

**SOUTH CAROLINA BUILDING CODES COUNCIL
2021 INTERNATIONAL FIRE CODE
MEETING MATERIALS
OCTOBER 6, 2021**



Midlands Fire Marshal's Association
111 Westpark Boulevard P.O. Box 211725
Columbia, SC 29210

September 11, 2021

South Carolina Building Codes Council
110 Centerview Drive
Columbia, SC 29210

To whom it may concern,

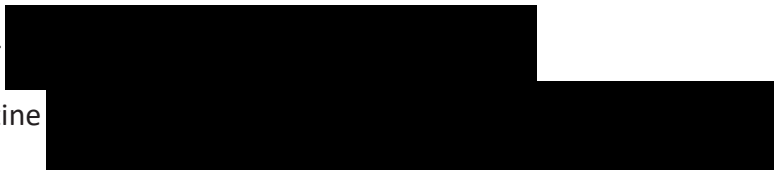
The Midlands Fire Marshals Association is submitting the following code submittal for your review for the proposed 2021 code adoptions.

Thank you in advance for reviewing our proposed code additions. If you have any questions or concerns, the following code committee members can be reached at the following phone numbers or by e-mail.

Sincerely,

Terry Mueller

James Ballentine





South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Dr • Columbia • SC • 29210
P.O. Box 11329 • Columbia • SC • 29211-1329
Phone: 803-896-4688 • contact.bcc@llr.sc.gov • Fax: 803-896-4814
llr.sc.gov/bcc

IFC 2021-1

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: Definition

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC Chapter 2 – (Add the term) Vacation rentals as an example for R-1 Occupancy

In 200 characters or less, please briefly describe the justification for this modification request.

To clarify which occupancy it falls into and to know what requirements they then are required to meet.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021

Title: Fire Investigator

From: [JAMES BALLENTINE](#)
To: [Molly Price](#)
Cc: [Maggie Smith](#); [Mueller, Terry J.](#)
Subject: Code Modification Submittals
Date: Thursday, September 16, 2021 5:49:40 PM

---- SCDLLR NOTICE (M365) ----

- **This email is from an external email address. Please use caution when deciding whether to open any attachments or when clicking links.**
- **Personally Identifiable Information (PII) should not be included in e-mail text or attachments. Do not save or transmit PII unencrypted.**

Hey Molly,

We conducted an online vote with all of our members and we compiled all of their votes. I have that tally form if you need me to forward it to you. We ensured we received more than 50% for each of the modification request that were sent to the BCC.

Just let me know.

Thanks

Jim

Mr. Mueller,

I believe Ms. Smith from my team has already reached out to determine if there are any supporting documents needed with your requests, but can you also please confirm (via email is fine) that the submitted modifications have the support of your Association's Board in accordance with section (E) (2) below?

8-240. Building Codes Modification Procedure

(E) A request for a local or statewide modification must include:

- (1) A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment: and,
- (2) Verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification: and,

Thank you,

Molly F. Price

JAMES BALLENTINE

Deputy Fire Marshal

Richland County Government

Emergency Services Department

Fire and Enforcement Division





2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-2

2021 Code Section: 202 General definitions

Modification: Add language.

Primitive Camp Structure: Shall include any structure permanent or temporary in nature, used for outdoor camping (transient), open on at least one side with no fully enclosed habitable spaces, less than 400 square feet under roof, and not classified as a residential occupancy due to lack of electrical, plumbing, mechanical, and sprinkler systems.

Reason: N/A

Proponent: BOASC

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 02	202

Comments: No change in 2021 IFC.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-3

2021 Code Section: 202 General definitions ~~A-3 occupancies~~

Modification: Add language to the listing of A-3 occupancies in the General definitions ~~the following use:~~

Structures without a commercial kitchen, used in agritourism activity as defined by S.C. Code Ann. 46-53-10(1).

Reason: N/A

Proponent: BOASC

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 03	202

Comments: See clerical corrections above. No change in 2021 IFC.

+

7/27: Approved with clerical correction noted above.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-4

2021 Code Section: 202 General definitions

Modification: Add ~~Language~~ sky lanterns to the definition.

Recreational Fire: An outdoor fire burning materials other than rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, portable outdoor fireplace, barbeque grill or barbeque pit and has a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height for pleasure, religious, ceremonial to include sky lanterns, cooking, warmth or similar purpose.

Reason: N/A

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 01	202
IFC 2015	IFC 2015 01	202
IFC 2012	IFC 2012 01	202

Comments: No change in 2021 IFC. See clerical corrections above, including underlining the language to be added.

7/27: Approved with clerical correction noted above.

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111 Westpark Boulevard P.O. Box 211725
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September 11, 2021

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IFC 2021-5

2021 BUILDING CODE MODIFICATION REQUEST FORM

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☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 315.3.3

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 315.3.3 Equipment rooms: Combustible material shall not be stored in boiler rooms, mechanical rooms, electrical equipment rooms or in fire command centers as specified in Section 508.1.5. (Add) Rooms shall be labeled with approved signage "No combustible storage allowed".

Recommended language from Committee Meeting on 9/28 removes "Combustible" from first sentence and adds last sentence to section:

315.3.3 Equipment rooms. Material shall not be stored in boiler rooms, mechanical rooms, electrical equipment rooms or in fire command centers as specified in Section 508.1.5. Rooms shall be labeled with appropriate signage "No storage allowed."

In 200 characters or less, please briefly describe the justification for this modification request.

This would permit the AHJ to have owner/ occupant label the rooms as no storage allowed.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021

Title: Fire Investigator



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-6

2021 Code Section: Table 315.7.6(1) ~~Pile Separation Distances~~ Separation Distance
Between Wood Pallet Stacks and Buildings

Modification: Delete existing table and use the table below. ~~Add Language~~

~~*Use this table instead of the table in the 2018 IFC.*~~

WALL CONSTRUCTION	OPENING TYPE	WOOD PALLET SEPARATION DISTANCT (FEET)		
		Less Than or Equal to 50 Pallets	51 to 200 Pallets	Over 200 Pallets
Masonry	None	2	2	2
Masonry	Fire-rated glazing w/open sprinklers	2	5	20
Masonry	Fire-rated glazing	5	10	20
Masonry	Plain glass w/sprinklers	5	10	20
Noncombustible	None	5	10	20
Wood w/open sprinklers		5	10	20
Wood	None	15	30	90
Any	Plain glazing	15	30	90

Reason: N/A

Proponent: BOASC

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 04	315.7.6(1)

Comments: See clerical corrections above. Table 315.7.6(1) in the 2021 IFC now reflects the values above. Modification no longer needed.

Continued



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-6

2021 Code Section: Table 315.7.6(1)

TABLE 315.7.6(1)
SEPARATION DISTANCE BETWEEN WOOD PALLET STACKS AND BUILDINGS

WALL CONSTRUCTION	OPENING TYPE	WOOD PALLET SEPARATION DISTANCE (feet)		
		≤ 50 Pallets	51 to 200 Pallets	> 200 Pallets
Masonry	None	2	2	2
Masonry	Fire-rated glazing with open sprinklers	2	5	20
Masonry	Fire-rated glazing	5	10	20
Masonry	Plain glass with open sprinklers	5	10	20
Noncombustible	None	5	10	20
Wood with open sprinklers	—	5	10	20
Wood	None	15	30	90
Any	Plain glass	15	30	90

For SI: 1 foot = 304.8 mm.

7/27: Modification dropped, see reasons above.



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IFC 2021-7

2021 BUILDING CODE MODIFICATION REQUEST FORM

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☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

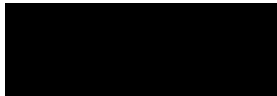
State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.:



Email Address:



Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 319.11

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 319.11 Mobile cooking operations shall be separated from buildings, structures, canopies, tents, combustible materials, vehicles, and other cooking operations by a minimum of 10 feet. Exhaust shall be directed away from openings, air intakes and away from any means of egress.

9/28 Committee Meeting- Support Approval for added section to code.

In 200 characters or less, please briefly describe the justification for this modification request.

Currently there is no requirement under the International Fire Code for distances between other food trucks and structures, etc. NFPA requires 10 foot between food trucks but the International Fire Code requires no cooking within 20 foot of a tent per 3106.5.1. Numerous other agencies throughout the county have mandated 20 foot between other food trucks and buildings etc... NFPA requires exhaust to be directed away from openings, air intakes and away from any means of egress.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

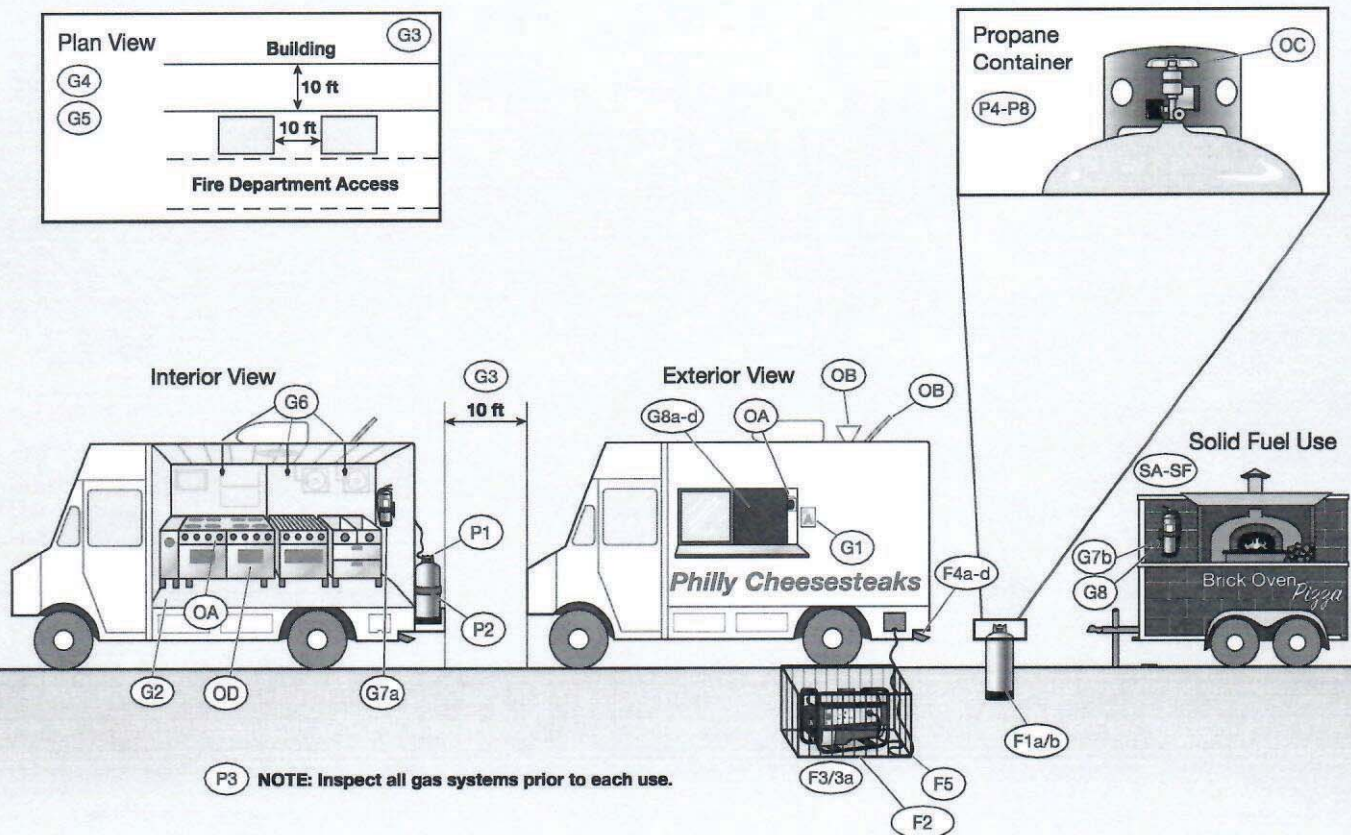
I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021

Title: Fire Investigator



FOOD TRUCK SAFETY



NFPA code references are provided at the end of each item. The red keys correspond to the NFPA food truck safety diagram. For more detailed information, see NFPA 1 and Annex B in NFPA 96.

General Safety Checklist

- ☐ Obtain license or permits from the local authorities. [1:1.12.8(a)] **G1**
- ☐ Ensure there is no public seating within the mobile food truck. [1:50.7.1.6.3] **G2**
- ☐ Check that there is a clearance of at least 10 ft away from buildings, structures, vehicles, and any combustible materials. [96:7.8.2; 96:7.8.3 for carnivals only] **G3**
- ☐ Verify fire department vehicular access is provided for fire lanes and access roads. [1:18.2.4] **G4**
- ☐ Ensure clearance is provided for the fire department to access fire hydrants and access fire department connections. [1:13.1.3; 1:13.1.4; 1:13.1.5] **G5**
- ☐ Check that appliances using combustible media are protected by an approved fire extinguishing system. [96:10.1.2] **G6**
- ☐ Verify portable fire extinguishers have been selected and installed in kitchen cooking areas in accordance with NFPA 10. [96:10.9.3] **G7a**
- ☐ Where solid fuel cooking appliance produce grease-laden vapors, make sure the appliances are protected by listed fire-extinguishing equipment. [96:14.7.1] **G7b**
- ☐ Ensure that workers are trained in the following: [96:B.15.1]: **G8**
 - ☐ Proper use of portable fire extinguishers and extinguishing systems [10:1.2] **G8a**
 - ☐ Proper method of shutting off fuel sources [96:10.4.1] **G8b**
 - ☐ Proper procedure for notifying the local fire department [1:10.14.9 for carnivals only] **G8c**
 - ☐ Proper procedure for how to perform simple leak test on gas connections [58:6.16, 58:6.17] **G8d**



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IFC 2021-8

2021 BUILDING CODE MODIFICATION REQUEST FORM

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- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: _____
(List all jurisdictions that apply.)

Association/Jurisdiction: Home Builders Association of South Carolina

Address: 625 Taylor Street Columbia SC 29201
Street City State Zip

Name: Mark Nix Title/Position: Executive Director

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 503.1.2 Additional Access

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

Exception: Where two fire apparatus access roads are required by Section 503.1.2 or this appendix, the additional fire apparatus access road is permitted to be a driveway, pathway, court or other approved *fire lane* not accessible to public motor vehicles where designed by a registered design professional to meet the loading requirements and minimum specifications of Section 503 and this appendix, and the surface provides all-weather driving capabilities.
Marking or signs shall be provided in accordance with Section 503.3 and Section D103.6.

9/28 Committee Recommends Approval of adding exception above to 503.1.2:

503.1.2 Additional access. The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

Reason:

The current provisions of IFC Section 503, Appendix D and the definition of “fire department apparatus road” as written can be interpreted to require the construction of an actual road, street, lane or other feature potentially accessible to public vehicular traffic as well as fire department vehicles, complete with curbs and gutters, shoulders and other components and making a complete intersection with a main road, street, highway, etc. adjacent to the development. However, for long, narrow parcels of land which can only be physically accessed along one of the narrow sides, such an interpretation may result in placing the intersection created by the second access road closer to the main access to the development than is permitted by local highway or zoning ordinances.

Nothing in IFC Section 503 or Appendix D requires the additional road intersect a public way at the same elevation as the public way, or even be a true “road” accessible to vehicular traffic. A code-compliant “road” could simply be a driveway or other pathway primarily intended for pedestrian use but constructed to meet the width, loading and other requirements of a fire apparatus access road. Such a pathway would not need to form a true intersection with public streets but could simply end at a sloped or roll-up curb. The defined term “fire lane” includes such alternatives.

The pointer to the base code requirements for fire apparatus access roads in Section 503 insures the minimum 20 foot width required per Section 503.2.1, the requirement to maintain the access road or fire lane unobstructed per Section 503.4, and the requirements for gates where they are provided are all recognized and maintained, in addition to the dimensional and loading requirements within Appendix D.

The exception could reduce the cost of constructing a fire apparatus access road by allowing for the elimination of curbs and gutters or other elements associated with a road open to public vehicles. The exception would also enable more cost-effective development of sites where the only option under which development of the site would otherwise be permitted would be providing alternative, potentially costly, means of fire protection.

In 200 characters or less, please briefly describe the justification for this modification request.

This amendment adds an exception permitting fire apparatus access roads to be a driveway, pathway or other approved surface that creates a fire lane not accessible to motor vehicles. Additional reasoning attached.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Mark Nix	Executive Director	HBA of SC		
Andy Barber	HBASC Codes Chairman	HBA of SC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: _____

Title: Executive Director



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IFC 2021-9

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☐ Local Modification: _____
(List all jurisdictions that apply.)

Association/Jurisdiction: Home Builders Association of South Carolina

Address: 625 Taylor Street Columbia SC 29201
Street City State Zip

Name: Mark Nix Title/Position: Executive Director

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: D503.1.1.2 One- or two-family dwelling residential developments

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

D503.1.1.2 One- or two-family dwelling residential developments having less than 50 units. Developments of one- or two-family dwellings where the number of dwelling units does not exceed 50 shall be permitted to have a single approved fire apparatus access road provided all of the following requirements are met:

1. The minimum unobstructed width of the single fire apparatus access road shall be 26 feet (7925 mm) and shall otherwise comply with Section 503 and Appendix Section D103.
2. Where the fire apparatus access road exceeds 150 feet in length the width and turnaround provisions of Section D103.4 shall be met.
3. A minimum of one fire hydrant on each side of the fire apparatus access road in accordance with Section 507.5 shall be provided. The fire code official shall be permitted to require additional hydrants and hydrant spacing based on the length of the fire apparatus access road, fire flow requirements, and the distance from any point on the street or road frontage to a hydrant.
4. The development is not located in a wildland-urban interface area as defined in the International Wildland-Urban Interface Code

Future Development. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.

9/28 Committee Meeting- Recommend approval as modified below (new section).

503.1.2.1 One- or two-family dwelling residential developments having less than 50 units.

Developments of one- or two-family dwellings where the number of dwelling units does not exceed 50 shall be permitted to have a single approved fire apparatus access road provided all of the following requirements are met:

1. The minimum unobstructed width of the single fire apparatus access road shall be 26 feet (7925 mm) and shall otherwise comply with Section 503.
2. A minimum of one fire hydrant on each side of the fire apparatus access road in accordance with Section 507.5 shall be provided. The fire code official shall be permitted to require additional hydrants and hydrant spacing based on the length of the fire apparatus access road, fire flow requirements, and the distance from any point on the street or road frontage to a hydrant.
3. The development is not located in a wildland-urban interface area as defined in the International Wildland-Urban Interface Code.

Future Development. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.

In 200 characters or less, please briefly describe the justification for this modification request. **IFC 2021-9**

This amendment adds an exception raising the trigger for a second fire apparatus access road to 50 dwellings if the width is 26 feet and the development is not in a wildland-urban interface area. See attached for additional information.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Mark Nix	Executive Director	HBA of SC		
Andy Barber	HBASC Codes Chairman	HBA of SC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: _____

Title: Executive Director

Reason:

One of the barriers to affordable housing frequently cited by HBA members is availability of lots for development. In some cases, the dimensions of such parcels, surrounding development, surrounding terrain or other constraints make it difficult if not impossible to provide a second fire department apparatus road, even if constructed as a sidewalk, bike path or other feature only accessible to fire trucks, not accessible to public motor vehicles. A developer may either be faced with having to sacrifice planned dwelling units or providing alternative, potentially costly, means of fire protection in order to construct the development. Either solution increases the cost of construction for the homes in the development and may render them unaffordable to homebuyers or renters with modest incomes. Or, the developer may be forced to abandon the lot, meaning the IFC has improperly acted as a de facto zoning code.

The current 30 dwelling trigger is low compared to a multifamily development can contain up to 100 units. One of the reasons for the second fire department apparatus road is in case the primary access to the development is blocked by traffic congestion or an accident. Given the average household size is between 2 and 3 people, clearly a 100-unit multifamily building is likely to generate more traffic than 30 single-family houses. Average lot size has also been shrinking, so if travel distance is a concern, it will take less time for fire equipment to traverse many current single-family developments than it may have previously. There is no reason for such a low trigger as 30 homes.

This amendment adds a new subsection that raises the trigger to 50 dwellings, or half the number of dwelling units at which a multifamily development triggers the second fire department apparatus road, if the minimum unobstructed width of the primary fire department apparatus road is increased to 26 feet in width to aid in both fire department access and evacuation, at least one hydrant be placed on each side of the road to minimize the need to run hoses across a road, obstructing both traffic and fire vehicles, and the development is not in a wildfire-prone area.

A pointer to the dead-end turnaround requirements in Section D103.4 underscores the fact a single fire apparatus access road needs to comply with all the requirements of Section 503 and Appendix D. It is noted Table D103.4 requires the fire code official to approve the minimum width and turnarounds for dead-end access roads exceeding 750 in length.

This amendment will reduce the cost of constructing for developments of 31 to 50 houses by eliminating the need for the second fire apparatus access road and enabling development of slightly larger parcels. The exception would also enable more cost-effective development of sites where the only option under which development of the site would otherwise be permitted would be providing alternative, potentially costly, means of fire protection.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-10

2021 Code Section: 503.2.1 Dimensions

Modification: Deleted the words “exclusive of shoulders” from text. The section now states: Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with Section 503.6 and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

Reason: To retain the current means in which fire apparatus access and road dimensions are measured.

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 05	503.2.1
IFC 2015	IFC 2015 04	503.2.1
IFC 2012	IFC 2012 04	503.2.1

Comments: No changes in the 2021 IFC.

7/27 Committee Meeting: Recommend Approval



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-11

2021 Code Section: 507.1 Required water supply

Modification: ~~Deleted and~~ Added language.

An approved water supply capable of supplying the required fire flow for ~~the~~ fire protection shall be provided to premises ~~upon~~ on which facilities, buildings or portions of buildings are hereafter constructed or moved into ~~the~~ or within the jurisdiction to meet the necessary fire flow as determined by the fire code official. Where public water supply is inadequate or not available, an approved alternative water source meeting the fire flow requirements shall be provided. Fire flow performance tests shall be witnessed by the fire official, or representative, prior to final approval.

Exception. One- and two-family dwellings, including attached or detached accessory structures.

Reason: N/A

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 06	507.1

Comments: See clerical corrections above. Removed the underline from the first portion as it's written in the 2018 to indicate added language. "Upon" was changed to "on" from the 2015 to the 2018 IFC with no indication of a modification in the 2018 IFC. No changes in 2021 IFC.

7/27 Committee Meeting: Recommend Approval with clerical corrections noted above.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-12

2021 Code Section: 507.5.1 Where Required

Modification: Delete ~~(400 ft)~~ (122 m) and Add Language.

~~Where required.~~ Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 500 feet (152m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on site fire hydrants and mains shall be provided where required by the fire code official.

Location. The location and number of hydrants shall be designated by the fire official, but in no case, shall distance between installed fire hydrants exceed 1000 feet (305 m). Fire hydrants shall be located within 500 feet (152 m) of all fire fighter access points when measured along the normal routes of fire department vehicle access which conforms to the requirements of section 503. No point of the exterior of a building shall be located more than 500 feet (152 m) from a hydrant accessible to fire department vehicles as provided in section 503.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirements shall be 600 feet (183m).
2. For buildings equipped **throughout** with an **approved** automatic sprinkler system installed in accordance with Section 903.~~13~~.1.1 or 903.3.1.2 the distance requirement shall be 600 feet (183m).

Reason: N/A

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 07	507.5.1

Comments: See clerical corrections above. No changes in 2021 IFC.

7/27 Committee Meeting: Recommend Approval with clerical corrections noted above.



2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 507.5.1.1

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 507.5.1.1 Hydrant for standpipe or fire sprinkler systems: Buildings equipped with a standpipe or fire sprinkler system installed in accordance with Section 903 or 905 shall have a fire hydrant within 100 feet of the fire department connections.

9/27 Committee Meeting: Recommend Approval. Modification underlined below.

507.5.1.1 Hydrant for standpipe systems.

Buildings equipped with a standpipe or fire sprinkler system installed in accordance with Section 903 or 905 shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connections.

Exception: The distance shall be permitted to exceed 100 feet (30 480 mm) where approved by the fire code official.

In 200 characters or less, please briefly describe the justification for this modification request.

Adds to already requirements for a fire hydrant to be within 100 feet of the fire department connection if there is a standpipe to also require if there is a fire sprinkler system.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information is the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021

Title: Fire Investigator



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Dr • Columbia • SC • 29210
P.O. Box 11329 • Columbia • SC • 29211-1329
Phone: 803-896-4688 • contact.bcc@llr.sc.gov • Fax: 803-896-4814
llr.sc.gov/bcc

IFC 2021-14

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 507.5.4

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 507.5.4 Obstruction: Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. No parking shall be allowed within 15 feet of a fire hydrant on the side of the fire department connection side of the fire hydrant. Area shall be posted/marked and enforced at the discretion of the local AHJ.

9/27 Committee Meeting: Support Approval as modified below.

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. No parking shall be allowed within 15 feet of a fire hydrant on the side of the fire department connection side of the fire hydrant.

In 200 characters or less, please briefly describe the justification for this modification request.

This is already a state traffic violation. Allows fire code officials to enforce this violation as well. State traffic law states: SC title 56-5-2530: Stopping, standing or parking prohibited in specified places; exceptions.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021
 Title: Fire Investigator

2012 South Carolina Code of Laws Title 56 - Motor Vehicles
Chapter 5 - UNIFORM ACT REGULATING TRAFFIC ON HIGHWAYS
Section 56-5-2530 - Stopping, standing or parking prohibited in specified places;
exceptions.

Universal Citation: SC Code § 56-5-2530 (2012)

(A) Except when necessary to avoid conflict with other traffic, or in compliance with law or the directions of a police officer or official traffic-control device, no person shall:

(1) Stop, stand or park a vehicle:

(a) On the roadway side of any vehicle stopped or parked at the edge or curb of a street.

(b) On a sidewalk.

(c) Within an intersection.

(d) On a crosswalk.

(e) Between a safety zone and the adjacent curb or within thirty feet of points on the curb immediately opposite the ends of a safety zone, unless a different length is indicated by signs or markings.

(f) Alongside or opposite any street excavation or obstruction when stopping, standing or parking would obstruct traffic.

(g) Upon any bridge or other elevated structure upon a highway or within a highway tunnel.

(h) On any railroad tracks.

(i) On any controlled-access highway.

(j) In the area between roadways of a divided highway, including crossovers.

(k) At any place where official traffic-control devices prohibit stopping.

(2) Stand or park a vehicle, whether occupied or not, except momentarily to pick up or discharge passengers:

(a) In front of a public or private driveway.

(b) Within fifteen feet of a fire hydrant.

(c) Within twenty feet of a crosswalk at an intersection.

(d) Within thirty feet upon the approach to any flashing signal, stop sign, yield sign or traffic-control signal located at the side of a roadway.

(e) Within twenty feet of the driveway entrance to any fire station and on the side of a street opposite to any fire station within seventy-five feet of the entrance when properly signposted.

(f) At any place where official traffic-control devices prohibit standing.

(3) Park a vehicle, whether occupied or not, except temporarily for the purpose of and while actually engaged in loading or unloading property or passengers:

(a) Within fifty feet of the nearest rail of a railroad crossing.

(b) At any place where official traffic-control devices prohibit parking.

(B) No person shall move a vehicle not lawfully under his control into any such prohibited area or away from a curb such a distance as is unlawful.

(C) This section does not prohibit a federal postal service carrier from stopping, standing, or parking along a rural roadway for frequent short intervals during delivery of mail, parcels, or packages. As used in this section, "rural" means an area outside the incorporated areas of the county.



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IFC 2021-15

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
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- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 507.5.7

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 507.5.7 (New code) Temporary water meters: Temporary water meters used for portable water or irrigation use, shall be disconnected from fire hydrants at the end of each business day.

9/28 Committee Meeting: Do not support approval.

In 200 characters or less, please briefly describe the justification for this modification request. **IFC 2021-15**

Removing water meters from hydrants during an emergency causes delays in firefighting abilities.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021

Title: Fire Investigator



South Carolina Department of Labor, Licensing and Regulation

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IFC 2021-16

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

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- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 607.1

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 607.1 General: Storage of cooking oil (grease) in commercial cooking operations utilizing aboveground tanks with a capacity greater than 60 gallon installed within a building shall comply with Sections (IFC 2021) 607.2 through 607.7 and NFPA 30. For purposes of this section, cooking oil shall be classified as a Class IIIB liquid unless otherwise determined by testing.

9/28 Committee Meeting: Recommend Approval as Modified below.

607.1 General. Storage of cooking oil (grease) in commercial cooking operations utilizing above-ground tanks with a capacity greater than 60 gal (227 L) installed within a building shall comply with Sections 607.2 through 607.7 and NFPA 30. For purposes of this section, cooking oil shall be classified as a Class IIIB liquid unless otherwise determined by testing. These tanks shall have the contents identified as outlined in 5703.5.

In 200 characters or less, please briefly describe the justification for this modification request.

These tanks shall have the contents identified as outlined in 5003.5, 5003.5.1 and NFPA 30.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information is the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021
 Title: Fire Investigator



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IFC 2021-17

2021 BUILDING CODE MODIFICATION REQUEST FORM

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☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 610.1.2 (2021)

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 610.1.2 (2021) Maintenance: The lint trap, mechanical and heating components, and the exhaust duct system of clothes dryer shall be maintained in accordance with the manufacture's operating instructions or bi-annually to prevent the accumulation of lint or debris that prevents the exhaust of air and products of combustion.

9/28 Committee Meeting: Do not support approval.

In 200 characters or less, please briefly describe the justification for this modification request.

Request is to add bi-annually so if instructions are not available, a period is established for cleanings.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Invetigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021

Title: Fire Investigator



South Carolina Department of Labor, Licensing and Regulation

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IFC 2021-18

2021 BUILDING CODE MODIFICATION REQUEST FORM

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- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
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- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Entire State

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd PO Box 211725 Columbia, SC 29210

Street

City

State

Zip

Name: Terry Mueller

Title/Position: Fire Investigator

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: IFC 708.1 **Correction - IFC 709.1**

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

IFC 708.1 Suspended acoustical ceilings: Suspended acoustical ceiling systems shall be maintained in accordance with all applicable ASTM and UL standards. Damaged, penetrated or missing acoustical ceiling tiles shall be replaced to meet required the standards and IFC section 701.

9/28 Committee Meeting: Do not support approval.

In 200 characters or less, please briefly describe the justification for this modification request.

Request language to be added to the code to directly address acoustical ceiling tiles and their need to be maintained.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Terry Mueller	Fire Investigator	DHEC		
James Ballentine	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Terry J Mueller Date: 9/11/2021

Title: Fire Investigator

From: [JAMES BALLENTINE](#)
To: [Maggie Smith](#); [Mueller, Terry J.](#)
Subject: RE: Code Modification Form IFC Section 708.1.pdf
Date: Thursday, September 23, 2021 1:12:29 PM
Attachments: [image001.png](#)

---- SCDLLR NOTICE (M365) ----

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- **Personally Identifiable Information (PII) should not be included in e-mail text or attachments. Do not save or transmit PII unencrypted.**

Hey Maggie

I spoke to Terry. He asked that you change that to 709.1, so it will be a new, added section. Feel free to contact me if you have any questions.

Thanks a bunch!

Jim

JAMES BALLENTINE

Deputy Fire Marshal
Richland County Government
Emergency Services Department
Fire and Enforcement Division



From: Maggie Smith <maggie.smith@llr.sc.gov>

Sent: Thursday, September 23, 2021 1:01 PM

To: Mueller, Terry J. 

Cc: JAMES BALLENTINE 

Subject: Code Modifica

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Terry,

I spoke with James earlier regarding the attached code modification request and we wanted to get your input. The way the modification language is currently listed it would appear that you wish to

replace IFC Section 708.1 Maintaining Protection with a new section and title. Can you clarify in which section you would like this new text added, or if you would like for it to replace existing text? I appreciate your assistance.

Thank you,

Maggie Smith, CBO
SC Building Codes Council
SC Manufactured Housing Board
110 Centerview Dr, Columbia SC 29210 (physical)
PO Box 11329, Columbia SC 29211 (mailing)
Ph: 803-896-4688
Fx: 803-896-4814

Twitter: [@SCDLLR](https://twitter.com/SCDLLR)
Facebook: [@SCDLLR](https://www.facebook.com/SCDLLR)
Website: www.llr.sc.gov



Making South Carolina a Safe Place to Work and Live

Please click on the link below to complete the Customer Service Satisfaction Survey. It only takes a minute to complete. This will let my supervisor know if you were satisfied or dissatisfied with the service you received from me.

<https://eservice.llr.sc.gov/OnlineSurvey/Home/Index/75>

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2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-19

2021 Code Section: 901.6.3 Records

Modification: Add Language.

Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained. Copies of the inspection reports shall be sent to the local jurisdiction, by the servicing vendor, as prescribed by the fire code official.

Reason: N/A

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 08	901.6.3

Comments: No change in 2021 IFC.

7/27 Committee Meeting: Support Approval



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-20

2021 Code Section: 903.2.9 Group S-1

Modification: Added Language **applies** to Number 5 **only**.

An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 fire area exceeds 12,000 square feet (1115 m2).
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m2).
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464m2).
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses where the fire area exceeds 2,500 square feet (232 m2). This section, when acceptable to the Authority Having Jurisdiction, does not apply to self-storage type facilities that are single story fire areas less than 12,000 square feet, and the building is only accessible from exterior entry points and is not provided with interior hallways, spaces or corridors.

Reason: N/A

Proponent: City of Charleston

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 09	903.2.9

Comments: 2021 IFC removed number 5. No other change to language in 2021 IFC. Modification may not be required.

7/27: Modification dropped.



South Carolina Department of Labor, Licensing and Regulation

South Carolina Building Codes Council

110 Centerview Dr • Columbia • SC • 29210

P.O. Box 11329 • Columbia • SC • 29211-1329

Phone: 803-896-4688 • contact.bcc@llr.sc.gov • Fax: 803-896-4814

llr.sc.gov/bcc

IFC 2021-21

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: _____
(List all jurisdictions that apply.)

Association/Jurisdiction: Home Builders Association of South Carolina

Address: 625 Taylor Street Columbia SC 29201
Street City State Zip

Name: Mark Nix Title/Position: Executive Director

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 903.3.1.2 NFPA 13R sprinkler systems

**Code section as modified:**

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

-903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:

1. Four stories or less above grade plane.
2. The floor level of the highest story is ~~30~~ 35 feet (~~9144~~ 10668 mm) or less above the lowest level of fire department vehicle access.
3. The floor level of the lowest story is 30 feet (9144 mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the International Building Code shall be measured from grade plane.

2021 International Building Code

[F] 903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:

1. Four stories or fewer above grade plane.
2. The floor level of the highest story is ~~30~~ 35 feet (~~9144~~ 10668mm) or less above the lowest level of fire department vehicle access.
3. The floor level of the lowest story is 30 feet (9144 mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 shall be measured from grade plan

8/19 Committee Meeting: Do Not Support Approval.



In 200 characters or less, please briefly describe the justification for this modification request.

This amendment revises the permitted height of the floor level of the highest story in a Group R occupancy that allows for NFPA 13R sprinklers. See attached for additional information.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Mark Nix	Executive Director	HBA of SC		
Andy Barber	HBASC Codes Chairman	HBA of SC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: Mark Nix  Digitally signed by Mark Nix
Date: 2021.08.10 16:09:28 -04'00' Date: _____

Title: Executive Director

**Reason:**

This amendment revises the permitted maximum height from 30-feet to 35-feet for the floor level in a Group R occupancy that will allow for a NFPA 13R sprinkler system.

NFPA 13R has been the standard for installing fire sprinkler in low-rise residential occupancies since 1989. It is scoped to multifamily buildings with a maximum of four stories, but the 2013 edition allowed these buildings to be on top of a fire-separated podium or pedestal, significantly increasing their overall allowed height to 60 feet. The 2018 editions of the IFC and IBC added requirements to address concerns regarding the fire safety of the attics in these podium-style buildings.

The amended language aims at rectifying a change to the 2021 IFC which limited the permitted height to 30 feet instead of reverting back to the pre-2013 limits of four stories total. This was done even before the effects of the increased fire safety measures in the 2018 edition could be assessed. This amendment is a compromise between the result of last cycle and the original four-story threshold in the standard. The proposed 35-foot height is well below the 60-foot threshold of previous code editions and more realistically allows for 4-story Group R buildings with floor-to-ceiling heights of 8 to 10 feet which is common in multifamily buildings.

By increasing the permitted height, it will decrease the cost of construction that allows for a 13R sprinkler system instead of a full 13 sprinkler system, which can save over \$2,100 per unit in a multi-family building (Home Innovation Research Labs, Cost Analysis of Proposed Group A Code Changes (2018-2019 ICC Code Development Cycle) – October 2018).

Costs associated with requirements for attic protection in NFPA 13 systems not only includes the additional sprinklers and piping but also costs associated with increased hydraulic demand and water supply as well as necessary freeze protection in cold and even moderate climates. Greater density and spacing of sprinklers, larger pipe diameter, sprinklers in concealed spaces, and especially, requirements for attic protection (with some exceptions) all contribute to the added cost. This cost increase does not include the final cost with markup to the building owner or the potential need to add a fire pump in the NFPA 13 system.



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Dr • Columbia • SC • 29210
P.O. Box 11329 • Columbia • SC • 29211-1329
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llr.sc.gov/bcc

IFC 2021-22

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)


Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code 

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 907.6.5.1

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

(907.6.5.1 Fire alarm notification devices shall be unobstructed and visible at all times.)

9/28 Committee Recommendation: Approval as modified.

Add sentence above to existing section 907.6.5 as noted below:

[F] 907.6.5 Access.

Access shall be provided to each fire alarm device and notification appliance for periodic inspection, maintenance and testing. Fire alarm notification devices shall be unobstructed and visible at all times.

In 200 characters or less, please briefly describe the justification for this modification request.

Currently the Fire Code does not address this issue.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Terry Mueller	Fire Investigator IV	DHEC		

Affirmation

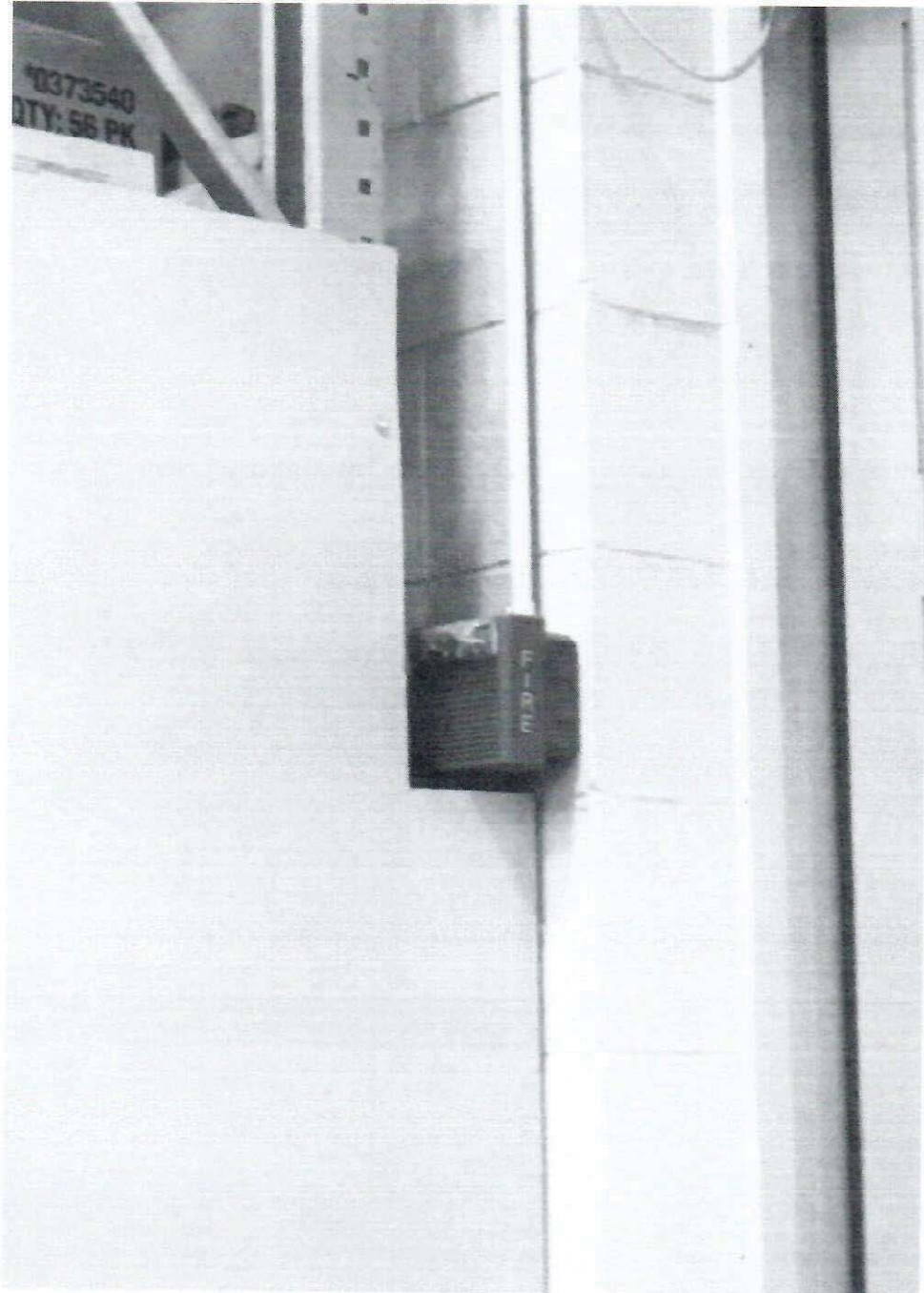
I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal

907.6.5.1

IFC 2021-22



From: [JAMES BALLENTINE](#)
To: [Maggie Smith](#); [Mueller, Terry J.](#)
Subject: RE: Code Modification Submittals
Date: Thursday, September 23, 2021 1:58:26 PM
Attachments: [image001.png](#)
[image005.png](#)
[image006.png](#)

---- SCDLLR NOTICE (M365) ----


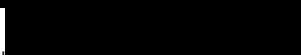
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Hey Maggie
For 907.6.5.1
I suggest "Notification device obstructions"
For 319.11
I suggest "Clearance requirements"
Thanks!
Jim

JAMES BALLENTINE

Deputy Fire Marshal
Richland County Government
Emergency Services Department
Fire and Enforcement Division



From: Maggie Smith <maggie.smith@llr.sc.gov>
Sent: Thursday, September 23, 2021 1:49 PM
To: Mueller, Terry J. 
Cc: JAMES BALLENTINE 
Subject: FW: Code Mod

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Terry or James,



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IFC 2021-23

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
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- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)


Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code 

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 907.6.6.4

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

(907.6.6.4 Maintenance of contact information: Property owners/ tenants shall ensure emergency contact information is current with the fire alarm monitoring company.)

9/28 Committee Meeting: Do not support approval.

In 200 characters or less, please briefly describe the justification for this modification request.

No code addresses that building occupants maintain after hours contact information with their fire alarm monitoring company. We often have properties that requires fire watch to be implemented after hours but the fire alarm company does not have updated emergency contacts for the property.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Terry Mueller	Fire Investigator IV	DHEC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
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IFC 2021-24

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code ▼

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 1010.2.14

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

Electric locking systems, including electro-mechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group I-1, I-2 (and I-4) occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

9/28 Committee Meeting: Support Approval. Need to also include changes in IBC and add I-4 to title.

1010.2.14 Controlled egress doors in Groups I-1, I-2, and I-4.

Electric locking systems, including electro-mechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group I-1, I-2, and I-4 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

In 200 characters or less, please briefly describe the justification for this modification request.

Requesting to include I-4 when occupied as an Adult Day Care. This would help prevent nuisance alarms and reduce elopement issues when serving clients with Dementia, Alzheimer's or similar health care issues.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Darryl Todd McAlhany	Fire Investigator, director	DHEC		
Terry Mueller	Fire Investigator IV	DHEC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-25

2021 Code Section: 1016.2 Egress through intervening spaces

Modification: Delete and Add Language.

Egress through intervening spaces shall comply with this section.

1. Exit access through an enclosed elevator lobby is permitted. Access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies required by Section 3006 of the International Building Code. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.

2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an exit.

Exception: Means of egress are not prohibited through adjoining or intervening rooms or spaces in a Group H, S, or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

3. An exit access shall not pass through a room that can be locked to prevent egress.

4. Means of egress from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.

Exception: Dwelling units or sleeping areas in R-1 and R-2 occupancies shall be permitted to egress through other sleeping areas serving adjoining rooms that are part of the same dwelling unit or guest room.

5. Egress shall not pass through kitchens, storage rooms, closets, or spaces used for similar purposes.

Exceptions:

1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.

2. Means of egress are not prohibited through stockrooms in Group M occupancies where all of the following are met:

2.1 The stock is of the same hazard classification as that found in the main retail area.

2.2 Not more than 50 percent of the exit access is through the stockroom.

2.3 The stockroom is not subject to locking from the egress side.

2.4 There is a demarcated, minimum 44-inch-wide (1118 mm) aisle defined by ~~full or partial-height fixed walls~~ a wall not less than 42 inches high or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.

Reason: N/A

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 11	1016.2

Continued



2021 International Fire Code

South Carolina Building Codes Council

Proposed Modification Continuations from 2018

IFC 2021-25

Comments: See clerical corrections above to show modified language. Language was added to number 1 in the 2021 IFC. It is in red below.

2021 Code: 1016.2 Egress through intervening spaces.

Egress through intervening spaces shall comply with this section.

1. Exit access through an enclosed elevator lobby is permitted. **Where access to two or more exits or exit access doorways is required in Section 1006.2.1,** access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies required by Section 3006. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.
2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an exit.

Exception: Means of egress are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

3. An exit access shall not pass through a room that can be locked to prevent egress.
4. Means of egress from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.
5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.
Exceptions:
 1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.
 2. Means of egress are not prohibited through stockrooms in Group M occupancies where all of the following are met:
 - 2.1. The stock is of the same hazard classification as that found in the main retail area.
 - 2.2. Not more than 50 percent of the exit access is through the stockroom.
 - 2.3. The stockroom is not subject to locking from the egress side.
 - 2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) aisle defined by full- or partial-height fixed walls or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.

7/27 Committee Meeting: Support Approval with clerical corrections noted above in red and added 2021 language.



National Electrical Manufacturers Association

IFC 2021-26

The association of electrical equipment
and medical imaging manufacturers
www.nema.org

September 15, 2021

South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Drive
Columbia, SC 29210

SUBJECT: 2021 Building Code Modification Request

Dear Sir/Madam:

The purpose of this letter is to transmit a 2021 Building Code Modification Request Form. I am the NEMA representative authorized to present the proposed amendment. I also verify that the proposed amendment has the support of a majority of the members of the NEMA Energy Storage Section and/or the NEMA Fire, Life Safety, Security and Emergency Communication Section.

Sincerely,

A handwritten signature in black ink, reading "Philip A. Squair". The signature is written in a cursive, flowing style.

Philip Squair
Vice-President, Government Relations
National Electrical Manufacturers Association



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Dr • Columbia • SC • 29210
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llr.sc.gov/bcc

IFC 2021-26

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: _____
(List all jurisdictions that apply.)

Association/Jurisdiction: National Electrical Manufacturers Association

Address: 1300 N 17th Street Arlington, VA 22209
Street City State Zip

Name: Phil Squair Title/Position: VP of Government Relations

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 1207.1.4

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

1207.1.4 Hazard mitigation analysis.

A failure modes and effects analysis (FMEA) or other approved hazard mitigation analysis shall be provided in accordance with Section 104.8.2 under any of the following conditions:

1. Where ESS technologies not specifically identified in Table 1207.1.1 are provided.
2. More than one ESS technology is provided in a room or enclosed area where there is a potential for adverse interaction between technologies.
3. Where allowed as a basis for increasing maximum allowable quantities. See Section 1207.5.2.
- (4. Where flammable gases can be produced under abnormal conditions.)

In 200 characters or less, please briefly describe the justification for this modification request.

Recent editions and revisions to the Fire Code and NFPA 855 are adding a situation that would trigger an HMA in addition to the three currently listed. Specifically, an HMA shall be required when an ESS battery technology emits flammable gases during abnormal conditions. This provision will require system designers to carefully consider the hazards specific to lithium-ion battery technology.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Scott Lang	Senior Industry Affairs Manager	Honeywell		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: September 15, 2021

Title: Vice President, Government Relations



National Electrical Manufacturers Association

The association of electrical equipment
and medical imaging manufacturers
www.nema.org

IFC 2021-27

September 15, 2021

South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Drive
Columbia, SC 29210

SUBJECT: 2021 Building Code Modification Request

Dear Sir/Madam:

The purpose of this letter is to transmit a 2021 Building Code Modification Request Form. I am the NEMA representative authorized to present the proposed amendment. I also verify that the proposed amendment has the support of a majority of the members of the NEMA Energy Storage Section and/or the NEMA Fire, Life Safety, Security and Emergency Communication Section.

Sincerely,

A handwritten signature in black ink that reads 'Philip A. Squair'.

Philip Squair
Vice-President, Government Relations
National Electrical Manufacturers Association



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Dr • Columbia • SC • 29210
P.O. Box 11329 • Columbia • SC • 29211-1329
Phone: 803-896-4688 • contact.bcc@llr.sc.gov • Fax: 803-896-4814
llr.sc.gov/bcc

IFC 2021-27

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: _____
(List all jurisdictions that apply.)

Association/Jurisdiction: National Electrical Manufacturers Association

Address: 1300 17th St N #900 Arlington VA 22209
Street City State Zip

Name: Phil Squair Title/Position: VP of Government Relations

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 1207.5.4

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

1207.5.4 Fire detection. An approved automatic smoke detection system ~~or radiant energy-sensing fire detection system~~ complying with Section 907.2 shall be installed in rooms, indoor areas, and walk-in units containing electrochemical ESS. An approved radiant energy -sensing fire detection system shall be installed to protect open parking garage and rooftop installations. Alarm signals from detection systems shall be transmitted to a central station, proprietary or remote station service in accordance with NFPA 72, or where approved to a constantly attended location.

In 200 characters or less, please briefly describe the justification for this modification request.

For indoor areas, only smoke detection systems (preferably high sensitivity smoke detection systems) listed to UL 268 can provide the early warning necessary in ESS installations. High sensitivity smoke detectors can detect incipient smoke conditions that are indicative of problems within the ESS. The smoke detectors can then be used to trigger suppression systems. Radiant energy detectors cannot be considered early warning because they rely on an open flame condition. In outdoor applications, smoke detectors are not typically used and other technologies must be used.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Scott Lang	Senior Industry Affairs Manager	Honeywell		
Greg Kaufman	Business Development	Honeywell		
Richard Roberts	Senior Industry Affairs Manager	Honeywell		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: September 15, 2021

Title: Vice President, Government Relations



National Electrical Manufacturers Association

The association of electrical equipment
and medical imaging manufacturers
www.nema.org

IFC 2021-28

September 15, 2021

South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Drive
Columbia, SC 29210

SUBJECT: 2021 Building Code Modification Request

Dear Sir/Madam:

The purpose of this letter is to transmit a 2021 Building Code Modification Request Form. I am the NEMA representative authorized to present the proposed amendment. I also verify that the proposed amendment has the support of a majority of the members of the NEMA Energy Storage Section and/or the NEMA Fire, Life Safety, Security and Emergency Communication Section.

Sincerely,

A handwritten signature in black ink, reading "Philip A. Squair". The signature is written in a cursive, flowing style.

Philip Squair
Vice-President, Government Relations
National Electrical Manufacturers Association



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
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llr.sc.gov/bcc

IFC 2021-28

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
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☒ Statewide Modification

☐ Local Modification: _____
(List all jurisdictions that apply.)

Association/Jurisdiction: National Electrical Manufacturers Association

Address: 1300 17th St N #900 Arlington VA 22209
Street City State Zip

Name: Phil Squair Title/Position: VP of Government Relations

Phone No. [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: Table 1207.6 footnotes

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

Table 1207.6

- a. Not required for lead-acid and nickel cadmium batteries at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC.
- b. Protection shall be provided unless documentation acceptable to the fire code official is provided in accordance with Section 104.7.2 that provides justification why the protection is not necessary based on the technology used.
- c. Applicable to vented (i.e. flooded) type nickel cadmium and lead acid batteries.
- d. Not required for vented (i.e. flooded) type lead acid batteries.
- e. ~~The thermal runaway protection is permitted to be part of a battery management system that has been evaluated with the battery as part of the evaluation to UL 1973.~~

In 200 characters or less, please briefly describe the justification for this modification request.

Section 1207.6.5 requires "a listed device or other approved method to prevent, detect and minimize the impact of thermal runaway." The exception in the footnotes of Table 1207.6 allows for the BMS to perform this function. However, UL 1973 lacks specific requirements for thermal runaway protection in the BMS that would provide the needed granularity in voltage, current, or temperature sensing to detect the early indicators of an abuse condition. Sensors and systems outside of the BMS (but which interface with the BMS) are better suited for detecting the off-gas condition of even a single cell. The off-gassing of electrolyte solvent vapors is a pre-cursor condition that can be detected and then used to isolate the module.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Scott Lang	Senior Industry Affairs Manager	Honeywell		
Steve Cummings	Director, Sensors Business Unit	Nexceris		
William Sudah	Business Development	Honeywell		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: September 15, 2021

Title: Vice President, Government Relations



National Electrical Manufacturers Association

IFC 2021-29
The association of electrical equipment
and medical imaging manufacturers
www.nema.org

September 15, 2021

South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Drive
Columbia, SC 29210

SUBJECT: 2021 Building Code Modification Request

Dear Sir/Madam:

The purpose of this letter is to transmit a 2021 Building Code Modification Request Form. I am the NEMA representative authorized to present the proposed amendment. I also verify that the proposed amendment has the support of a majority of the members of the NEMA Energy Storage Section and/or the NEMA Fire, Life Safety, Security and Emergency Communication Section.

Sincerely,

A handwritten signature in black ink, reading "Philip A. Squair". The signature is written in a cursive, flowing style.

Philip Squair
Vice-President, Government Relations
National Electrical Manufacturers Association



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
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llr.sc.gov/bcc

IFC 2021-29

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
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☒ Statewide Modification

☐ Local Modification: _____
(List all jurisdictions that apply.)

Association/Jurisdiction: National Electrical Manufacturers Association

Address: 1300 17th St N #900 Arlington VA 22209
Street City State Zip

Name: Phil Squair Title/Position: VP of Government Relations

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: _____

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

1207.6.1.2.4 Gas detection system. Where required by Section 1207.6.1.2, rooms, areas, and walk-in units containing ESS shall be protected by an approved continuous gas detection system that complies with Section 916 and with the following:

1. The gas detection system shall be designed to activate the mechanical ventilation system when the level of flammable gas in the room, area, or walk-in unit exceeds 25 percent of the LFL.
2. The mechanical ventilation system shall remain on until the flammable gas detected is less than 25 percent of the LFL.
3. The gas detection system shall be provided with a minimum of 2 hours of standby power in accordance with Section 1203.2.6.
4. Failure of the gas detection system shall annunciate a trouble signal at an approved central station, proprietary or remote station service in accordance with NFPA 72, or shall initiate an audible and visible trouble signal at an approved constantly attended on-site location.
- (5. The gas detection system shall initiate the shutdown of the ESS upon the initial detection of gas from the venting of a lithium-ion UL 1973 listed system.)

(6. Upon activation of the gas detection system, an alarm signal shall annunciate at an approved onsite location in accordance with Section 916 and at an approved supervising station in accordance with NFPA 72.)

In 200 characters or less, please briefly describe the justification for this modification request.

Two types of gas detection systems are useful in protecting lithium-ion battery installations. The first type uses LEL type gas sensors to detect and mitigate explosive levels of gas. The second type uses a much higher sensitivity gas sensor that can detect trace levels of electrolyte solvent vapor that is given off during the off-gas event during cell abuse. If cell abuse is detected after the off-gas event, several minutes of warning is provided prior to thermal runaway wherein the abuse factor can be removed and/or affected module isolated and shut down.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
Scott Lang	Senior Industry Affairs Manager	Honeywell		
Steve Cummings	Director, Sensors Business Unit	Nexceris		
William Sudah	Business Development	Honeywell		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: September 15, 2021

Title: Vice President, Government Relations



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
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llr.sc.gov/bcc

IFC 2021-30

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
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- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)


Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code 

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 2303.2

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

Emergency disconnect switches. An approved emergency disconnect switch shall be provided at an approved location to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. The emergency disconnect switch for exterior fuel dispensers shall be provided with ready access and shall be located within 100 feet of, but not less than 20 feet from, the fuel dispensers. For interior fuel-dispensing operations, the emergency disconnect switch shall be provided with ready access and be installed at an approved location. Such devices shall be distinctly labeled as: "EMERGENCY FUEL SHUTOFF". Signs shall be provided in approved locations. (The sign shall be metal with raised letters not less than 2 inch in size. Letter widths, strokes and spacing shall be in proportion to their height. The sign shall be red in color with white lettering or white in color with red lettering.)

9/28 Committee Meeting: Recommend Approval.

2303.2 Emergency disconnect switches. An approved emergency disconnect switch shall be provided at an approved location to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. The emergency disconnect switch for exterior fuel dispensers shall be provided with ready access and shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, the fuel dispensers. For interior fuel dispensing operations, the emergency disconnect switch shall be provided with ready access and be installed at an approved location. Such devices shall be distinctly labeled as: "EMERGENCY FUEL SHUTOFF." Signs shall be provided in approved locations. The sign shall be metal with raised letters not less than 2 inch in size. Letter widths, strokes and spacing shall be in proportion to their height. The sign shall be red in color with white lettering or white in color with red lettering.

In 200 characters or less, please briefly describe the justification for this modification request.

To establish a minimum standardized letter size for emergency shutoff switch signage.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Terry Mueller	Fire Investigator IV	DHEC		
Kevin Powers	Deputy Fire Marshal	Richland County		

Affirmation

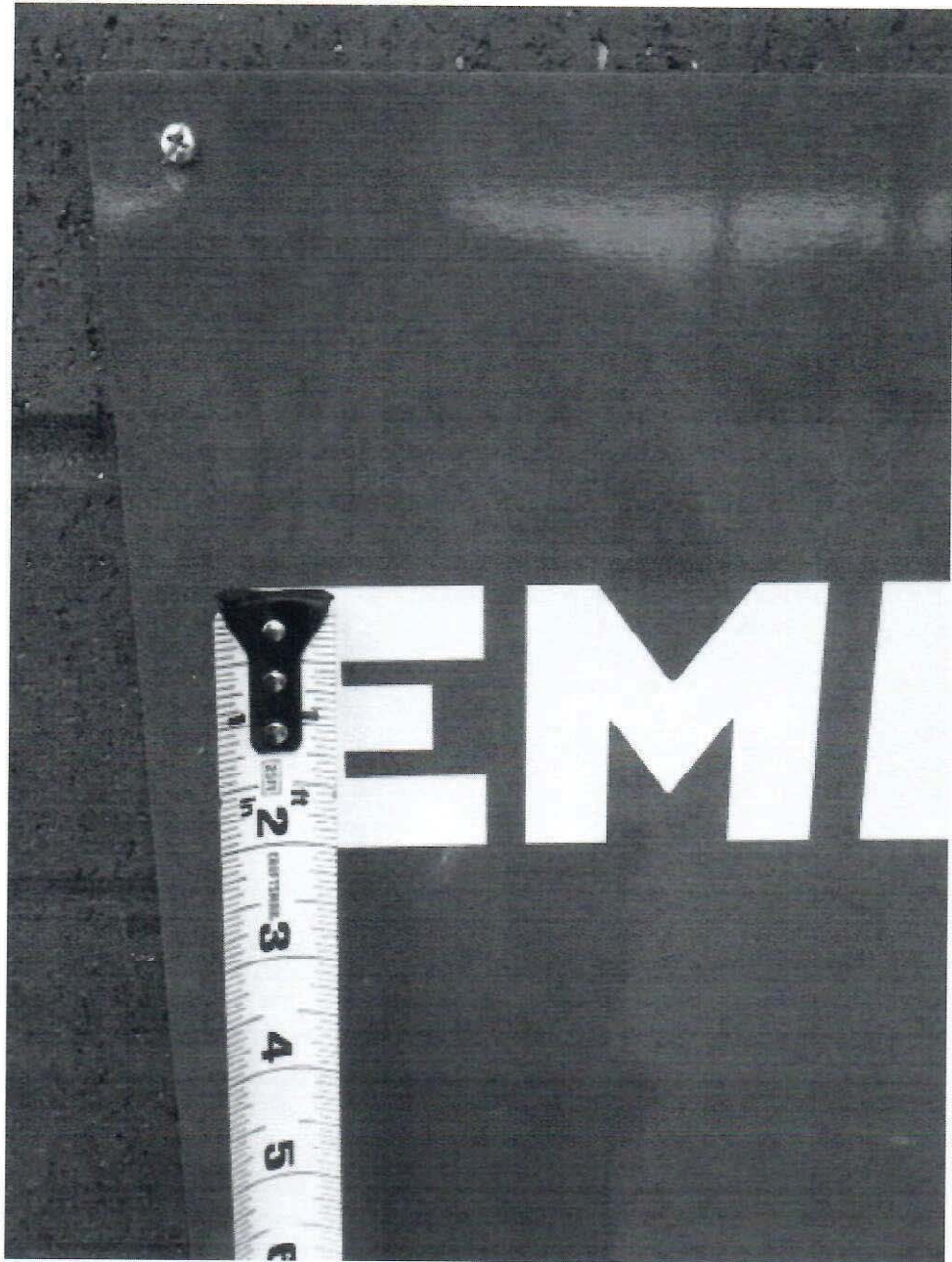
I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal

2303.2

IFC 2021-30





South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Dr • Columbia • SC • 29210
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IFC 2021-31

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
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- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: StateWide

(List all jurisdictions that apply.)


Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code 

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 2303.2.2

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

(2303.2.2 Emergency disconnect switches shall be tested annually by the responsible party to ensure proper operation; records of testing shall be maintained for inspection. Any switches determined to be faulty; the fuel pumps they serve shall be taken out of service until the emergency shutoff switch is placed back into service.)

9/28 Committee Meeting: Recommend Approval of new section as written below.

2303.2.2 Testing. Emergency disconnect switches shall be tested annually by the responsible party to ensure proper operation; records of testing shall be maintained on site for inspection. Any switches determined to be faulty; the fuel pumps they serve shall be taken out of service until the emergency shutoff switch is placed back into service.

In 200 characters or less, please briefly describe the justification for this modification request.

To ensure that emergency shutoff switches operate properly during an emergency.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Kevin Powers	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal

DISPENSER DISCONNECTS – CRITICAL SAFETY NET THAT IS OVERLOOKED?

NOVEMBER/DECEMBER 2008 SAFETY DONNY COOK

Reading Time: 3 minutes

Technology of fuel dispensers has kept pace with the fast-paced society of today. Present day

fuel dispensers often come configured with a multitude of options. Fuel dispenser designs in the

past incorporated only basic circuits related to a suction pump and an on/off switch. Dispensers

today come with LCD displays and have options that range from onboard intercoms, video

streaming capabilities to point-of-sale card readers.

All of the advancements in fuel dispenser designs have increased the number of

electrical/electronic circuits that are present at fuel dispenser junction boxes.

The situation

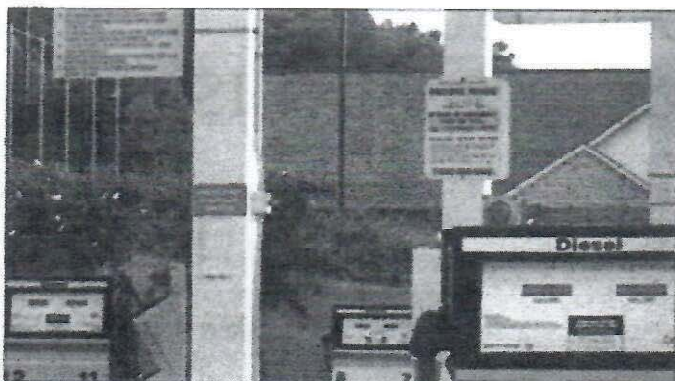


Photo 1. Emergency shut-off switch located within 30m (100ft.) of a fuel dispensing device which it serves.

Fuel dispensing electrical circuitry connections consist of fuel dispenser supply power (line voltage, usually 120 Volt-ac) as well as low-voltage remote signaling circuits and communications circuits. In many cases these circuits route back to multiple interface cabinets and control panels making it difficult to ensure that all circuits are disconnected at the time of a catastrophic event or for routine maintenance.

NFPA 30A, *Code for Motor Fuel Dispensing Devices Facilities and Repair Garages*, requires the installation of an emergency disconnect that is accessible to fuel dispensing facility attendant and/or patrons. Specifically, **NFPA 30A, Section 6.7** states:

“6.7 Emergency Electrical Disconnects. Fuel dispensing systems shall be provided with one or more clearly identified emergency shutoff devices or electrical disconnects. Such devices or disconnects shall be installed in approved locations but not less than 6 m (20 ft) or more than

30 m (100 ft) from the fuel dispensing devices that they serve. Emergency shutoff devices or electrical disconnects shall disconnect power to all dispensing devices; to all remote pumps serving the dispensing devices; to all associated power, control, and signal circuits; and to all other electrical equipment in the hazardous (classified) locations surrounding the fuel dispensing devices. When more than one emergency shutoff device or electrical disconnect is provided, all devices shall be interconnected. Resetting from an emergency shutoff condition shall require manual intervention and the manner of resetting shall be approved by the authority having jurisdiction."

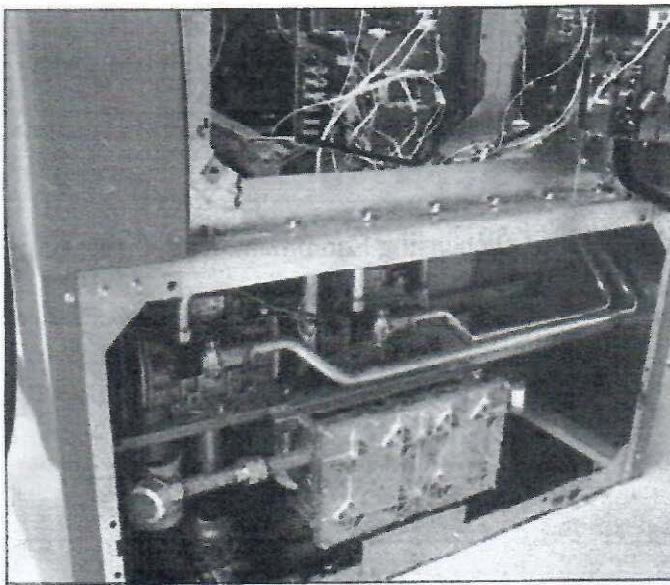


Photo 2. Low-voltage remote signaling circuits and communication circuits inside a motor fuel dispensing device.

In addition to the emergency switch requirements in **Section 6.7 of NFPA 30A, Section 514.11 of the National Electrical Code® (NEC)** requires fuel dispenser power and power to all associated remote signaling circuits be disconnected during routine maintenance. Specifically it states:

"514.11 Circuit Disconnects

(A) General. Each circuit leading to or through dispensing equipment, including equipment for remote pumping systems, shall be provided with a clearly identified and readily accessible switch or other acceptable means, located remote from the dispensing devices, to disconnect simultaneously from the source of supply, all conductors of the circuits, including the grounded conductor, if any. Single-pole breakers utilizing handle ties shall not be permitted.

NEC 514.13 Provisions for Maintenance and Service of Dispensing Equipment. Each dispensing device shall be provided with a means to remove all external voltage sources, including feedback, during periods of maintenance and service of the dispensing equipment. The location of this shall be permitted to be other than inside or adjacent to the dispensing device. The means shall be capable of being locked in the open position.

The impetus of disconnect requirements in both codes is to eliminate incidental contact, shorting of a circuit with incendive energy in a classified hazardous area and the possibility of starting a remote pump that could release product during maintenance.

Enforcement predicament

Although the *NEC* is nationally adopted and *NFPA 30A* is recognized in fire codes that are nationally adopted, fuel dispensers facilities across the nation rarely comply with disconnection requirements. From a practical standpoint, the disconnection requirements reduce the possibility of accidental release of a flammable/combustible fluid and the possibility of an electrical short in a classified area.

The enforcement of disconnection requirements is a shared responsibility of authorities having jurisdiction that are either electrical inspectors and/or fire officials. The predicament is that **AHJs** haven't questioned the limitation of installed dispensing equipment and interconnection of related systems. The reason for this is fewer dispensing facilities are built than residential or commercial installations and **AHJs** are not as versed in requirements and the way point-of-sale circuits are interconnected.

Careless customer causes fuel spill shutting down Circle K in The Villages

<https://www.villages-news.com/2021/06/07/careless-customer-causes-fuel-spill-shutting-down-circle-k-in-the-villages/>

By Ron Clark

June 7, 2021

A careless customer caused a fuel spill shutting down a Circle K in The Villages.

A customer on Sunday night pulled into the Circle K at Southern Trace Plaza for a fillup and nearly drove away with the nozzle still lodged in the vehicle's fuel tank, according to a witness. Realizing what had happened, the driver put the nozzle back in the pump "like nothing happened." The driver didn't notify the clerk at Circle K.

A woman in a black four-door sedan approached the pump as the other driver pulled out of the parking lot. The gasoline nozzle was apparently still active and began to spray all over the woman, her car and the interior of her car, because she left a door open when she stepped out.

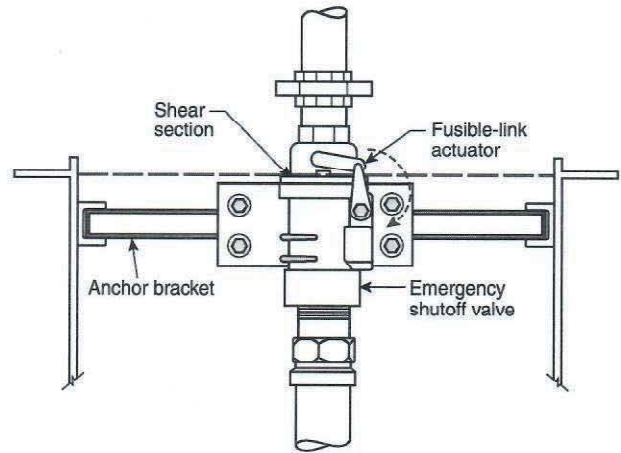
To make matters worse, the emergency shut off switch was not working. The nozzle reportedly kept spraying for 10 minutes until The Villages Public Department arrived and firefighters manually shut off the pumps.

Yellow crime scene tape was put up around the car and the pumps.

2303.2.2

EXHIBIT II.6.10

Proper Attachment of Emergency Shutoff Valve to Fuel Dispenser Mounting Bracket. (From PEI/ RP 100, Recommended Practices for Installation of Underground Liquid Storage Systems. Courtesy of Petroleum Equipment Institute)



spout of the dispensing nozzle, both of which are intended to function if a vehicle drives away with the nozzle still inserted in its filler tube.

The Technical Committee on Automotive and Marine Service Stations has discussed several times whether the emergency shutoff valve should be of the double-poppet type. A double-poppet shear valve behaves like a dry-break coupling: a spring-loaded closure is provided on both sides of the shear section, so that liquid is retained on both sides when the valve breaks. Thus, not only will liquid be confined in the supply piping, it will also be prevented from draining from the piping inside the dislodged part of the dispenser.

Two divergent opinions are held among fire safety professionals and the fire service. Some believe that a double-poppet design limits the amount of fuel involved in an accident because the fuel contained in the dispenser itself doesn't spill. Others are of the opinion that, if a fire does occur, it will heat the trapped liquid in the dispenser, possibly to the point where the internal piping will forcefully rupture and result in injuries to emergency response personnel. This issue was discussed again in preparation for the 2018 edition of the Code, and the committee decided to require that the shear valve be of a double-poppet type. It is this double-poppet type that is shown in Exhibit II.6.9.

6.3.9.1 The automatic-closing feature of this valve shall be tested at the time of installation and at least once a year thereafter by manually tripping the hold-open linkage. Records of such tests shall be kept at the premises or shall be made available for inspection by the authority having jurisdiction within 24 hours of a verbal or written request.

6.3.10 Where a suction-type dispensing system includes a booster pump or where a suction-type dispensing system is supplied by a tank in a manner that produces a gravity head on the dispensing device, a vacuum-actuated shutoff valve with a shear section or equivalent-type valve, listed and labeled in accordance with UL 842, *Standard for Valves for Flammable Fluids*, shall be installed directly under the dispensing device.

6.4 Requirements for Remote/Submersible Pumps

This section shall apply to systems for dispensing Class I and Class II liquids where the liquids are transferred from storage to individual or multiple dispensing devices by pumps located other than at the dispensing devices.

Example of other emergency linkage in the system required to be tested.



Certification of Operational Testing of Emergency Electrical Shutoff Switches

**KEEP FORM AT FACILITY
DO NOT MAIL OR FAX TO OSFM**

Facility #: _____

(1) OWNER OF TANKS :

Name: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Contact Name: _____

Phone #: _____ Fax #: _____

(2) FACILITY - name and address where tanks are located:

Name: _____

Street Address: _____

City: _____ County: _____

Contact Name: _____

Phone #: _____ Fax #: _____

The regulations of the Office of the State Fire Marshal ("OSFM") in Sections 175.210, 175.220, 175.230, 175.240 and 175.250 require that facilities dispensing motor fuels, such as attended and unattended self-service stations, full-service stations, fleet facilities and marinas, have emergency electrical shutoff switches located so that every dispenser has a shutoff switch within 20 to 100 feet away. These emergency switches must be interconnected so that activation of any one switch will shut off power to all dispensers and pumps. Attended self-service stations must have an additional emergency shutoff at the control station. Unattended self-service and fleet dispensing facilities must have an additional emergency shutoff at the dispensing island, but where these facilities have only one island, only one switch is required and must be located 20 to 100 feet from all dispensers or at a location as approved by OSFM. The emergency electrical shutoff switches must be tested annually.

It is the duty of OSFM to make sure that these electrical switches have been tested and are working prior to approving any motor fuel dispensing permit. If these emergency switches have not been tested prior to the Fire Marshal's inspection, the inspection staff of OSFM will have the switches tested during the inspection.

OSFM realizes that testing of the emergency electrical shutoff switches by our office may interrupt business activities. Therefore, in order to avoid interruption, OSFM will allow the tank owner or their designated agent to certify on this form that the emergency electrical shutoff switches have been tested and all electrical power to all pumps, dispenser and dispenser lighting is disconnected all at one time.

Under the penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, the undersigned certifies that the statements set forth in this instrument are true and correct, except as to matters stated to be on information and belief and as to such matters the undersigned certifies as aforesaid that he/she verily believes the same to be true.

By signing this document, I certify that I personally tested the emergency electrical shutoff switches at the above referenced facility. I turned the emergency electrical switches off, individually testing each such switch, and all electrical power to all pumps, dispensers and dispenser lighting disconnected all at one time. (This does not include any L.E.D. digital display units that are battery operated inside the dispenser housings.)

(Number of Switches Tested)

(Date of Test)

(Name of Tester)

(Signature of Tester)

From: [JAMES BALLENTINE](#)
To: [Maggie Smith](#); [Mueller, Terry J.](#)
Subject: RE: Code Modification Submittals
Date: Thursday, September 23, 2021 2:24:14 PM
Attachments: [image001.png](#)
[image005.png](#)
[image006.png](#)

---- SCDLLR NOTICE (M365) ----

- **This email is from an external email address. Please use caution when deciding whether to open any attachments or when clicking links.**
- **Personally Identifiable Information (PII) should not be included in e-mail text or attachments. Do not save or transmit PII unencrypted.**

Hey Maggie
I suggest "Testing"

JAMES BALLENTINE

Deputy Fire Marshal
Richland County Government
Emergency Services Department
Fire and Enforcement Division



From: Maggie Smith <maggie.smith@llr.sc.gov>
Sent: Thursday, September 23, 2021 2:19 PM
To: Mueller, Terry J. [REDACTED]
Cc: JAMES BALLENTINE [REDACTED]
Subject: RE: Code Modification Submittals

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

James,

Can you provide a title for the new section 2303.2.2 as well?

Thank you,



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
110 Centerview Dr • Columbia • SC • 29210
P.O. Box 11329 • Columbia • SC • 29211-1329
Phone: 803-896-4688 • contact.bcc@llr.sc.gov • Fax: 803-896-4814
llr.sc.gov/bcc

IFC 2021-32

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)


Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code 

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 2304.3

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

~~Unattended Self-service motor fuel-dispensing facilities shall comply with sections 2304.3.1 through 2304.3.7~~

9/28 Committee Meeting: Do not support approval.

In 200 characters or less, please briefly describe the justification for this modification request.

Many fuel stations are leaving their pumps on after hours (without approval through their local fire marshal offices) or they are being accidentally left on, we propose that the codes for unmanned fuel stations are applied to all fueling stations. Would request that all self-service fuel-dispensing facilities be required to meet the listed requirements to ensure public safety is increased.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Terry Mueller	Fire Investigator IV	DHEC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal



South Carolina Department of Labor, Licensing and Regulation
South Carolina Building Codes Council
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llr.sc.gov/bcc

IFC 2021-33

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)


Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code 

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 2305.5

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

Approved portable fire extinguishers complying with Section 906 with a minimum rating of 2-A:20-B:C shall be provided and located such that an extinguisher is not more than 75 (50) feet from pumps, dispensers or storage tank fill-pipe openings.

**9/28 Committee Meeting: Recommend approval of changing
75 ft to 50 ft.**

2305.5 Fire extinguishers. Approved portable fire extinguishers complying with Section 906 with a minimum rating of 2-A:20-B:C shall be provided and located such that an extinguisher is not more than 50 feet (22 860 mm) from pumps, dispensers or storage tank fill-pipe openings

In 200 characters or less, please briefly describe the justification for this modification request.

Section 906.3(2) requirements for primarily class B hazards states the maximum travel distance for a primary class B fire is 50 feet. Currently 2305.5 would allow an additional 25 feet travel distance to the maximum travel distance allowed in chapter section 906.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Kevin Powers	Deputy Fire Marshal	Richland County		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal

6.2.1.4.1 Where hose stations are so provided, they shall conform to NFPA 14.

6.2.1.4.2 The location of hose stations and the placement of fire extinguishers shall be such that the hose stations do not replace more than every other fire extinguisher.

6.2.1.5 Where the area of the floor of a building is less than that specified in Table 6.2.1.1, at least one fire extinguisher of the minimum size required shall be provided.

6.2.1.6 The protection requirements shall be permitted to be fulfilled with fire extinguishers of higher rating, provided the travel distance to such larger fire extinguishers does not exceed 75 ft (22.9 m) and the maximum floor area per unit of A is not exceeded.

6.3 Installations for Class B Hazards.

6.3.1 Spill Fires.

6.3.1.1* Minimum ratings of fire extinguishers for the listed grades of hazard shall be provided in accordance with Table 6.3.1.1.

6.3.1.1.1 Two or more fire extinguishers of lower rating shall not be used to fulfill the protection requirements of Table 6.3.1.1, except as permitted by 6.3.1.1.2 and 6.3.1.1.3.

6.3.1.1.2 Up to three AFFF or FFFP fire extinguishers of at least 2½ gal (9.46 L) capacity shall be permitted to be used to fulfill extra hazard requirements.

6.3.1.1.3 Two AFFF or FFFP fire extinguishers of at least 1.6 gal (6 L) capacity shall be permitted to be used to fulfill ordinary hazard requirements.

6.3.1.2 Fire extinguishers of lesser rating, designed for small specific hazards within the general hazard area, shall be permitted to be installed but shall not be considered as fulfilling any part of the requirements of Table 6.3.1.1, unless permitted by 6.3.1.1.1 or 6.3.1.1.2.

6.3.1.3 Fire extinguishers shall be located so that the maximum travel distances do not exceed those specified in Table 6.3.1.1.

6.3.1.4 The protection requirements shall be permitted to be fulfilled with fire extinguishers of higher ratings, provided the travel distance to such larger fire extinguishers does not exceed 50 ft (15.25 m).

6.3.2 Flammable Liquids of Appreciable Depth.

6.3.2.1 Portable fire extinguishers shall not be installed as the sole protection for flammable liquid hazards of appreciable depth where the surface area exceeds 10 ft² (0.93 m²).

6.3.2.2* Where personnel who are trained in extinguishing fires in the protected hazards are located on the premises and capable of responding immediately, the maximum surface area shall not exceed 20 ft² (1.86 m²).

6.3.2.3 For flammable liquid hazards of appreciable depth, a Class B fire extinguisher shall be provided on the basis of at least 2 numerical units of Class B extinguishing potential per 1 ft² (0.09 m²) of flammable liquid surface of the largest hazard area.

6.3.2.4 AFFF- or FFFP-type fire extinguishers shall be permitted to be provided on the basis of 1-B of protection per 1 ft² (0.09 m²) of hazard. (*For fires involving water-soluble flammable liquids, see 5.5.4.*)

6.3.2.5 Two or more fire extinguishers of lower ratings, other than AFFF- or FFFP-type fire extinguishers, shall not be used in lieu of the fire extinguisher required for the largest hazard area.

6.3.2.6 Up to three AFFF- or FFFP-type fire extinguishers shall be permitted to fulfill the requirements, provided the sum of the Class B ratings meets or exceeds the value required for the largest hazard area.

6.3.2.7 Travel distances for portable fire extinguishers shall not exceed 50 ft (15.25 m). (*See Annex E.*)

6.3.2.7.1 Scattered or widely separated hazards shall be individually protected.

6.3.2.7.2 A fire extinguisher in the proximity of a hazard shall be located to be accessible in the presence of a fire without undue danger to the operator.

6.3.3 Obstacle, Gravity/Three-Dimensional, and Pressure Fire Hazards.

6.3.3.1 Where hand portable fire extinguishers are installed or positioned for obstacle, gravity/three-dimensional, or pressure fire hazards, the actual travel distance to hazard shall not exceed 30 ft (9.1 m) unless otherwise specified. (*See 5.6.1.*)

6.3.3.2 Where wheeled fire extinguishers of 125 lb (56.7 kg) agent capacity or larger are installed or positioned for obstacle, gravity/three-dimensional, or pressure fire hazards, the actual travel distance to hazard shall not exceed 100 ft (30.5 m) unless otherwise specified. (*See 5.6.1.*)

6.4* Installations for Class C Hazards.

6.4.1 Fire extinguishers with Class C ratings shall be required where energized electrical equipment can be encountered.

6.4.2 The requirement in 6.4.1 shall include situations where fire either directly involves or surrounds electrical equipment.

6.4.3 Because fire is a Class A or Class B hazard, the fire extinguishers shall be sized and located on the basis of the anticipated Class A or Class B hazard.

Table 6.3.1.1 Fire Extinguisher Size and Placement for Class B Hazards

Type of Hazard	Basic Minimum Extinguisher Rating	Maximum Travel Distance to Extinguishers	
		ft	m
Light	5-B	30	9.14
	10-B	50	15.25
Ordinary	10-B	30	9.14
	20-B	50	15.25
Extra	40-B	30	9.14
	80-B	50	15.25

Note: The specified ratings do not imply that fires of the magnitudes indicated by these ratings will occur, but, rather, they are provided to give the operators more time and agent to handle difficult spill fires that have the potential to occur.

FIRE PROTECTION AND LIFE SAFETY SYSTEMS

2.4. Electronic monitoring devices and supervisory circuits shall be tested every 3 years when extinguisher maintenance is performed.

2.5. A written log of required hydrostatic test dates for extinguishers shall be maintained by the *owner* to verify that hydrostatic tests are conducted at the frequency required by NFPA 10.

3. In Group I-3, portable fire extinguishers shall be permitted to be located at staff locations.

906.2.1 Certification of service personnel for portable fire extinguishers. Service personnel providing or conducting maintenance on portable fire extinguishers shall possess a valid certificate issued by an *approved* governmental agency, or other *approved* organization for the type of work performed.

906.3 Size and distribution. The size and distribution of portable fire extinguishers shall be in accordance with Sections 906.3.1 through 906.3.4.

TABLE 906.3(1)
FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS

	LIGHT (Low) HAZARD OCCUPANCY	ORDINARY (Moderate) HAZARD OCCUPANCY	EXTRA (High) HAZARD OCCUPANCY
Minimum-rated single extinguisher	2-A ^c	2-A	4-A ^a
Maximum floor area per unit of A	3,000 square feet	1,500 square feet	1,000 square feet
Maximum floor area for extinguisher ^b	11,250 square feet	11,250 square feet	11,250 square feet
Maximum distance of travel to extinguisher	75 feet	75 feet	75 feet

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m², 1 gallon = 3.785 L.

- Two 2½-gallon water-type extinguishers shall be deemed the equivalent of one 4-A rated extinguisher.
- Annex E.3.3 of NFPA 10 provides more details concerning application of the maximum floor area criteria.
- Two water-type extinguishers, each with a 1-A rating, shall be deemed the equivalent of one 2-A rated extinguisher for Light (Low) Hazard Occupancies.

TABLE 906.3(2)
FIRE EXTINGUISHERS FOR FLAMMABLE OR COMBUSTIBLE LIQUIDS WITH DEPTHS OF LESS THAN OR EQUAL TO 0.25 INCH^a

TYPE OF HAZARD	BASIC MINIMUM EXTINGUISHER RATING	MAXIMUM DISTANCE OF TRAVEL TO EXTINGUISHERS (feet)
Light (Low)	5-B	30
	10-B	50
Ordinary (Moderate)	10-B	30
	20-B	50
Extra (High)	40-B	30
	80-B	50

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

- For requirements on water-soluble flammable liquids and alternative sizing criteria, see Section 5.5 of NFPA 10.

906.3.1 Class A fire hazards. The minimum sizes and distribution of portable fire extinguishers for occupancies that involve primarily Class A fire hazards shall comply with Table 906.3(1).

906.3.2 Class B fire hazards. Portable fire extinguishers for occupancies involving *flammable* or *combustible liquids* with depths less than or equal to 0.25 inch (6.4 mm) shall be selected and placed in accordance with Table 906.3(2).

Portable fire extinguishers for occupancies involving *flammable* or *combustible liquids* with a depth of greater than 0.25 inch (6.4 mm) shall be selected and placed in accordance with NFPA 10.

906.3.3 Class C fire hazards. Portable fire extinguishers for Class C fire hazards shall be selected and placed on the basis of the anticipated Class A or B hazard.

906.3.4 Class D fire hazards. Portable fire extinguishers for occupancies involving combustible metals shall be selected and placed in accordance with NFPA 10.

906.4 Cooking equipment fires. Fire extinguishers provided for the protection of cooking equipment shall be of an *approved* type compatible with the automatic fire-extinguishing system agent. Cooking equipment involving solid fuels or vegetable or animal oils and fats shall be protected by a Class K-rated portable extinguisher in accordance with Sections 906.1, Item 2, 906.4.1 and 906.4.2 as applicable.

906.4.1 Portable fire extinguishers for solid fuel cooking appliances. Solid fuel cooking appliances, whether or not under a hood, with fireboxes 5 cubic feet (0.14 m³) or less in volume shall have a minimum 2.5-gallon (9 L) or two 1.5-gallon (6 L) Class K wet-chemical portable fire extinguishers located in accordance with Section 906.1.

906.4.2 Class K portable fire extinguishers for deep fat fryers. Where hazard areas include deep fat fryers, *listed* Class K portable fire extinguishers shall be provided as follows:

- For up to four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: one Class K portable fire extinguisher of a minimum 1.5-gallon (6 L) capacity.
- For every additional group of four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: one additional Class K portable fire extinguisher of a minimum 1.5-gallon (6 L) capacity shall be provided.
- For individual fryers exceeding 6 square feet (0.55 m²) in surface area: Class K portable fire extinguishers shall be installed in accordance with the extinguisher manufacturer's recommendations.

906.5 Conspicuous location. Portable fire extinguishers shall be located in conspicuous locations where they will have *ready access* and be immediately available for use. These locations shall be along normal paths of travel, unless the *fire code official* determines that the hazard posed indicates the need for placement away from normal paths of travel.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-34

2021 Code Section: 2307.4 Location of dispensing operations and equipment

Modification: Delete numbers 1-6 and Add Language.

The point of transfer for LP-gas dispensing operations shall be separated from buildings and other ~~structures~~ **exposures** in accordance with NFPA 58 Table 6.7.2.1 and IFC Section 2306.7.

Exception: The point of transfer for LP-gas dispensing operations need not be separated from canopies that are constructed in accordance with the International Building Code and that provide weather protection for the dispensing equipment.

LP-gas containers shall be located in accordance with Chapter 61. LP-gas storage and dispensing equipment shall be located outdoors and in accordance with Section 2306.7.

Reason: These changes are made to bring IFC Chapter 23 and NFPA 58 in harmony with respect to distance between point of transfer and exposures. The propane industry has used NFPA 58 as its standard for over 40 years in South Carolina. The modifications made above are in harmony with NFPA 58 Table 6.5.3

Proponent: South Carolina Propane Gas Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 12	2307.4
IFC 2015	IFC 2015 09	2307.4
IFC 2012	IFC 2012 09	2307.4

Comments: See clerical corrections above. No change in 2021 IFC.

7/27 Committee Meeting: Support Approval with clerical corrections noted above.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-35

2021 Code Section: 2307.7 Public fueling of motor vehicles

Modification: ~~Text was Deleted from~~ the first sentence ~~below~~.

~~The first sentence,~~ Self-Service LP-gas dispensing systems, including key, code and card lock dispensing systems, shall be limited to the filling of permanently mounted containers providing fuel to the LP-gas powered vehicle. ~~Is eliminated~~

Reason: To allow portable propane cylinders to be refilled at self service refueling stations.

Proponent: South Carolina Propane Gas Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 13	2307.7
IFC 2015	IFC 2015 11	2307.7
IFC 2012	IFC 2012 11	2307.6

Comments: See clerical corrections above. No changes in 2021 IFC.

7/27 Committee Meeting: Support Approval with clerical corrections noted above.



South Carolina Department of Labor, Licensing and Regulation

South Carolina Building Codes Council

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IFC 2021-36

2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)

Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd

Street

Columbia

City

SC

State

29210

Zip

Name: James Ballentine

Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED]

Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code



Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 3103.9

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

Structural stability and anchorage required. Tents or membrane structures and their appurtenances shall be designed and installed to withstand the elements of weather and prevent collapsing. Documentation of structural stability shall be furnished to the fire code official. (In special events or assembly setting, tents or canopies larger than ~~400~~ square feet shall be secured utilizing 40 lbs. for each leg of the tent or more as determined by the AHJ.)

9/28 Committee Meeting: Do not support approval.

In 200 characters or less, please briefly describe the justification for this modification request.

To add to the current code anchorage requirements.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Terry Mueller	Fire Investigator IV	DHEC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal



3103.9

Copper Mountain Fire Department Community Risk Management Policy

IFC 2021-36

Special Event Tent and Canopy Weight Policy

Background:

Summit County has unpredictable weather and often strong, gusty, and erratic winds. While participants use canopies to shield themselves from the rain and sun, our region's winds can turn your tent or canopy into a deadly missile with one unexpected gust.

Strong gusts can develop without warning at any time before, during or after an event has closed. Events in Summit County **WILL have wind**. Participants may experience calm conditions during morning set-up; however, conditions can change dramatically by late afternoon and break-down.

Set-up and break-down periods are when tents and canopies are most vulnerable to the wind. Structures must be completely secured as soon as they are set up. At the end of the event, structures must be broken down immediately following removal of weights.

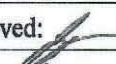
The event organizer is responsible for ensuring all temporary structures meet the requirements of this policy. Failure of the event organizer to comply with this policy will result in legal action, fines, and/or removal of the structure from the event site.

Requirements:

- I. A tent or canopy up to 20'X20' can be weighted down utilizing 40 pound weights on each leg of the tent:
 - i. The weight must be suspended from the top corner of the tent and secured to each leg of the tent.
 - ii. The weight must be self-contained and permanently sealed. It must be capable of being suspended. (Please see Exhibit A for allowable weights.)
 - i. EXCEPTION: Approved sandbags or weight plates, which are designed by the manufacturer, are allowed.
 - iii. Items not allowed include but are not limited to: containers of water, (open or sealed) other than 55 gallon drums as listed in Section II, bags of sand (not designed by the tent/canopy manufacturer), bricks, cinder-blocks, rocks, gym type weights, or stakes, etc.
 - iv. Tents and canopies shall not be tethered to a fence, light post, bench, trashcan, or other fixed object. The tent or canopy shall be self-weighted and shall not rely on outside objects for securement.



Red, White & Blue Fire District Community Risk Management Policy 432

Approved: 	Date: 2/13/13
Last Revision:	February 2013
Next Revision:	February 2015

Special Event Tent and Canopy Weight Policy

Background:

Summit County has unpredictable weather and often strong, gusty, and erratic winds. While participants use canopies to shield themselves from the rain and sun, our region's winds can turn your tent or canopy into a deadly missile with one unexpected gust.

Strong gusts can develop without warning at any time before, during or after an event has closed. Events in Summit County WILL have wind. Participants may experience calm conditions during morning set-up; however, conditions can change dramatically by late afternoon and break-down.

Set-up and break-down periods are when tents and canopies are most vulnerable to the wind. Structures must be completely secured as soon as they are set up. At the end of the event, structures must be broken down immediately following removal of weights.

The event organizer is responsible for ensuring all temporary structures meet the requirements of this policy. Failure of the event organizer to comply with this policy will result in legal action, fines, and/or removal of the structure from the event site.

Requirements:

- I. A tent or canopy up to 20'X20' can be weighted down utilizing 40 pound weights on each leg of the tent:
 - i. The weight must be suspended from the top corner of the tent and secured to each leg of the tent.
 - ii. The weight must be self-contained and permanently sealed. It must be capable of being suspended. (Please see Exhibit A for allowable weights.)
 - i. EXCEPTION: Approved sandbags or weight plates, which are designed by the manufacturer, are allowed.
 - iii. Items not allowed include but are not limited to: containers of water, (open or sealed) other than 55 gallon drums as listed in Section II, bags of sand (not designed by the tent/canopy manufacturer), bricks, cinder-blocks, rocks, gym type weights, or stakes, etc.
 - iv. Tents and canopies shall not be tethered to a fence, light post, bench, trashcan, or other fixed object. The tent or canopy shall be self weighted and shall not rely on outside objects for securement.



*Your Resource Partner in
Building a Safer Cincinnati*

Buildings & Inspections

TENTS

Tents may be erected for a period of less than 180 days.

I. WHEN IS A BUILDING PERMIT REQUIRED FOR A TENT?

The Ohio Building Code and the Zoning Code (see temporary structures) of the City of Cincinnati contain regulations governing the erection of tents. Therefore, a building permit is required prior to the tent's erection for individual tents (or multiple tents less than 12 feet apart) that are:

- Greater than 400 sq. ft. with sides
- Greater than 700 sq. ft. without sides

II. WHAT CODES/REGULATIONS ARE APPLICABLE?

All work performed must be in accordance with the Ohio Building Code, the Cincinnati Zoning Code, and all other applicable laws and ordinances.

Contact the following agencies:

Building Code Plans Examination - 513-352-3316
Zoning Code Plans Examination - 513-352-2430
Customer Service - 513-352-3271

III. HOW DO I OBTAIN A PERMIT?

Submit an application for a permit along with three copies of plans for review to the Permit Center at 805 Central Avenue, Suite 500, Cincinnati, Ohio 45202 at least three business days before the proposed date of erection. It is the responsibility of the property owner to get the required permits. The permit fee shall be due when the permit application has been approved. The installer must allow for 48 hours' notice to schedule inspections. Inspections are to be scheduled during regular working hours. The application and plans shall include the following information:

- A. Permit Application. Complete applicable portions, including the section entitled "Other", indicating:
 1. Intended use of the tent
 2. Date of erection
 3. Date(s) of occupancy
 4. Date tent will be dismantled
- B. Plot Plan - Drawn to scale showing:
 1. Size of tent
 2. Distances to other structures
 3. Location on the property – distance to property lines
 4. Open-sided tents must be located 10 feet minimum from property lines and 12 feet minimum from buildings on the same lot
 5. Tents with sides must be located 10 feet minimum from property lines and 20 feet minimum from buildings on the same lot

C. Additional Requirements

1. The tent installer must clearly indicate if the tent(s) is being located in a space with limited access, such as a rooftop or a courtyard, and must verify that adequate egress will be available
2. Tents with sides must have conforming exits – flap removed or side-hinged doors
3. Tents with heat must have approval from the Fire Department
4. Tents with electric require a separate permit from IBI, 513-381-6080
5. A certificate verifying that the fabric is flame resistant in accordance with NFPA 701
6. Staking/tie-downing information
7. A seating layout, aisle widths, path of travel and other requirement as applicable, per the Ohio Building Code
8. Show side panels (if any) and exit information
9. Provide a note on the plans instructing the owners to evacuate the tents when wind speed meets or exceeds 40 MPH. Provide the name and cell phone number of the responsible person.
10. The tent installer must verify that the tie down is capable to resist an uplift of at least 10 psf net of horizontal tent area
11. The tent installer must verify that the proposed type of anchoring such as stakes or concrete blocks can be used at the specific site

IV. WHAT HAPPENS AFTER I APPLY FOR MY PERMIT?

The aforementioned agencies will review the application. (including a field inspection, if necessary) If any of the agencies has questions or comments, they will contact the person listed on the application.

- A. If the tent is to be used for a circus, menagerie, carnival, medicine show, or similar form of public entertainment subject to the provisions of Chapter 825 of the Cincinnati Municipal Code, the application shall not be approved without the written consent of the City Manager. Plans for these tents must include a seating layout, aisle widths, and other pertinent egress requirements as listed in Chapter 10, Ohio Building Code.

Exception: Tents used for public entertainment, shall not be used for more than three consecutive days, unless approved by City Council.

- B. If the application is approved, the following steps shall be taken:

1. The fee prescribed in Section 1101-87 CBC shall be collected and a permit shall be issued.
2. Customer Service shall send letters of notification to:
 - i. The Police Department
 - ii. The Fire Department
 - iii. The Inspection Bureau, Inc.
 - iv. The Treasurer's Office, if the tent will be used for public entertainment as per Item A above.
3. Customer Services shall notify the agencies listed in Item B-2, above, by phone if the tent is to be erected within 24 hours of the issuance of the permit.
4. Prior to the occupancy of the tent, an inspection shall be made by the Building Construction Inspection Section and the Fire Department to assure compliance with the approved plans and that the egress and seating layout comply with the applicable sections of the Cincinnati Building Code and Ohio Building Code.

City of Columbia Fire Marshal's Office Requirements for Anchoring and Securing Tents and Membrane Structures:

3103.9 Anchorage required.

Tents, membrane structures and their appurtenances shall be adequately roped, braced and anchored to withstand the **elements of weather and prevent against collapsing**. Documentation of structural stability shall be furnished to the fire code official on request. A minimum weight **of 50 pounds and shall** be applied to **each corner** for small event tents (10 x10). Larger tents shall be secured and staked as approved by the Fire Marshal. (**Note:** Merchandise that's intended for sale or distribution **shall not** be used as anchoring for tents such as clothing or coolers.)

(Note: In the event of inclement weather of excessive wind conditions, regardless of the weight anchorage you may instructed to take down your tent.)

<https://colafire.net/special-events-rules-and-regs/>



Summit Fire & EMS

Canopy Weight Guideline

Most accidents at events involve canopies. **It is your responsibility to minimize the risk.** There are two general rules regarding canopies which all participants need to remember:

- **Your canopy shall be fully secured before setting up anything else.**
- **Be sure that your method of securing your canopy to the ground does not create an additional hazard. Use approved straps to secure canopy weights.**

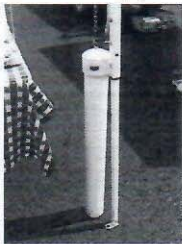
Weights

Summit County has unpredictable weather, and often strong, gusty winds. While participants use canopies to shield themselves from the rain and sun, our region's winds can turn your canopies into deadly missiles with one unexpected gust.

All participants must have their own weights, with a minimum of 40 pounds, per tent leg and roof. Gallon water jugs and single bricks are not safe. A gallon of water weighs only eight pounds and a single brick, weighing in at three pounds. PVC pipe filled with concrete or tent weight sandbags are safe ways to weigh down your tents.

Setup and breakdown periods are when canopies consistently prove to be most vulnerable to the wind. You must be sure to completely secure your canopy as soon as you set it up, and take down your canopy as soon as you remove your weights at the end of the day.

DO NOT let yourself be interrupted by **ANYTHING** in the middle of this process, as a half-secured canopy is as dangerous, if not more dangerous, than an unsecured canopy.



What is APPROVED

PVC Pipe Filled with Concrete (40-50 pounds per leg)

The PVC pipe filled with cement hangs on the inside of the canopy pole, and it has rounded edges. Pipe must be **secured to roof and to canopy leg separately.**

How to Build It Yourself

Use 4 inch ID PVC pipe cut 36 inches long or longer, purchase two end caps for each section along with a long eyebolt and nut. Drill a hole in one of the end caps just large enough to allow the bolt end of the eyebolt to go through it. Using an adhesive for PVC pipe, seal one end with the undrilled cap.

Mix at least 40 lbs. of dry concrete, such as quickcrete, with water and pour into the tube. Insert the bolt through the hole in the cap and tighten a nut onto the bolt inside the cap. Secure the cap to the pipe with PVC adhesive. Use tie-down straps that allow you to adjust the height for your weights. This keeps the weight tension tight. Only use approved tie down straps to secure the weights to the canopy.

WHAT IS APPROVED (continued) EZ - Up Sand Bags or Similar

(40 pounds per leg)



Each weight bag holds up to 40 pounds of sand (which you provide) and attaches to legs and roof structure. Remember to use the large size bags and fill them completely.

What is NOT Allowed

- **One gallon water jugs** weighing 8 pounds each are far short of the required 40 lbs. per leg.
- **Larger water jugs that do not have handles molded as part of the body.**
- **Concrete blocks – cannot be secured adequately to canopy legs and do not weigh enough.**
- **Coolers, bags of ice, water jugs from which water or product is removed.**
- **Loose weightlifting plates – cannot be secured to legs and roof properly.**
- **Dumbbells – cannot be secured properly to canopy legs.**
- **Merchandise Racks – do not weigh enough when product is removed.**
- **Stakes in the ground.**

How to Secure Weights

WEIGHTS MUST BE SECURED TO CANOPY ROOF AND TO CANOPY LEG SEPARATELY WITH THE FOLLOWING METHODS:

Nylon ratchet straps

High quality rope – light-duty cord is not allowed.

Factory-supplied pins (weight bags come with these).

Note: Bungees and rubber straps are not allowed!
***Alternative materials and methods may be approved on a case-by-case basis. Requests must be submitted to Summit Fire & EMS.**

heating and electrical equipment. The *construction documents* shall include an analysis of structural stability.

3103.7 Inspections. The entire *tent*, air-supported, air-inflated or tensioned *membrane structure* system shall be inspected at regular intervals, but not less than two times per permit use period, by the permittee, *owner* or agent to determine that the installation is maintained in accordance with this chapter.

Exception: Permit use periods of less than 30 days.

3103.7.1 Inspection report. Where required by the *fire code official*, an inspection report shall be provided and shall consist of maintenance, anchors and fabric inspections.

3103.8 Access, location and parking. Access, location and parking for temporary *tents* and *membrane structures* shall be in accordance with this section.

3103.8.1 Access. Fire apparatus access roads shall be provided in accordance with Section 503.

3103.8.2 Location. *Tents* or *membrane structures* shall not be located within 20 feet (6096 mm) of *lot lines*, buildings, other *tents* or *membrane structures*, parked vehicles or internal combustion engines. For the purpose of determining required distances, support ropes and guy wires shall be considered as part of the temporary *membrane structure* or *tent*.

Exceptions:

1. Separation distance between *membrane structures* and *tents* not used for cooking is not required where the aggregate floor area does not exceed 15,000 square feet (1394 m²).
2. *Membrane structures* or *tents* need not be separated from buildings where all of the following conditions are met:
 - 2.1. The aggregate floor area of the *membrane structure* or *tent* shall not exceed 10,000 square feet (929 m²).
 - 2.2. The aggregate floor area of the building and *membrane structure* or *tent* shall not exceed the allowable floor area including increases as indicated in the *International Building Code*.
 - 2.3. Required *means of egress* are provided for both the building and the *membrane structure* or *tent* including travel distances.
 - 2.4. Fire apparatus access roads are provided in accordance with Section 503.

3103.8.3 Location of structures in excess of 15,000 square feet in area. *Membrane structures* having an area of 15,000 square feet (1394 m²) or more shall be located not less than 50 feet (15 240 mm) from any other *tent* or structure as measured from the sidewall of the *tent* or *membrane structure* unless joined together by a corridor.

3103.8.4 Membrane structures on buildings. *Membrane structures* that are erected on buildings, balconies, decks or other structures shall be regulated as permanent *membrane structures* in accordance with Section 3102 of the *International Building Code*.

3103.8.5 Connecting corridors. *Tents* or *membrane structures* are allowed to be joined together by means of corridors. *Exit* doors shall be provided at each end of such corridor. On each side of such corridor and approximately opposite each other, there shall be provided openings not less than 12 feet (3658 mm) wide.

3103.8.6 Fire break. An unobstructed fire break passage-way or fire road not less than 12 feet (3658 mm) wide and free from guy ropes or other obstructions shall be maintained on all sides of all *tents* and *membrane structures* unless otherwise approved by the *fire code official*.

3103.9 Structural stability and anchorage required. *Tents* or *membrane structures* and their appurtenances shall be designed and installed to withstand the elements of weather and prevent collapsing. Documentation of structural stability shall be furnished to the *fire code official*.

3103.9.1 Tents and membrane structures greater than one story. *Tents* and *membrane structures* exceeding one story shall be designed and constructed to comply with Sections 1606 through 1609 of the *International Building Code*.

3103.9.2 Tents and membrane structures greater than 7,500 square feet. *Tents* and *membrane structures* greater than 7,500 square feet (697 m²) shall be designed and constructed to comply with Sections 1606 through 1609 of the *International Building Code*.

3103.9.3 Tents and membrane structures with an occupant load greater than 1,000. *Tents* and *membrane structures* with an occupant capacity greater than 1,000 persons shall be designed and constructed to comply with Sections 1606 through 1609 of the *International Building Code*.

3103.10 Temporary air-supported and air-inflated membrane structures. Temporary air-supported and air-inflated *membrane structures* shall be in accordance with Sections 3103.10.1 through 3103.10.4.

3103.10.1 Door operation. During high winds exceeding 50 miles per hour (22 m/s) or in snow conditions, the use of doors in air-supported structures shall be controlled to avoid excessive air loss. Doors shall not be left open.

3103.10.2 Fabric envelope design and construction. Air-supported and air-inflated structures shall have the design and construction of the fabric envelope and the method of anchoring in accordance with Architectural Fabric Structures Institute FSAAS.

3103.10.3 Blowers. An air-supported structure used as a place of assembly shall be furnished with not less than two blowers, each of which has adequate capacity to maintain full inflation pressure with normal leakage. The design of the blower shall be so as to provide integral limiting pressure at the design pressure specified by the manufacturer.



2021 BUILDING CODE MODIFICATION REQUEST FORM

Requirements:

- All requests must be submitted by September 22, 2021.
- Each request for code modification must be submitted separately.
- A cover letter from the local jurisdiction or professional association stating that the individual is authorized to present the proposed amendment; and verification that the proposed amendment has the support of at least a majority of the members of the board or council governing the local jurisdiction or professional association proposing the modification.
- Sufficient test information, studies, data, or other documentation that would be necessary to fully explain and justify the proposed amendment
- For local modification requests only: the physical or climatological basis for the request and the reason that the suggested change would correct the condition.
- A local jurisdiction or professional association shall not propose a modification which will amend, suspend, eliminate or supersede an existing statute, policy, rule or regulation of any state or federal agency per S.C. Regulation 8-240 (H).
- **A completed modification request must be received with all required documentation before it will be reviewed.**

☒ Statewide Modification

☐ Local Modification: Statewide

(List all jurisdictions that apply.)


Association/Jurisdiction: Midlands Fire Marshal's Association

Address: 111 Westpark Blvd Columbia SC 29210
Street City State Zip

Name: James Ballentine Title/Position: Deputy Fire Marshal

Phone No.: [REDACTED] Email Address: [REDACTED]

Please select the applicable code to be modified:

2021 International Fire Code 

Please list the exact code section, table, figure, or appendix to be modified, and attach a photocopy of the applicable code section: 3106.5.4

Code section as modified:

(Please strike through language being removed, and put language to be added in parentheses. Use additional pages as needed.)

(3106.5.4 Special event cooking areas shall be protected from public access by fencing, enclosures, or by methods approved by the AHJ. Cooking equipment shall not be within reach of the public. Cooking Booths/Tents and outdoor cooking areas must: maintain 5 ft. between the public and all cooking appliances located in the outdoor cooking area. Cooking appliances must be separated from the public by physical guards or fencing.)

9/28 Committee Meeting: Do not support approval.

In 200 characters or less, please briefly describe the justification for this modification request.

To be proactive with protecting the public from being injured or accidentally cause a cooking appliance from being knocked over and causing a fire.

Per Regulation 8-240(E)(5), please list the persons with their titles and affiliations, known at the time of submittal, who will provide testimony in favor of the amendment. Due to the possibility of virtual hearings, **all information in the table below is required** to ensure proper notification. Use additional pages as needed.

Name	Title	Affiliation	Phone Number	Email Address
James Ballentine	Deputy Fire Marshal	Richland County		
Terry Mueller	Fire Investigator IV	DHEC		

Affirmation

I certify that all information in this form, including all supplementary documents submitted with this form, are true and correct to the best of my knowledge after undertaking due diligence to determine their accuracy.

Signature: _____ Date: 9/8/2021

Title: Deputy Fire Marshal

From: [JAMES BALLENTINE](#)
To: [Maggie Smith](#); [Mueller, Terry J.](#)
Subject: RE: Code Modification Submittals
Date: Thursday, September 23, 2021 2:44:14 PM
Attachments: [image001.png](#)
[image005.png](#)
[image006.png](#)

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Hey Maggie

That's a tough one....

I suggest "Protected cooking areas"

I've never been a part of this process before. Will/can the work committee offer changes to any of these or do they only vote up or down?

Thanks

Jim

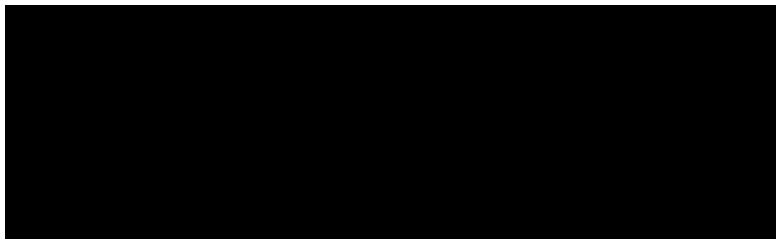
JAMES BALLENTINE

Deputy Fire Marshal

Richland County Government

Emergency Services Department

Fire and Enforcement Division



From: Maggie Smith <maggie.smith@llr.sc.gov>

Sent: Thursday, September 23, 2021 2:34 PM

To: Mueller, Terry J. 

Cc: JAMES BALLENTINE 

Subject: RE: Code Modification Submittals

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

James,



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-38

2021 Code Section: 6101.1 Scope

Modification: Text was modified.

The section now states:

Storage, handling and transportation of liquefied petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter and NFPA 58. Properties of LP-gases shall be determined in accordance with Annex B of NFPA 58.

Reason: NFPA uses the word annex not appendix. Note: Continued modification IFC 2012 12

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 14	6101.1
IFC 2015	IFC 2015 12	6101.1
IFC 2012	IFC 2012 12	6101.1

Comments: Modification changes the word "appendix" to "annex". No change in 2021 IFC.

7/27 Committee Meeting: Support Approval with clerical corrections noted above.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-39

2021 Code Section: 6103.2.1.1 Use in basement, pit or similar location

Modification: Delete the section **and exception** and substitute with new text.

The section now states:

LP-gas containers complying 6103.2.2 shall be permitted to be used in basements and above grade underfloor spaces provided such location has adequate ventilation for equipment utilization. Equipment with attached cylinders shall not be left unattended or stored in such location after use. LP-gas container storage shall comply with Section 6109.7. Self-contained torch assemblies may be used in accordance with 6103.2.1.6.

Reason: To permit the use of LP-gas powered equipment in below grade or underfloor spaces with adequate ventilation.

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 15	6103.2.1.1
IFC 2015	IFC 2015 13	6103.2.1.1
IFC 2012	IFC 2012 13	6103.2.1.1

Comments: See clerical correction above. The language changed in the 2021 IFC.

2021 IFC: 6103.2.1.1 Use in basement, pit, or similar location.

LP-gas containers shall not be used in a basement, pit, above-grade underfloor space or similar location where heavier-than-air gas might collect unless such location is provided with an approved means of ventilation.

Exception: Use with self-contained torch assemblies in accordance with Section 6103.2.1.6.

7/27 Committee Meeting: Modification dropped.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-40

2021 Code Section: 6103.2.1.6 Use with self-contained torch assemblies

Modification: Increased the capacity of portable LP-gas containers.

The section now states:

Portable LP-gas containers are allowed to be used to supply approved self-contained torch assemblies or similar appliances. Such containers shall not exceed a water capacity of ~~(2.7)~~ pounds (1.2 kg).

Reason: To bring IFC Chapter 61 in harmony with NFPA 58

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 16	6103.2.1.6
IFC 2015	IFC 2015 14	6103.2.1.6
IFC 2012	IFC 2012 14	6103.2.1.6

Comments: See clerical corrections above. Language changed in 2018 IFC to match the modified language and there was no change in the 2021 IFC. Modification is no longer needed.

2018 IFC: 6103.2.1.6 Use with self-contained torch assemblies.

Portable LP-gas containers are allowed to be used to supply approved self-contained torch assemblies or similar appliances. Such containers shall not exceed a water capacity of 2.7 pounds (1.2 kg).

7/27 Committee Meeting: Modification dropped.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-41

2021 Code Section: 6106.1 Attendants

Modification: Added language to require an attendant dispensing LP-gas to be qualified in part by NFPA 58.

The section now states:

Dispensing of LP-gas shall be performed by a qualified attendant that meets the requirements of this section and NFPA 58 Section 4.4.

Reason: NFPA 58 Section 4.4 requires documented training every three years

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 17	6106.1
IFC 2015	IFC 2015 16	6106.1
IFC 2012	IFC 2012 16	6106.1

Comments: See clerical correction above. No change in 2021 IFC.

7/27 Committee Meeting: Support Approval



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-42

2021 Code Section: 6107.4 Protecting containers from vehicles

Modification: Added an exception.

The new exception states:

Exception: An alternative method may be used that meets the intent of this section with the approval of the AHJ.

Reason: To allow the AHJ the ability to accept an alternate method of compliance through a variance.

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 18	6107.4
IFC 2015	IFC 2015 18	6107.4
IFC 2012	IFC 2012 18	6107.4

Comments: See clerical correction above. Compliance for protection changed from Section 312 to NFPA 58 from the 2012 IFC to the 2015 IFC. No change in the 2021 IFC.

7/27 Committee Meeting: Support Approval



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-43

2021 Code Section: 6109.13 Protection of containers

Modification: Added text to the end of the section.

The section now states:

LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle protections shall be required as required by the fire code official in accordance with ~~IFC Section~~ 312 or NFPA 58 8.4.2.2

Reason: To provide an alternate method of compliance

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 20	6109.13
IFC 2015	IFC 2015 22	6109.13
IFC 2012	IFC 2012 22	6109.13

Comments: See clerical correction above. Language changed from the 2012 IFC to the 2015 IFC to make vehicle impact protection compliant with Section 6107.4 instead of the fire code official, and added an exception. No change in language from 2015 to 2021 IFC.

7/27 Committee Meeting: Support Approval with clerical correction above.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-44

2021 Code Section: 6110.1 Temporarily out of service

Modification: Changed the section heading and modified text.

The section now states:

Containers not connected for service at customer locations. LP-gas containers at customers' locations that are not connected for service shall comply with both of the following:

1. Have LP-gas container outlets, except relief valves, closed and plugged or capped.
2. Be positioned with the relief valve in direct communication with the LP-gas container vapor space.

Reason: To reflect the original intent of the section.

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 21	6110.1
IFC 2015	IFC 2015 23	6110.1
IFC 2012	IFC 2012 23	6110.1

Comments: The 2021 IFC changed the header and removed the word "temporary" from the first sentence.

2021 IFC: 6110.1 Removed from service.

LP-gas containers whose use has been discontinued shall comply with all of the following:

1. Be disconnected from appliance piping.
2. Have LP-gas container outlets, except relief valves, closed or plugged.
3. Be positioned with the relief valve in direct communication with the LP-gas container vapor space.



2021 International Fire Code
South Carolina Building Codes Council
Proposed Modification Continuations from 2018

IFC 2021-45

2021 Code Section: 6111.2.1 Near residential, educational and institutional occupancies and other high-risk areas.

Modification: Added a second paragraph to the existing section.

The additional text states:

Separation distance requirements may be reduced to not less than 50 feet as approved by the fire code official, based upon a completed fire safety analysis and consideration of special features such as topographical conditions, capacity of the LP-gas vehicle and the capabilities of the local fire department. The Office of the State Fire Marshall will provide an approved fire safety analysis to be utilized for this specific requirement.

Reason: To allow the fire code official to authorize a reduction of the 500 foot requirement.

Note: Continued modification IFC 2012 24.

Proponent: South Carolina Fire Marshal's Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2018	IFC 2018 22	6111.2.1
IFC 2015	IFC 2015 24	6111.2.1
IFC 2012	IFC 2012 24	6111.2.1

Comments: No change in the 2021 IFC.

7/27 Committee Meeting: Approved