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**DEPARTMENT OF LABOR, LICENSING AND REGULATION**

**BUILDING CODES COUNCIL**

CHAPTER8

Statutory Authority: 1976 Code Sections 6-9-40 and 40‑1‑70

8‑900 through 8-921. International Fire Code.

**Synopsis:**

The South Carolina Building Codes Council proposes to amend Chapter 8, Article 9, to reflect modifications to the 2021 South Carolina Building Codes, the International Fire Code.

A Notice of Drafting was published in the *State Register* on July 23, 2021.

**Instructions:**

Replace regulation as shown below. All other items and sections remain unchanged.

**Text:**

ARTICLE 9

International Fire Code

2021 International Fire Code Modification Summary

(Statutory Authority: 1976 Code Section 6‑9‑40)

8‑900. International Fire Code.

NOTE‑This article is based upon the International Fire Code, 2021 Edition, in accordance with the statutory amendments to acts governing the Building Codes Council, except for the modifications referenced below.

This code is identical to the 2021 Edition of the International Fire Code except for the following modifications:

8‑901. IFC Section 202 General definitions.

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.

8‑902. IFC Section 202 General definitions.

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.

8‑903. IFC Section 202 General definitions.

Add to the listing of A‑3 occupancies: Structures, without a commercial kitchen, used in agritourism activity as defined by S.C. Code Ann. 46‑53‑10(1).

8‑904. IFC 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.”

8‑905. IFC Section 319.11 Clearance requirements.

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.

8‑906. IFC Section 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.

 **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.

8‑907. IFC 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.

8‑908. IFC Section 503.2.1 Dimensions.

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).

8‑909. IFC Section 507.1 Required water supply.

An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings, or portions of buildings are hereafter constructed or moved into 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 alternate water source meeting the fire flow requirements shall be provided. Fire flow performance tests shall be witnessed by the fire code official or representative prior to final approval. Exception. One and two family dwellings, including attached or detached accessory structures.

8‑910. IFC Section 507.5.1 Where required.

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 500 feet (152 m) 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 the 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 requirement shall be 600 feet (183 m).

 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

8‑911. IFC Section 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.

8‑912. IFC Section 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.

8‑913. IFC Section 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.

8‑914. IFC Section 901.6.3 Records.

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.

8‑915. IFC Section 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.

8‑916. IFC Section 1010.2.14 Controlled egress doors in Groups I‑1 and I‑2 as well as I‑4 (Adult Day Care occupancy only).

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 and I‑2 occupancies where the clinical needs of persons receiving care require their containment and Group I‑4 Adult Day Care occupancies where the clinical needs of person 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:

 1. The door locks shall unlock on actuation of the automatic sprinkler system or automatic smoke detection system.

 2. The door locks shall unlock on loss of power controlling the lock or lock mechanism.

 3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the fire command center, a nursing station or other approved location. The switch shall directly break power to the lock.

 4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.

 5. The procedures for unlocking the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.

 6. All clinical staff shall have the keys, codes or other means necessary to operate the locking systems.

 7. Emergency lighting shall be provided at the door.

 8. The door locking system units shall be listed in accordance with UL 294.

 Exceptions:

 1. Items 1 through 4 shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric or cognitive treatment area.

 2. Items 1 through 4 shall not apply to doors to areas where a listed egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I‑2 hospital.

8‑917. IFC 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 of the South Carolina 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 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.

8‑918. IFC Section 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.

8‑919. IFC Section 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 from pumps, dispensers or storage tank fill‑pipe openings.

8‑920. IFC Section 2307.4 Location of dispensing operations and equipment.

The point of transfer for LP‑gas dispensing operations shall be separated from buildings and other 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 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.

8‑921. IFC Section 2307.7 Public fueling of motor vehicles.

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 removed.

8‑922. IFC Section 6101.1 Scope.

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.

8‑923. IFC Section 6106.1 Attendants.

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

8‑924. IFC Section 6107.4 Protecting containers from vehicles.

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

8‑925. IFC Section 6109.13 Protection of containers.

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 Section 312 or NFPA 58 8.4.2.2.

8‑926. IFC Section 6110.1 Removed from service.

Containers not connected for service at customer locations. LP‑gas containers at customer locations that are not connected for service shall comply with all 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.

8‑927. IFC Section 6111.2.1 Near residential, educational and institutional occupancies and other high‑risk areas.

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 Marshal will provide an approved fire safety analysis to be utilized for this specific requirement.

**Fiscal Impact Statement:**

There will be no cost incurred by the State or any of its political subdivisions for these regulations.

**Statement of Rationale:**

The South Carolina Building Codes Council proposes to amend Chapter 8, Article 9, to reflect modifications to the 2021 South Carolina Building Codes, the International Fire Code.