch (25 mm) in diameter through the door, have not less than a 0.25-inch-thick (6.4 mm) glass disc and the holder is of metal that will not melt out where subject to temperatures of 1,700°F (927°C).
2. *Corridor* door assemblies in occupancies of Group I-2 shall be in accordance with Section 407.3.1.
3. Unprotected openings shall be permitted for *corridors* in multitheater complexes where each motion picture auditorium has not fewer than one-half of its required *exit* or *exit access doorways* opening directly to the exterior or into an *exit passageway*.
4. Horizontal sliding doors in *smoke barriers* that comply with Sections 408.6 and 408.8.4 in occupancies in Group I-3.
5. In corridor walls required to have a fire-resistance rating in accordance with Section 1020.2, an elevator hoistway door opening directly into the corridor is not required to meet the smoke and draft control door assembly requirements in this section where the elevator connect 3 stories or less and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

1020.2.1 Hoistway ~~opening~~ protection. Elevator hoistway doors in elevators hoistway enclosures required to be fire resistance rated shall be protected in accordance with Section 716. Elevator hoistway doors ~~openings~~ shall also be protected in accordance with Section ~~3006.2.1~~ 3006.2.

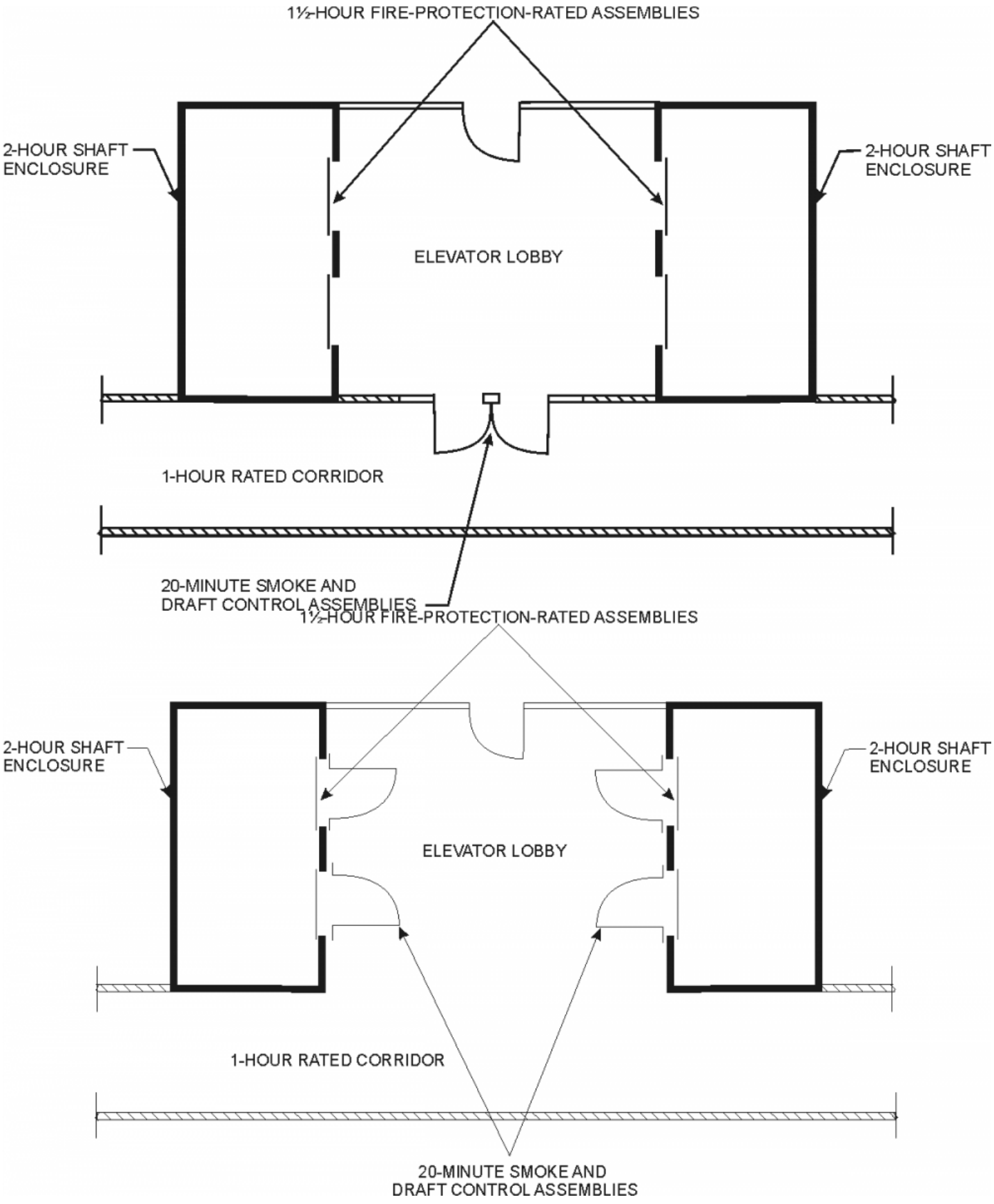
Reason: The intent of this proposal is to allow for two and three story Group R and Group I-1 buildings that do not have to have elevator lobbies to not have smoke and draft control at the doors. Even with sprinklers, these buildings have fire resistance rated corridors.
Elevators are within vertical shafts and are sent to fire barrier protection requirements in Section 712.1.1, 713.14 and 3002.1. Section 707.6 in fire barriers references Section 716 for opening protection of all openings, which would include door through the shaft to allows entrance into the elevator car. Elevator car doors often open directly into a rated corridor, so Section 716.2.2.1 is applicable to those elevator doors.

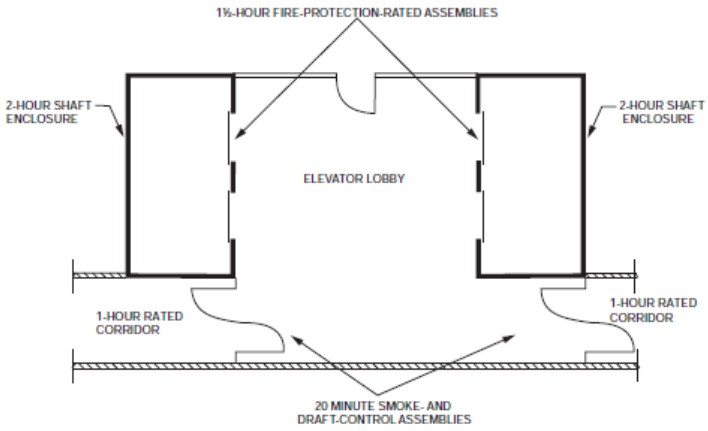
The new exception 5 in Section 716.2.2.1 is to allow for elevators in low rise building to not to have to meet the smoke and draft requirements of opening protectives in corridors. While many elevator hoistway/vertical shaft doors are tested and labeled for the 1-hour or $1^1/2$-hour fire resistance rating (see Section 716.2.1), very few, if any of the doors typically sold in the United States will also meet the smoke and draft requirements (see Section 716.2.2.1.1) that would allow them to open directly into a fire-resistance-rated corridor.

Current text literally results in elevator lobbies or other protection in front of the elevator doors in all rated corridors. There would not be significant stack effect for the movement of smoke with this minimal allowance. The code currently allows other floor vertical openings in Sections 712 and 1019.3 for four stories, so how is the elevator shaft more of a hazard? This allowance would make these buildings then require elevator lobbies/elevator opening protect at the same point, thus coordinating Section 716 and 3006.

The pointer in Section 1020.2.1 is in recognition that elevator entrance doors in rated corridors have to meet both criteria.

Below are what is currently required in even 2 story building with rated corridors.





Commentary Figure 1020.6(6)
ELEVATOR LOBBY/CORRIDOR OPTION 4

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and ICC Fire 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will decrease the cost of construction
This will be a decrease in some 2 and 3 story buildings. The shaft would need a fire resistant elevator entrance door, but would not require a lobby or other protection options to meet the smoke and draft control.

BCAC General Item8-Mandatory language "May" (7016)

IBC: TABLE 721.1(2), FIGURE 722.5.1(2); IFC: TABLE 6109.12; IZC: 305.1; IFC: 5704.2.9.7.5.1; IZC: 302.1, 1008.1.1, 1004.4, 1008.2.4, 1008.2.6, 1009.2, 1302.2, 1301.1

Proponents: Mike Nugent, Chair, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Building Code

Revise as follows:

TABLE 721.1(2)
RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS [a, o, p]

MATERIAL	ITEM NUMBER	CONSTRUCTION	MINIMUM FINISHED THICKNESS FACE-TO-FACE[b] (inches)			
			4 hours	3 hours	2 hours	1 hour
1. Brick of clay or shale	1-1.1	Solid brick of clay or shale.[c]	6	4.9	3.8	2.7
	1-1.2	Hollow brick, not filled.	5.0	4.3	3.4	2.3
	1-1.3	Hollow brick unit wall, grout or filled with perlite vermiculite or expanded shale aggregate.	6.6	5.5	4.4	3.0
	1-2.1	4" nominal thick units not less than 75 percent solid backed with a hat-shaped metal furring channel $^3/_4$" thick formed from 0.021" sheet metal attached to the brick wall on 24" centers with approved fasteners, and $^1/_2$" Type X gypsum wallboard attached to the metal furring strips with 1"-long Type S screws spaced 8" on center.	—	—	5[d]	—
2. Combination of clay brick and load-bearing hollow clay tile	2-1.1	4" solid brick and 4" tile (not less than 40 percent solid).	—	8	—	—
	2-1.2	4" solid brick and 8" tile (not less than 40 percent solid).	12	—	—	—
3. Concrete masonry units	3-1.1[f, g]	Expanded slag or pumice.	4.7	4.0	3.2	2.1
	3-1.2[f, g]	Expanded clay, shale or slate.	5.1	4.4	3.6	2.6
	3-1.3[f]	Limestone, cinders or air-cooled slag.	5.9	5.0	4.0	2.7
	3-1.4[f, g]	Calcareous or siliceous gravel.	6.2	5.3	4.2	2.8
4. Solid concrete[h, i]	4-1.1	Siliceous aggregate concrete.	7.0	6.2	5.0	3.5
		Carbonate aggregate concrete.	6.6	5.7	4.6	3.2
		Sand-lightweight concrete.	5.4	4.6	3.8	2.7
		Lightweight concrete.	5.1	4.4	3.6	2.5
5. Glazed or unglazed facing tile, nonload-bearing	5-1.1	One 2" unit cored 15 percent maximum and one 4" unit cored 25 percent maximum with $^3/_4$" mortar-filled collar joint. Unit positions reversed in alternate courses.	—	$6^3/_8$	—	—
	5-1.2	One 2" unit cored 15 percent maximum and one 4" unit cored 40 percent maximum with $^3/_4$" mortar-filled collar joint. Unit positions side with $^3/_4$" gypsum plaster. Two wythes tied together every fourth course with No. 22 gage corrugated metal ties.	—	$6^3/_4$	—	—
	5-1.3	One unit with three cells in wall thickness, cored 29 percent maximum.	—	—	6	—
	5-1.4	One 2" unit cored 22 percent maximum and one 4" unit cored 41 percent maximum with $^1/_4$" mortar-filled collar joint. Two wythes tied together every third course with 0.030"(No. 22 galvanized sheet steel gage) corrugated metal ties.	—	—	6	—
	5-1.5	One 4" unit cored 25 percent maximum with $^3/_4$" gypsum plaster on one side.	—	—	$4^3/_4$	—
	5-1.6	One 4" unit with two cells in wall thickness, cored 22 percent maximum.	—	—	—	4
	5-1.7	One 4" unit cored 30 percent maximum with $^3/_4$" vermiculite gypsum plaster on one side.	—	—	$4^1/_2$	—
	5-1.8	One 4" unit cored 39 percent maximum with $^3/_4$" gypsum plaster on one side.	—	—	—	$4^1/_2$
		$^3/_4$" by 0.055" (No. 16 carbon sheet steel gage) vertical cold-rolled channels, 16" on center with 2.6-pound flat metal lath				

6. Solid gypsum plaster	6-1.1	applied to one face and tied with 0.049" (No. 18 B.W. gage) wire at 6" spacing. Gypsum plaster each side mixed 1:2 by weight, gypsum to sand aggregate.	—	—	—	2[d]
	6-1.2	$^3/_4$" by 0.05" (No. 16 carbon sheet steel gage) cold-rolled channels 16" on center with metal lath applied to one face and tied with 0.049" (No. 18 B.W. gage) wire at 6" spacing. Perlite or vermiculite gypsum plaster each side. For three-coat work, the plaster mix for the second coat shall not exceed 100 pounds of gypsum to $2^1/_2$ cubic feet of aggregate for the 1-hour system.	—	—	$2^1/_2$[d]	2[d]
	6-1.3	$^3/_4$" by 0.055" (No. 16 carbon sheet steel gage) vertical cold-rolled channels, 16" on center with $^3/_8$" gypsum lath applied to one face and attached with sheet metal clips. Gypsum plaster each side mixed 1:2 by weight, gypsum to sand aggregate.	—	—	—	2[d]
	6-2.1	Studless with $^1/_2$" full-length plain gypsum lath and gypsum plaster each side. Plaster mixed 1:1 for scratch coat and 1:2 for brown coat, by weight, gypsum to sand aggregate.	—	—	—	2[d]
	6-2.2	Studless with $^1/_2$" full-length plain gypsum lath and perlite or vermiculite gypsum plaster each side.	—	—	$2^1/_2$[d]	2[d]
	6-2.3	Studless partition with $^3/_8$" rib metal lath installed vertically adjacent edges tied 6" on center with No. 18 gage wire ties, gypsum plaster each side mixed 1:2 by weight, gypsum to sand aggregate.	—	—	—	2[d]
7. Solid perlite and Portland cement	7-1.1	Perlite mixed in the ratio of 3 cubic feet to 100 pounds of Portland cement and machine applied to stud side of $1^1/_2$" mesh by 0.058-inch (No. 17 B.W. gage) paper-backed woven wire fabric lath wire-tied to 4"-deep steel trussed wire[j] studs 16" on center. Wire ties of 0.049" (No. 18 B.W. gage) galvanized steel wire 6" on center vertically.	—	—	$3^1/_8$[d]	—
8. Solid neat wood fibered gypsum plaster	8-1.1	$^3/_4$" by 0.055-inch (No. 16 carbon sheet steel gage) cold-rolled channels, 12" on center with 2.5-pound flat metal lath applied to one face and tied with 0.049" (No. 18 B.W.gage) wire at 6" spacing. Neat gypsum plaster applied each side.	—	—	2[d]	—
9. Solid wallboard partition	9-1.1	One full-length layer $^1/_2$" Type X gypsum wallboard[e] laminated to each side of 1" full-length V-edge gypsum coreboard with approved laminating compound. Vertical joints of face layer and coreboard staggered not less than 3".	—	—	2[d]	—
10. Hollow (studless) gypsum wallboard partition	10-1.1	One full-length layer of $^5/_8$" Type X gypsum wallboard[e] attached to both sides of wood or metal top and bottom runners laminated to each side of 1" × 6" full-length gypsum coreboard ribs spaced 2" on center with approved laminating compound. Ribs centered at vertical joints of face plies and joints staggered 24" in opposing faces. Ribs ~~may~~ shall be permitted to be recessed 6" from the top and bottom.	—	—	—	$2^1/_4$[d]
	10-1.2	1" regular gypsum V-edge full-length backing board attached to both sides of wood or metal top and bottom runners with nails or $1^5/_8$" drywall screws at 24" on center. Minimum width of runners $1^5/_8$". Face layer of $^1/_2$" regular full-length gypsum wallboard laminated to outer faces of backing board with approved laminating compound.	—	—	$4^5/_8$[d]	—
11. Noncombustible studs—interior	11-1.1	$3^1/_4$" × 0.044" (No. 18 carbon sheet steel gage) steel studs spaced 24" on center. $^5/_8$" gypsum plaster on metal lath each side mixed 1:2 by weight, gypsum to sand aggregate.	—	—	—	$4^3/_4$[d]
	11-1.2	$3^3/_8$" × 0.055" (No. 16 carbon sheet steel gage) approved nailable[k] studs spaced 24" on center. $^5/_8$" neat gypsum wood-fibered plaster each side over $^3/_8$" rib metal lath nailed to studs with 6d common nails, 8" on center. Nails driven $1^1/_4$" and bent over.	—	—	$5^5/_8$	—
		4" × 0.044" (No. 18 carbon sheet steel gage) channel-shaped steel studs at 16" on center. On each side approved resilient				

partition with plaster each side	11-1.3	steel studs at 16" on center. On each side approved resilient clips pressed onto stud flange at 16" vertical spacing, $^1/_4$" pencil rods snapped into or wire tied onto outer loop of clips, metal lath wire-tied to pencil rods at 6" intervals, 1" perlite gypsum plaster, each side.	—	$7^5/_8$[d]	—	—
	11-1.4	$2^1/_2$" × 0.044" (No. 18 carbon sheet steel gage) steel studs spaced 16" on center. Wood fibered gypsum plaster mixed 1:1 by weight gypsum to sand aggregate applied on $^3/_4$-pound metal lath wire tied to studs, each side. $^3/_4$" plaster applied over each face, including finish coat.	—	—	$4^1/_4$[d]	—
12. Wood studs—interior partition with plaster each side	12-1.1[l, m]	2" × 4" wood studs 16" on center with $^5/_8$" gypsum plaster on metal lath. Lath attached by 4d common nails bent over or No. 14 gage by $1^1/_4$" by $^3/_4$" crown width staples spaced 6" on center. Plaster mixed 1:$1^1/_2$ for scratch coat and 1:3 for brown coat, by weight, gypsum to sand aggregate.	—	—	—	$5^1/_8$
	12-1.2[l]	2" × 4" wood studs 16" on center with metal lath and $^7/_8$" neat wood-fibered gypsum plaster each side. Lath attached by 6d common nails, 7" on center. Nails driven $1^1/_4$" and bent over.	—	—	$5^1/_2$[d]	—
	12-1.3[l]	2" × 4" wood studs 16" on center with $^3/_8$" perforated or plain gypsum lath and $^1/_2$" gypsum plaster each side. Lath nailed with $1^1/_8$" by No. 13 gage by $^{19}/_{64}$" head plasterboard blued nails, 4" on center. Plaster mixed 1:2 by weight, gypsum to sand aggregate.	—	—	—	$5^1/_4$
	12-1.4[l]	2" × 4" wood studs 16" on center with $^3/_8$" Type X gypsum lath and $^1/_2$" gypsum plaster each side. Lath nailed with $1^1/_8$" by No. 13 gage by $^{19}/_{64}$" head plasterboard blued nails, 5" on center. Plaster mixed 1:2 by weight, gypsum to sand aggregate.	—	—	—	$5^1/_4$
13. Noncombustible studs—interior partition with gypsum wallboard each side	13-1.1	0.018" (No. 25 carbon sheet steel gage) channel-shaped studs 24" on center with one full-length layer of $^5/_8$" Type X gypsum wallboard[e] applied vertically attached with 1"-long No. 6 dry wall screws to each stud. Screws are 8" on center around the perimeter and 12" on center on the intermediate stud. Where applied horizontally, the Type X gypsum wallboard shall be attached to $3^5/_8$" studs and the horizontal joints shall be staggered with those on the opposite side. Screws for the horizontal application shall be 8" on center at vertical edges and 12" on center at intermediate studs.	—	—	—	$2^7/_8$[d]
	13-1.2	0.018" (No. 25 carbon sheet steel gage) channel-shaped studs 25" on center with two full-length layers of $^1/_2$" Type X gypsum wallboard[e] applied vertically each side. First layer attached with 1"-long, No. 6 drywall screws, 8" on center around the perimeter and 12" on center on the intermediate stud. Second layer applied with vertical joints offset one stud space from first layer using $1^5/_8$" long, No. 6 drywall screws spaced 9" on center along vertical joints, 12" on center at intermediate studs and 24" on center along top and bottom runners.	—	—	$3^5/_8$[d]	—
	13-1.3	0.055" (No. 16 carbon sheet steel gage) approved nailable metal studs[e] 24" on center with full-length $^5/_8$" Type X gypsum wallboard[e] applied vertically and nailed 7" on center with 6d cement-coated common nails. Approved metal fastener grips used with nails at vertical butt joints along studs.	—	—	—	$4^7/_8$
	14-1.1[h, m]	2" × 4" wood studs 16" on center with two layers of $^3/_8$" regular gypsum wallboard[e] each side, 4d cooler[n] or wallboard[n] nails at 8" on center first layer, 5d cooler[n] or wallboard[n] nails at 8" on center second layer with laminating compound between layers, joints staggered. First layer applied full length vertically, second layer applied horizontally or vertically.	—	—	—	5
	14-1.2[l, m]	2" × 4" wood studs 16" on center with two layers $^1/_2$" regular gypsum wallboard[e] applied vertically or horizontally each side[k], joints staggered. Nail base layer with 5d cooler[n] or wallboard[n]	—	—	—	$5^1/_2$

		nails at 8" on center face layer with 8d cooler[n] or wallboard[n] nails at 8" on center.				
14. Wood studs—interior partition with gypsum wallboard each side	14-1.3[l, m]	2" × 4" wood studs 24" on center with $^5/_8$" Type X gypsum wallboard[e] applied vertically or horizontally nailed with 6d cooler[n] or wallboard[n] nails at 7" on center with end joints on nailing members. Stagger joints each side.	—	—	—	$4^3/_4$
	14-1.4[l]	2" × 4" fire-retardant-treated wood studs spaced 24" on center with one layer of $^5/_8$" Type X gypsum wallboard[e] applied with face paper grain (long dimension) parallel to studs. Wallboard attached with 6d cooler[n] or wallboard[n] nails at 7" on center.	—	—	—	$4^3/_4$[d]
	14-1.5[l, m]	2" × 4" wood studs 16" on center with two layers $^5/_8$" Type X gypsum wallboard[e] each side. Base layers applied vertically and nailed with 6d cooler[n] or wallboard[n] nails at 9" on center. Face layer applied vertically or horizontally and nailed with 8d cooler[n] or wallboard[n] nails at 7" on center. For nail-adhesive application, base layers are nailed 6" on center. Face layers applied with coating of approved wallboard adhesive and nailed 12" on center.	—	—	6	—
	14-1.6[l]	2" × 3" fire-retardant-treated wood studs spaced 24" on center with one layer of $^5/_8$" Type X gypsum wallboard[e] applied with face paper grain (long dimension) at right angles to studs. Wallboard attached with 6d cement-coated box nails spaced 7" on center.	—	—	—	$3^5/_8$[d]
	15-1.1[l, m]	Exterior surface with $^3/_4$" drop siding over $^1/_2$" gypsum sheathing on 2" × 4" wood studs at 16" on center, interior surface treatment as required for 1-hour-rated exterior or interior 2" × 4" wood stud partitions. Gypsum sheathing nailed with $1^3/_4$" by No.11 gage by $^7/_{16}$" head galvanized nails at 8" on center. Siding nailed with 7d galvanized smooth box nails.	—	—	—	Varies
	15-1.2[l, m]	2" × 4" wood studs 16" on center with metal lath and $^3/_4$" cement plaster on each side. Lath attached with 6d common nails 7" on center driven to 1" minimum penetration and bent over. Plaster mix 1:4 for scratch coat and 1:5 for brown coat, by volume, cement to sand.	—	—	—	$5^3/_8$
	15-1.3[l, m]	2" × 4" wood studs 16" on center with $^7/_8$" cement plaster (measured from the face of studs) on the exterior surface with interior surface treatment as required for interior wood stud partitions in this table. Plaster mix 1:4 for scratch coat and 1:5 for brown coat, by volume, cement to sand.	—	—	—	Varies
	15-1.4	$3^5/_8$" No. 16 gage noncombustible studs 16" on center with $^7/_8$" cement plaster (measured from the face of the studs) on the exterior surface with interior surface treatment as required for interior, nonbearing, noncombustible stud partitions in this table. Plaster mix 1:4 for scratch coat and 1:5 for brown coat, by volume, cement to sand.	—	—	—	Varies[d]
	15-1.5[m]	$2^1/_4$" × $3^3/_4$" clay face brick with cored holes over $^1/_2$" gypsum sheathing on exterior surface of 2" × 4" wood studs at 16" on center and two layers $^5/_8$" Type X gypsum wallboard[e] on interior surface. Sheathing placed horizontally or vertically with vertical joints over studs nailed 6" on center with $1^3/_4$" × No. 11 gage by $^7/_{16}$" head galvanized nails. Inner layer of wallboard placed horizontally or vertically and nailed 8" on center with 6d cooler[n] or wallboard[n] nails. Outer layer of wallboard placed horizontally or vertically and nailed 8" on center with 8d cooler[n] or wallboard[n] nails. Joints staggered with vertical joints over studs. Outer layer joints taped and finished with compound. Nail heads covered with joint compound. 0.035 inch (No. 20 galvanized sheet gage) corrugated galvanized steel wall ties $^3/_4$" by $6^5/_8$" attached to each stud with two 8d cooler[n] or wallboard[n] nails every sixth course of bricks.	—	—	10	—

	every sixth course of bricks.				
15-1.6[l, m]	2" × 6" fire-retardant-treated wood studs 16" on center. Interior face has two layers of $^5/_8$" Type X gypsum with the base layer placed vertically and attached with 6d box nails 12"on center. The face layer is placed horizontally and attached with 8d box nails 8" on center at joints and 12" on center elsewhere. The exterior face has a base layer of $^5/_8$" Type X gypsum sheathing placed vertically with 6d box nails 8" on center at joints and 12" on center elsewhere. An approved building paper is next applied, followed by self-furred exterior lath attached with $2^1/_2$", No. 12 gage galvanized roofing nails with a $^3/_8$" diameter head and spaced 6" on center along each stud. Cement plaster consisting of a $^1/_2$" brown coat is then applied. The scratch coat is mixed in the proportion of 1:3 by weight, cement to sand with 10 pounds of hydrated lime and 3 pounds of approved additives or admixtures per sack of cement. The brown coat is mixed in the proportion of 1:4 by weight, cement to sand with the same amounts of hydrated lime and approved additives or admixtures used in the scratch coat.	—	—	$8^1/_4$	—
15-1.7[l, m]	2" × 6" wood studs 16" on center. The exterior face has a layer of $^5/_8$" Type X gypsum sheathing placed vertically with 6d box nails 8" on center at joints and 12" on center elsewhere. An approved building paper is next applied, followed by 1" by No. 18 gage self-furred exterior lath attached with 8d by $2^1/_2$"-long galvanized roofing nails spaced 6" on center along each stud. Cement plaster consisting of a $^1/_2$" scratch coat, a bonding agent and a $^1/_2$" brown coat and a finish coat is then applied. The scratch coat is mixed in the proportion of 1:3 by weight, cement to sand with 10 pounds of hydrated lime and 3 pounds of approved additives or admixtures per sack of cement. The brown coat is mixed in the proportion of 1:4 by weight, cement to sand with the same amounts of hydrated lime and approved additives or admixtures used in the scratch coat. The interior is covered with $^3/_8$" gypsum lath with 1" hexagonal mesh of 0.035 inch (No. 20 B.W. gage) woven wire lath furred out $^5/_{16}$" and 1" perlite or vermiculite gypsum plaster. Lath nailed with $1^1/_8$" by No. 13 gage by $^{19}/_{64}$" head plasterboard glued nails spaced 5" on center. Mesh attached by $1^3/_4$" by No. 12 gage by $^3/_8$" head nails with $^3/_8$" furrings, spaced 8" on center. The plaster mix shall not exceed 100 pounds of gypsum to $2^1/_2$ cubic feet of aggregate.	—	—	$8^3/_8$	—
15-1.8[l, m]	2" × 6" wood studs 16" on center. The exterior face has a layer of $^5/_8$" Type X gypsum sheathing placed vertically with 6d box nails 8" on center at joints and 12" on center elsewhere. An approved building paper is next applied, followed by $1^1/_2$" by No. 17 gage self-furred exterior lath attached with 8d by $2^1/_2$"-long galvanized roofing nails spaced 6" on center along each stud. Cement plaster consisting of a $^1/_2$" scratch coat and a $^1/_2$" brown coat is then applied. The plaster ~~may~~ shall be permitted to be placed by machine. The scratch coat is mixed in the proportion of 1:4 by weight, plastic cement to sand. The brown coat is mixed in the proportion of 1:5 by weight, plastic cement to sand. The interior is covered with $^3/_8$" gypsum lath with 1" hexagonal mesh of No. 20-gage woven wire lath furred out $^5/_{16}$" and 1" perlite or vermiculite gypsum plaster. Lath nailed with $1^1/_8$" by No. 13 gage by $^{19}/_{64}$" head plasterboard glued nails spaced 5" on center. Mesh attached by $1^3/_4$" by No.12 gage by $^3/_8$" head nails with $^3/_8$" furrings, spaced 8" on center. The plaster mix shallnot exceed 100 pounds of gypsum to $2^1/_2$ cubic feet of aggregate.	—	—	$8^3/_8$	—
	4" No. 18 gage, nonload-bearing metal studs, 16" on center, with 1" Portland cement lime plaster (measured from the back side				

15. Exterior or interior walls	15-1.9	of the $^3/_4$-pound expanded metal lath) on the exterior surface. Interior surface to be covered with 1" of gypsum plaster on $^3/_4$-pound expanded metal lath proportioned by weight—1:2 for scratch coat, 1:3 for brown, gypsum to sand. Lath on one side of the partition fastened to $^1/_4$" diameter pencil rods supported by No. 20 gage metal clips, located 16" on center vertically, on each stud. 3" thick mineral fiber insulating batts friction fitted between the studs.	—	—	$6^1/_2$[d]	—
	15-1.10	Steel studs 0.060" thick, 4" deep or 6" at 16" or 24" centers, with $^1/_2$" glass fiber-reinforced concrete (GFRC) on the exterior surface. GFRC is attached with flex anchors at 24" on center, with 5" leg welded to studs with two $^1/_2$"-long flare-bevel welds, and 4" foot attached to the GFRC skin with $^5/_8$"-thick GFRC bonding pads that extend $2^1/_2$" beyond the flex anchor foot on both sides. Interior surface to have two layers of $^1/_2$" Type X gypsum wallboard.[e] The first layer of wallboard to be attached with 1"-long Type S buglehead screws spaced 24" on center and the second layer is attached with $1^5/_8$"-long Type S screws spaced at 12" on center. Cavity is to be filled with 5" of 4 pcf (nominal) mineral fiber batts. GFRC has $1^1/_2$" returns packed with mineral fiber and caulked on the exterior.	—	—	$6^1/_2$	—
	15-1.11	Steel studs 0.060" thick, 4" deep or 6" at 16" or 24" centers, respectively, with $^1/_2$" glass fiber-reinforced concrete (GFRC) on the exterior surface. GFRC is attached with flex anchors at 24" on center, with 5" leg welded to studs with two $^1/_2$"-long flare-bevel welds, and 4" foot attached to the GFRC skin with $^5/_8$"-thick GFRC bonding pads that extend $2^1/_2$" beyond the flex anchor foot on both sides. Interior surface to have one layerof $^5/_8$" Type X gypsum wallboard[e], attached with $1^1/_4$"-long Type S buglehead screws spaced 12" on center. Cavity is to be filled with 5" of 4 pcf (nominal) mineral fiber batts. GFRC has $1^1/_2$" returns packed with mineral fiber and caulked on the exterior.	—	—	—	$6^1/_8$
	15-1.12[q]	2" × 6" wood studs at 16" with double top plates, single bottom plate; interior and exterior sides covered with $^5/_8$" Type X gypsum wallboard, 4′ wide, applied horizontally or vertically with vertical joints over studs, and fastened with $2^1/_4$" Type S drywall screws, spaced 12" on center. Cavity to be filled with $5^1/_2$" mineral wool insulation.	—	—	—	$6^3/_4$
	15-1.13[q]	2" × 6" wood studs at 16" with double top plates, single bottom plate; interior and exterior sides covered with $^5/_8$" Type X gypsum wallboard, 4′ wide, applied vertically with all joints over framing or blocking and fastened with $2^1/_4$" Type S drywall screws, spaced 12" on center. R-19 mineral fiber insulation installed in stud cavity.	—	—	—	$6^3/_4$
	15-1.14[q]	2" × 6" wood studs at 16" with double top plates, single bottom plate; interior and exterior sides covered with $^5/_8$" Type X gypsum wallboard, 4′ wide, applied horizontally or vertically with vertical joints over studs, and fastened with $2^1/_4$" Type S drywall screws, spaced 7" on center.	—	—	—	$6^3/_4$
	15-1.15[q]	2" × 4" wood studs at 16" with double top plates, single bottom plate; interior and exterior sides covered with $^5/_8$" Type X gypsum wallboard and sheathing, respectively, 4′ wide, applied horizontally or vertically with vertical joints over studs, and fastened with $2^1/_4$" Type S drywall screws, spaced 12" on center. Cavity to be filled with $3^1/_2$" mineral wool insulation.	—	—	—	$4^3/_4$
	15-1.16[q]	2" × 6" wood studs at 24" centers with double top plates, single bottom plate; interior and exterior side covered with two layers of $^5/_8$" Type X gypsum wallboard, 4′ wide, applied horizontally with vertical joints over studs. Base layer fastened with $2^1/_4$" Type S drywall screws, spaced 24" on center and face layer fastened with Type S drywall screws, spaced 8" on center	—	—	8	—

		fastened with Type S drywall screws, spaced 8" on center; wallboard joints covered with paper tape and joint compound, fastener heads covered with joint compound. Cavity to be filled with $5^1/_2$" mineral wool insulation.				
	15-2.1[d]	$3^5/_8$" No. 16 gage steel studs at 24" on center or 2" × 4" wood studs at 24" on center. Metal lath attached to the exterior side of studs with minimum 1" long No. 6 drywall screws at 6" on center and covered with minimum $^3/_4$" thick Portland cement plaster. Thin veneer brick units of clay or shale complying with C1157/C1157M—2017, Grade TBS or better, installed in running bond in accordance with Section 1404.10. Combined total thickness of the Portland cement plaster, mortar and thin veneer brick units shall be not less than $1^3/_4$". Interior side covered with one layer of $^5/_8$"-thick Type X gypsum wallboard attached to studs with 1" long No. 6 drywall screws at 12" on center.	—	—	—	6
	15-2.2[d]	$3^5/_8$" No. 16 gage steel studs at 24" on center or 2" × 4" wood studs at 24" on center. Metal lath attached to the exterior side of studs with minimum 1" long No. 6 drywall screws at 6" on center and covered with minimum $^3/_4$" thick Portland cement plaster. Thin veneer brick units of clay or shale complying with C1157/C1157M—2017, Grade TBS or better, installed in running bond in accordance with Section 1404.10. Combined total thickness of the Portland cement plaster, mortar and thin veneer brick units shall be not less than 2". Interior side covered with two layers of $^5/_8$"-thick Type X gypsum wallboard. Bottom layer attached to studs with 1"-long No. 6 drywall screws at 24" on center. Top layer attached to studs with $1^5/_8$"-long No. 6 drywall screws at 12" on center.	—	—	$6^7/_8$	—
	15-2.3[d]	$3^5/_8$" No. 16 gage steel studs at 16" on center or 2" × 4" wood studs at 16" on center. Where metal lath is used, attach to the exterior side of studs with minimum 1"-long No. 6 drywall screws at 6" on center. Brick units of clay or shale not less than $2^5/_8$" thick complying with C270—14a installed in accordance with Section 1404.6 with a minimum 1" airspace. Interior side covered with one layer of $^5/_8$"-thick Type X gypsum wallboard attached to studs with 1"-long No. 6 drywall screws at 12" on center.	—	—	—	$7^7/_8$
	15-2.4[d]	$3^5/_8$" No. 16 gage steel studs at 16" on center or 2" × 4" wood studs at 16" on center. Where metal lath is used, attach to the exterior side of studs with minimum 1"-long No. 6 drywall screws at 6" on center. Brick units of clay or shale not less than $2^5/_8$" thick complying with C270—14a installed in accordance with Section 1404.6 with a minimum 1" airspace. Interior side covered with two layers of $^5/_8$"-thick Type X gypsum wallboard. Bottom layer attached to studs with 1"-long No. 6 drywall screws at 24" on center. Top layer attached to studs with $1^5/_8$"-long No. 6 drywall screws at 12" on center.	—	—	$8^1/_2$	—
16. Exterior	16-1.1[q]	2" × 4" wood studs at 16" centers with double top plates, single bottom plate; interior side covered with $^5/_8$" Type X gypsum wallboard, 4' wide, applied horizontally unblocked, and fastened with $2^1/_4$" Type S drywall screws, spaced 12" on center, wallboard joints covered with paper tape and joint compound, fastener heads covered with joint compound. Exterior covered with $^3/_8$" wood structural panels, applied vertically, horizontal joints blocked and fastened with 6d common nails (bright)—12" on center in the field, and 6" on center panel edges. Cavity to be filled with $3^1/_2$" mineral wool insulation. Rating established for exposure from interior side only.	—	—	—	$4^1/_2$
		2" × 6" wood studs at 16" centers with double top plates, single bottom plate; interior side covered with $^5/_8$" Type X gypsum wallboard, 4' wide, applied horizontally or vertically with vertical				

walls rated for fire resistance from the inside only in accordance with Section 705.5.	16-1.2[q]	wallboard, 4' wide, applied horizontally or vertically with vertical joints over studs and fastened with $2^1/_4$" Type S drywall screws, spaced 12" on center, wallboard joints covered with paper tape and joint compound, fastener heads covered with joint compound, exterior side covered with $^7/_{16}$" wood structural panels fastened with 6d common nails (bright) spaced 12" on center in the field and 6" on center along the panel edges. Cavity to be filled with $5^1/_2$" mineral wool insulation. Rating established from the gypsum-covered side only.	—	—	—	$6^9/_{16}$
	16-1.3[q]	2" × 6" wood studs at 16" centers with double top plates, single bottom plates; interior side covered with $^5/_8$" Type X gypsum wallboard, 4'wide, applied vertically with all joints over framing or blocking and fastened with $2^1/_4$" Type S drywall screws spaced 7" on center. Joints to be covered with tape and joint compound. Exterior covered with $^3/_8$" wood structural panels, applied vertically with edges over framing or blocking and fastened with 6d common nails (bright) at 12" on center in the field and 6" on center on panel edges. R-19 mineral fiber insulation installed in stud cavity. Rating established from the gypsum-covered side only.	—	—	—	$6^1/_2$

For SI: 1 inch = 25.4 mm, 1 square inch = 645.2 mm^2, 1 cubic foot = 0.0283 m^3.

a. Staples with equivalent holding power and penetration shall be permitted to be used as alternate fasteners to nails for attachment to wood framing.

b. Thickness shown for brick and clay tile is nominal thicknesses unless plastered, in which case thicknesses are net. Thickness shown for concrete masonry and clay masonry is equivalent thickness defined in Section 722.3.1 for concrete masonry and Section 722.4.1.1 for clay masonry. Where all cells are solid grouted or filled with silicone-treated perlite loose-fill insulation; vermiculite loose-fill insulation; or expanded clay, shale or slate lightweight aggregate, the equivalent thickness shall be the thickness of the block or brick using specified dimensions as defined in Chapter 21. Equivalent thickness shall include the thickness of applied plaster and lath or gypsum wallboard, where specified.

c. For units in which the net cross-sectional area of cored brick in any plane parallel to the surface containing the cores is not less than 75 percent of the gross cross-sectional area measured in the same plane.

d. Shall be used for nonbearing purposes only.

e. For all of the construction with gypsum wallboard described in this table, gypsum base for veneer plaster of the same size, thickness and core type shall be permitted to be substituted for gypsum wallboard, provided that attachment is identical to that specified for the wallboard, and the joints on the face layer are reinforced and the entire surface is covered with not less than $^1/_{16}$-inch gypsum veneer plaster.

f. The fire-resistance time period for concrete masonry units meeting the equivalent thicknesses required for a 2-hour fire-resistance rating in Item 3, and having a thickness of not less than $7^5/_8$ inches is 4 hours where cores that are not grouted are filled with silicone-treated perlite loose-fill insulation; vermiculite loose-fill insulation; or expanded clay, shale or slate lightweight aggregate, sand or slag having a maximum particle size of $^3/_8$ inch.

g. The fire-resistance rating of concrete masonry units composed of a combination of aggregate types or where plaster is applied directly to the concrete masonry shall be determined in accordance with ACI 216.1/TMS 0216. Lightweight aggregates shall have a maximum combined density of 65 pounds per cubic foot.

h. See Note b. The equivalent thickness shall be permitted to include the thickness of cement plaster or 1.5 times the thickness of gypsum plaster applied in accordance with the requirements of Chapter 25.

i. Concrete walls shall be reinforced with horizontal and vertical temperature reinforcement as required by Chapter 19.

j. Studs are welded truss wire studs with 0.18 inch (No. 7 B.W. gage) flange wire and 0.18 inch (No. 7 B.W. gage) truss wires.

k. Nailable metal studs consist of two channel studs spot welded back to back with a crimped web forming a nailing groove.

l. Wood structural panels shall be permitted to be installed between the fire protection and the wood studs on either the interior or exterior side of the wood frame assemblies in this table, provided that the length of the fasteners used to attach the fire protection is increased by an amount not less than the thickness of the wood structural panel.

m. For studs with a slenderness ratio, l_e/d, greater than 33, the design stress shall be reduced to 78 percent of allowable F'_c. For studs with a slenderness ratio, l_e/d, not exceeding 33, the design stress shall be reduced to 78 percent of the adjusted stress F'_c calculated for studs having a slenderness ratio l_e/d of 33.

n. For properties of cooler or wallboard nails, see ASTM C514, ASTM C547 or ASTM F1667.

o. Generic fire-resistance ratings (those not designated as PROPRIETARY* in the listing) in the GA 600 shall be accepted as if herein specified.

p. NCMA TEK 5-8A shall be permitted for the design of fire walls.

q. The design stress of studs shall be equal to not more than 100 percent of the allowable F'_c calculated in accordance with Section 2306.

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm.

1. Structural steel column, either wide flange or tubular shapes.
2. Type X gypsum board or gypsum panel products in accordance with ASTM C1177, C1178, C1278, C1396 or C1658. The total thickness of gypsum board or gypsum panel products calculated as *h* in Section 722.5.1.2 shall be applied vertically to an individual column using one of the following methods:

    1. As a single layer without horizontal joints.
    2. As multiple layers with horizontal joints not permitted in any layer.
    3. As multiple layers with horizontal joints staggered not less than 12 inches vertically between layers and not less than 8 feet vertically in any single layer. The total required thickness of gypsum board or gypsum panel products shall be determined on the basis of the specified fire-resistance rating and the weight-to-heated-perimeter ratio (W/D) of the column. For fire-resistance ratings of 2 hours or less, one of the required layers of gypsum board or gypsum panel product ~~may~~ shall be permitted to be applied to the exterior of the sheet steel column covers with 1-inch long Type S screws spaced 1 inch from the wallboard edge and 8 inches on center. For such installations, 0.0149-inch minimum thickness galvanized steel corner beads with $1^1/_2$-inch legs shall be attached to the wallboard with Type S screws spaced 12 inches on center.

3. For fire-resistance ratings of 3 hours or less, the column covers shall be fabricated from 0.0239-inch minimum thickness galvanized or stainless steel. For 4-hour fire-resistance ratings, the column covers shall be fabricated from 0.0239-inch minimum thickness stainless steel. The column covers shall be erected with the Snap Lock or Pittsburgh joint details. For fire-resistance ratings of 2 hours or less, column covers fabricated from 0.0269-inch minimum thickness galvanized or stainless steel shall be permitted to be erected with lap joints. The lap joints shall be permitted to be located anywhere around the perimeter of the column cover. The lap joints shall be secured with $^1/_2$-inch-long No. 8 sheet metal screws spaced 12 inches on center. The column covers shall be provided with a minimum expansion clearance of $^1/_8$ inch per linear foot between the ends of the cover and any restraining construction.

FIGURE 722.5.1(2)
GYPSUM-PROTECTED STRUCTURAL STEEL COLUMNS WITH SHEET STEEL COLUMN COVERS

TABLE 6109.12
SEPARATION FROM EXPOSURES OF LP-GAS CONTAINERS AWAITING USE, RESALE OR EXCHANGE STORED OUTSIDE OF BUILDINGS

QUANTITY OF LP-GAS STORED (pounds)	MINIMUM SEPARATION DISTANCE FROM STORED LP-GAS CYLINDERS TO (feet):						
	Nearest important building or group of buildings or line of adjoining property that may be built on	Line of adjoining property occupied by schools, places of religious worship, hospitals, athletic fields or other points of public gathering; busy thoroughfares; or sidewalks	LP-gas dispensing station	Doorway or opening to a building with two or more means of egress	Doorway or opening to a building with one means of egress	Combustible materials	Motor vehicle fuel dispenser
720 or less	0	0	5	5	10	10	20
721–2,500	0	10	10	5	10	10	20
2,501–6,000	10	10	10	10	10	10	20
6,001–10,000	20	20	20	20	20	10	20
Over 10,000	25	25	25	25	25	10	20

For SI: 1 foot = 304.8 mm, 1 pound = 0.454 kg.

2021 International Zoning Code

Revise as follows:

305.1 General. The principal objective of this zoning code is to provide for an orderly arrangement of compatible buildings and land uses, and for the property location of all types of uses required for the social and economic welfare of the community. To accomplish this objective, each type and kind of use is classified as permitted in one or more of the various use districts established by this code. However, in addition to those uses specifically classified and permitted in each district, there are certain additional uses that it ~~may be~~ is necessary to allow because of the unusual characteristics of the service they provide the public. These *conditional uses* require particular considerations as to their proper location to adjacent, established or intended uses, or to the planned growth of the community. The conditions controlling the locations and operation of such special uses are established by the applicable sections of this code.

2021 International Fire Code

Revise as follows:

5704.2.9.7.5.1 Information signs. A permanent sign shall be provided at the fill point for the tank, documenting the filling procedure and the tank calibration chart.

Exception:
Where climatic conditions are such that the sign ~~may be~~ has the potential to be obscured by ice or snow, or weathered beyond readability or otherwise impaired, said procedures and chart shall be located in the office window, lock box or other area available to the person filling the tank.

2021 International Zoning Code

Revise as follows:

302.1 Minimum areas. The minimum areas that ~~may~~ constitute a separate or detached part of any of the following zoning districts on the zoning map or subsequent amendments to said zoning map shall be as shown in Table 302.1. Where a nonresidential district is directly across the street from or abuts the district with the same or less restrictive classification, the area of the land directly across the street or abutting the property ~~may~~ shall be permitted to be included in the calculations in meeting the minimum district size requirements.

1008.1.1 Wall signs. Every single-family residence, multiple-family residential complex, commercial or *industrial* building, and every separate nonresidential building in a residential zone ~~may~~ shall be permitted to display wall signs per

street frontage subject to the limiting standards set forth in Table 1008.1.1(1). For shopping centers, planned *industrial parks* or other multiple-occupancy nonresidential buildings, the building face or wall shall be calculated separately for each separate occupancy, but in no event will the allowed area for any separate occupancy be less than [JURISDICTION TO INSERT NUMBER] square feet.

1004.4 Traffic visibility. Signs or sign structures shall not be erected at the intersection of any street in such a manner as to obstruct free and clear vision, nor at any location where by its position, shape or color it ~~may interfere~~ interferes with or obstruct the view of or be confused with any authorized traffic sign, signal or device.

1008.2.4 Special event signs in public ways. Signs advertising a special community event shall not be prohibited in or over public rights-of-way, subject to approval by the code official as to the size, location and method of erection. The code official ~~may~~ shall be permitted to not approve any special event signage that would impair the safety and convenience of use of public rights-of-way, or obstruct traffic visibility.

1008.2.6 Political signs. Political signs shall be permitted in all zoning districts, subject to the following limitations:

1. Such signs shall not exceed a height of [JURISDICTION TO INSERT NUMBER] feet nor an area of [JURISDICTION TO INSERT NUMBER] square feet.
2. Such signs for election candidates or ballot propositions shall be displayed only for a period of 60 days preceding the election and shall be removed within 10 days after the election, provided that signs promoting successful candidates or ballot propositions in a primary election ~~may~~ shall be permitted to remain displayed until not more than 10 days after the general election.
3. Such signs shall not be placed in any public right-of-way or obstruct traffic visibility.

1009.2 Development complex sign. In addition to the freestanding business identification signs otherwise allowed by this ordinance, every multiple-occupancy development complex shall be entitled to one free-standing sign per street front, at the maximum size permitted for business identification free-standing signs, to identify the development complex. Business identification shall not be permitted on a development complex sign. Any free-standing sign otherwise permitted under this ordinance ~~may~~ shall identify the name of the development complex.

1302.2 Uses. A*planned unit development* that will contain uses not permitted in the zoning district in which it is to be located will require a change of zoning district and shall be accompanied by an application for a zoning amendment, except that any residential use shall be considered to be a permitted use in a *planned unit development*, which allows residential uses and shall be governed by *density*, design and other requirements of the *planned unit development* permit.

Where a site is situated in more than one use district, the permitted uses applicable to such property in one district ~~may~~ shall be permitted to be extended into the adjacent use district.

1301.1 Approval. *Planned unit developments* (PUDs) shall be allowed by planning commission approval in any zoning district. Such *planned unit development* permit shall not be granted unless such development will meet the use limitations of the zoning district in which it is located and meet the *density* and other limitations of such districts, except as such requirements ~~may~~ shall be lawfully modified as provided by this code. Compliance with the regulations of this code in no way excuses the developer from the applicable requirements of a subdivision ordinance, except as modifications thereof are specifically authorized in the approval of the application for the planned unit development.

Reason: The term ‘may’ is subjective. The proposal is to bring the text into enforceable language by using the ICC preferred language.as often as possible. Similar proposals will be submitted for the Group B cycle for IRC, IECC and IEBC. This is a joint proposal submitted by the ICC Building Code Action Committee (BCAC) and the ICC Fire Code Action Committee (FCAC).

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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at:
FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
These changes are only changing verbiage.

FCAC WG1.4 – Proposal 1.4-2B - Landscaped to Vegetative Roof (7067)

IFC: SECTION 317, 317.1, 317.2, 317.4.3, 905.3.8, 504.3, SECTION 202 (New); IBC: [BF] 1505.10, [BF] 1507.15.1, SECTION 202, SECTION 202 (New)

Proponents: Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2021 International Fire Code

Revise as follows:

SECTION 317 VEGETATIVE ~~LANDSCAPED~~ ROOFS

317.1 General. Vegetative ~~Landscaped~~ roofs shall comply with ~~be installed and maintained in accordance with Sections 317.2 through 317.5 and~~ Sections 1505 and 1507.16 of the International Building Code and be installed and maintained in accordance with Sections 317,2 through 317.5.

317.2 Vegetative ~~Landscaped~~ roof size. Vegetative ~~Landscaped~~ roof areas shall not exceed 15,625 square feet (1450 m^2) in size for any single area with a maximum dimension of 125 feet (39 m) in length or width. A minimum 6-foot-wide (1.8 m) clearance consisting of a *listed* Class A roof assembly tested in accordance with ASTM E108 or UL 790 shall be provided between adjacent vegetative ~~landscaped~~ roof areas.

317.4.3 Maintenance plan. The *fire code official* is authorized to require a maintenance plan for vegetation placed on roofs due to the size of a vegetative ~~landscaped~~ roof, materials used or where a fire hazard exists to the building or exposures due to the lack of maintenance.

905.3.8 Landscaped or vegetative roofs. Buildings or structures that have landscaped or vegetative roofs and that are equipped with a standpipe system shall have the standpipe system extended to the roof level on which the landscaped or vegetative roof is located.

504.3 Stairway access to roof. New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3-percent slope), shall be provided with a *stairway* to the roof. *Stairway* access to the roof shall be in accordance with Section 1011.12. Such *stairway* shall be marked at street and floor levels with a sign indicating that the *stairway* continues to the roof. Where roofs are used for landscaped roofs , vegetative roofs or for other purposes, stairways shall be provided as required for such occupancy classification.

Add new definition as follows:

VEGETATIVE ROOF A roof assembly of interacting components designed to waterproof a building's top surface that includes, by design, vegetation and related landscape elements.

2021 International Building Code

Revise as follows:

[BF] 1505.10 Vegetative ~~Landscaped~~ roofs. Vegetative ~~Landscaped~~ roofs shall comply with Sections 1505.1 and 1507.15 and shall be installed in accordance with ANSI/SPRI VF-1.

[BF] 1507.15.1 Structural fire resistance. The structural frame and roof construction supporting the load imposed on the roof by the *vegetative roof* or landscaped roofs shall comply with the fire resistance rating requirements of Table 601.

[BS] VEGETATIVE ROOF. A roof ~~An~~ assembly of interacting components designed to waterproof a building's top surface that includes, by design, vegetation and related landscape elements.

Add new definition as follows:

LANDSCAPED ROOF. An area on a roof incorporating planters, vegetation, hardscaping, or other similar decorative appurtenances that are not part of a roof assembly.

Reason: This is an editorial proposal covering both the IFC and the IBC to consistently use the term "vegetative roof". The term "landscaped roofs" has been used by the public interchangeably with "vegetative roofs". This has created confusion in the building code and conflicts with industry standards that have coalesced around the term "vegetative roof". . Moreover, some of the sections presently identified as "landscaped roofs" should refer to "vegetative roofs" as they really addresses roofs that are part of the building envelope and, thus, are associated with the existing definition of "vegetative roofs". In these locations, the code is revised to properly use "vegetative roof". In other places, both terms are retained as the language could apply either to a vegetative roof where the membrane, growth medium and

vegetation are incorporated as part of the roof assembly, or a landscaped roof where planters, hardscapes, or other features are provided above the roof assembly and not integrated into it. A definition for “landscaped roofs” is proposed to capture such features and better distinguish between a true “vegetative roof” as defined in the IBC and industry standards.

Neither the IFC nor the IBC define the term “landscaped roof”, but the IBC does contain a definition for the term “vegetative roofs” that reads as follows.

[BS] VEGETATIVE ROOF. *An assembly of interacting components designed to waterproof a building’s top surface that includes, by design, vegetation and related landscape elements.*

This proposal also copies the existing definition from the IBC to the IFC.
This proposal is submitted by the ICC Fire Code Action Committee (FCAC) and 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 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The proposal is editorial and will not impact how vegetative and landscaped roofs are designed and constructed.

BCAC OCC Item 6- Section 509 (7475)

IBC: SECTION 429, 429.1, TABLE 429.1, 429.2, 429.3, 429.4, 429.4.1, 429.4.1.1, 429.4.2, 429.4.2.1, 302.3 (New)

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

2021 International Building Code

Revise as follows:

SECTION ~~509~~ 429 INCIDENTAL USES

~~509.1~~ 429.1 General Incidental uses located within single occupancy or mixed occupancy buildings shall comply with the provisions of this section. Incidental uses are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses specified in Table ~~509.1~~ 429.1.

Exception: Incidental uses within and serving a *dwelling unit* are not required to comply with this section.

TABLE ~~509.1~~ 429.1
INCIDENTAL USES

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic sprinkler system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Hydrogen fuel gas rooms, not classified as Group H	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies.
Incinerator rooms	2 hours and provide automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic sprinkler system
In Group E occupancies, laboratories and vocational shops not classified as Group H	1 hour or provide automatic sprinkler system
In Group I-2 occupancies, laboratories not classified as Group H	1 hour and provide automatic sprinkler system
In *ambulatory care facilities*, laboratories not classified as Group H	1 hour or provide automatic sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system
In Group I-2, laundry rooms over 100 square feet	1 hour
Group I-3 cells and Group I-2 patient rooms equipped with padded surfaces	1 hour
In Group I-2, physical plant maintenance shops	1 hour
In ambulatory care facilities or Group I-2 occupancies, waste and linen collection rooms with containers that have an aggregate volume of 10 cubic feet or greater	1 hour
In other than ambulatory care facilities and Group I-2 occupancies, waste and linen collection rooms over 100 square feet	1 hour or provide automatic sprinkler system
In ambulatory care facilities or Group I-2 occupancies, storage rooms greater than 100 square feet	1 hour
Electrical installations and transformers	See Sections 110.26 through 110.34 and Sections 450.8 through 450.48 of NFPA 70 for protection and separation requirements.

For SI: 1 square foot = 0.0929 m^2, 1 pound per square inch (psi) = 6.9 kPa, 1 British thermal unit (Btu) per hour = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L, 1 cubic foot = 0.0283 m^3.

~~509.2~~ 429.2 Occupancy classification. Incidental uses shall not be individually classified in accordance with Section 302.1. Incidental uses shall be included in the building occupancies within which they are located.

~~509.3~~ 429.3 Area limitations. Incidental uses shall not occupy more than 10 percent of the *building area* of the *story* in which they are located.

~~509.4~~ 429.4 Separation and protection. The incidental uses specified in Table ~~509.1~~ 429.1 shall be separated from the remainder of the building or equipped with an *automatic sprinkler system*, or both, in accordance with the provisions of that table.

~~509.4.1~~ 429.4.1 Separation. Where Table ~~509.1~~ 429.1 specifies a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the *building* by a *fire barrier* constructed in accordance with Section 707 or a *horizontal assembly* constructed in accordance with Section 711, or both. Construction supporting 1-hour *fire barriers* or *horizontal assemblies* used for incidental use separations in buildings of Type IIB, IIIB and VB construction is not required to be fire-resistance rated unless required by other sections of this code.

~~509.4.1.1~~ 429.4.1.1 Type IV-B and IV-C construction. Where Table ~~509.1~~ 429.1 specifies a fire-resistance-rated separation, *mass timber* elements serving as *fire barriers* or *horizontal assemblies* in Type IV-B or IV-C construction shall be separated from the interior of the incidental use with an *approved* thermal barrier consisting of *gypsum board* that is not less than $^1/_2$ inch (12.7 mm) in thickness or a material that is tested in accordance with and meets the acceptance criteria of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275.

~~**509.4.2**~~ **429.4.2 Protection.** Where Table ~~509.1~~ 429.1 permits an *automatic sprinkler system* without a *fire barrier*, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. The walls shall extend from the top of the foundation or floor assembly below to the underside of the ceiling that is a component of a fire-resistance-rated floor assembly or roof assembly above or to the underside of the floor or roof sheathing, deck or slab above. Doors shall be self- or automatic-closing upon detection of smoke in accordance with Section 716.2.6.6. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80. Walls surrounding the incidental use shall not have air transfer openings unless provided with *smoke dampers* in accordance with Section 710.8.

~~**509.4.2.1**~~ **429.4.2.1 Protection limitation.** Where an *automatic sprinkler system* is provided in accordance with Table ~~509.1~~ 429.1, only the space occupied by the incidental use need be equipped with such a system.

Add new text as follows:

302.3 Incidental Uses. Incidental uses shall comply with Section 429.

Reason: When users of the code are looking for specific requirements, they intuitively look to the chapter where the nature of the provision they are looking for is most closely related. This is why moving Section 509 to Chapter 4 will lead to better understanding and application of the code. The provisions of Chapter 5 “control the height and area of structures” whereas Chapter 4 contains “special uses”. "Incidental Uses” are ancillary functions associated with a greater level of risk to that occupancy. Therefore Section 509 belongs in Chapter 4.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as BCAC website at BCAC .

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a relocation of existing provisions only with no changes.