

Florida Fire Prevention Code 9th Edition

NFPA 1

The following are the Florida Specific Amendments to the **2024** edition of the Fire Code® (NFPA 1). Words stricken are deletions; words underlined are additions to the base edition of NFPA 1. **Yellow highlighting** indicates a newly added or newly deleted section (compared to the 8th edition). Note that some section numbering differs from the 8th edition due to numbering changes in NFPA 1 (2024).

Note: This **DRAFT** version includes FL specific amendments regarding fireworks (in definitions and chapter 65) that may not be in their final form for publication.

1.1.2.1 Anytime a reference is made to NFPA 1 or NFPA 101 within this code it shall be the Florida specific version of NFPA 1 and NFPA 101.

1.3.2.5 The **Florida Building Code** shall be referred to anytime a reference is made to the building code or to NFPA 220, Standard on Types of Building Construction in this Code or an adopted standard.

1.7.1 Administration.

The provisions of this Code shall apply without restriction, unless specifically modified by Florida Statutes, the Florida Administrative Code, or any Florida specific amendment to this Code.

1.7.4.1 If deemed necessary by a fire official for a complete, accurate, and thorough firesafety plan review or inspection, the fire official may request assistance from a building, electrical, plumbing, or similar specialty inspector; however, nothing in this rule gives authority or jurisdiction to any person other than a firesafety inspector certified under Section 633.216, Florida Statutes, to perform firesafety inspections required by law, rule, ordinance, or code.

1.11.1 Establishment of Fire Code ~~Board of Appeals~~ Process. A Method Board of Appeals shall be established to rule on matters relating to the fire code and its enforcement. If a Fire Code Board of Appeals is formed as method of appeal, the Fire Code Board of Appeals shall comply with Sections 1.11.1.1 through 1.11.6.6.

1.13.8 The authority having jurisdiction shall have the authority to issue permits for the operations in Table 1.13.8(a). ~~Permits shall be required in accordance with Table 1.12.8(a) through Table 1.12.8(d).~~

1.14 ~~Certificates of Fitness. (Deleted entirely)~~

2.1.1 When the AHJ accepts compliance with a subsequent edition of a referenced publication, compliance ~~Compliance~~ with subsequent editions of the referenced publications shall be considered evidence of compliance with the editions specified in this Code.

2.2 NFPA 220, ~~Standard on Types of Building Construction~~, 2024 edition; NFPA 260, ~~Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture~~, 2024 edition; NFPA 261, ~~Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering~~

~~Cigarettes, 2023 edition; NFPA 1030, Standard for Professional Qualifications for Fire Prevention Program Positions, 2024 edition; NFPA 1123, Code for Fireworks Display, 2022 edition; NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition; NFPA 1123, Code for Fireworks Display, 2018 edition; NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition; NFPA 5000®, Building Construction and Safety Code®, 2024 edition.~~

2.3.24 Other Publications. Webster's Third New International Dictionary of the English Language, Unabridged. Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2020.

2.4 NFPA 1030, Standard for Professional Qualifications for Fire Prevention Program Positions, 2024 Edition; NFPA 5000®, Building Construction and Safety Code®, 2024 edition.

3.1 General. ~~The definitions contained in this chapter shall apply to the terms used in this Code. Where terms are not defined in this chapter or within another chapter, they shall be defined using the definition within the Florida Building Code, their ordinarily accepted meanings within the context in which they are used. Merriam-Webster's Collegiate Dictionary, 11th edition, shall be the source for the ordinarily accepted meaning.~~

3.1.1 ~~Where terms are not defined in this chapter, within another chapter, or the Florida Building Code, they shall be defined using their ordinarily accepted meanings within the context in which they are used. Webster's Third New International Dictionary of the English Language, Unabridged, shall be a source for ordinarily accepted meaning.~~

3.3.136 Fireworks. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, or detonation, and that meets the definition of *Consumer Fireworks or Display Fireworks* as set forth in this Code, NFPA 1124.

3.3.136.2 Consumer Fireworks. Small fireworks devices containing restricted amounts of pyrotechnic composition, designed primarily to produce visible or audible effects by combustion, that comply with the construction, chemical composition, and labeling regulations of the U.S. Consumer Product Safety Commission (CPSC), as set forth in CPSC 16 CFR 1500 and 1507, 49 CFR 172, and APA Standard 87-1, Standard for the Construction and Approval for Transportation of Fireworks, Novelties, and Theatrical Pyrotechnics.

3.3.136.2.1 Consumer Fireworks Retail Sales Area. The portion of a consumer fireworks retail sales facility or store, including the immediately adjacent aisles, where consumer fireworks are located for the purpose of retail display and sale to the public.

3.3.136.2.2 Consumer Fireworks Retail Sales Facility (CFRS Facility). A permanent or temporary building or structure, CFRS stand, tent, canopy, or membrane structure that is used primarily for the retail display and sale of consumer fireworks to the public.

3.3.136.2.3 Consumer Fireworks Retail Sales (CFRS) Stand. A temporary or permanent building or structure that has a floor area not greater than 800 ft² (74 m²), other than tents, canopies, or membrane structures, that is used primarily for the retail display and sale of consumer fireworks to the public.

3.3.136.2.4 Packaged Fireworks Merchandise. A consumer fireworks device or group of consumer fireworks devices that has been packaged within an unperforated container or packaging material by the manufacturer, distributor, or seller for retail display and sale as a unit.

3.3.136.2.5 Covered Fuses. A fuse or designed point of ignition that is protected against accidental ignition by contact with a spark, smoldering items, or small open flame.

6.1.14.1.3* Where incidental to another occupancy, areas used as follows shall be permitted to be considered part of the predominant occupancy and shall be subject to the provisions of this Code and NFPA 101 that apply to the predominant occupancy:

(1) Mercantile, business, industrial, or storage use

(2)* Nonresidential use with an occupant load fewer than that established by Section 6.1 for the occupancy threshold

(3) Portions of buildings used as accessory offices or for customary non-hazardous uses necessary for transacting the principal business in storage and industrial occupancies need not be separated from the principal use.

(4) Industrial occupancies producing, using, or storing low hazard products in accordance with Subdivision 6.2.2 need not be separated by fire-resistant construction from the occupancies to which they are accessory.

[101:6.1.14.1.3]

6.1.14.1.3.1 Incidental use areas shall be separated as required by Table 509 of the Florida Building Code where Table 509 permits an automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated by construction capable of resisting the passage of smoke.

6.1.14.1.4 The following accessory occupancies shall not be required to be separated from the primary occupancy as required in 6.1.14.4:

(1) A kitchen in an assembly occupancy does not constitute a mixed occupancy.

(2) Accessory uses in industrial and storage occupancies as otherwise provided in 6.1.14.1.3(3)

(3) Rooms or spaces used for customary storage of non-hazardous materials in assembly, business, educational, industrial, mercantile, hotel and dormitory, and apartment occupancies which in aggregate do not exceed 10% of the major floor area in which they are located. Protection from hazards shall be as otherwise provided in the specific occupancy chapter.

6.1.14.4.7 One-story or two-story structures that are less than 10,000 square feet, whose occupancy is defined in the Florida Building Code and the Florida Fire Prevention Code as business or mercantile, the authority having jurisdiction shall enforce the wall fire-rating provisions for occupancy separation as defined in the Florida Building Code.

10.10.6.1 Unless permitted by 10.10.6.1.1 or 10.10.6.2, for other than one- and two-family dwellings, outdoor cooking appliances, grills, or other similar devices intended for cooking, heating, or any other purpose shall not be used, kindled, or stored in any of the following locations:

(1) On any balcony

(2) Under any overhanging portion of a structure

(3) Within 10 ft (3 m) of any structure

10.10.6.1.1 Listed electric portable, tabletop grills, not to exceed 200 square inches of cooking surface, or other similar apparatus shall be permitted.

10.11.1.1* New and existing buildings shall have approved address numbers placed in a position to be plainly legible and visible from the street or road fronting the property. If the building is addressed on another street, sometimes referred to as a vanity address, the street name shall also be included in letters with the same dimensions as the address number requirements of 10.11.1.2.

10.11.1.2 Address numbers shall be a minimum of ~~6~~ ~~4~~ ~~in.~~ (153.4 400 mm) high with a minimum stroke width of 1/2 in. (13 mm).

10.11.1.8 Address numbers for suites, units, etc. within a multiple tenant building or complex shall be individually identified in a manner approved by the AHJ, however shall be not less than 3 in. (76.2 mm) in height for residential and at least 6 in. (152.4 mm) in height for all other buildings, structures, or portions thereof.

11.10.2* In all new and existing buildings, the local authority having jurisdiction shall determine the minimum radio signal strength for fire department communications in accordance with section 633.202(18), F.S., and this Code. In all new and existing buildings, an approved emergency communication enhancement system shall be installed where the minimum radio signal strength into the building cannot be maintained in accordance with NFPA 1225. In all new and existing buildings, minimum radio signal strength for emergency services department communications shall be maintained at a level determined by the AHJ, and based on the existing coverage levels of the public safety communication systems utilized by the jurisdiction, measured at the exterior of the building.

11.10.2.1 Where existing coverage at the exterior of the building does not meet or exceed delivered audio quality of 3.4 or greater for analog or digital systems, two-way radio communication enhancement systems shall not be required.

11.6.2.1 Chapter 51 of NFPA 1 and NFPA 86, *Standard for Ovens and Furnaces*, shall apply to crematory furnaces for humans and animals.

11.6.2.1.1 NFPA 82 shall not apply to crematory furnaces for humans and animals.

12.6.2 Upholstered Furniture.

12.6.2.1* Smoldering Ignition of Upholstered Furniture. All upholstered furniture shall comply with Part 1640, Standard for the Flammability of Upholstered Furniture, Code of Federal Regulations. Newly introduced upholstered furniture, except as otherwise permitted by Chapters 11 through 43 of NFPA 101, shall be resistant to a cigarette ignition (i.e., smoldering) in accordance with one of the following:

(1) The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

(2) Mocked-up composites of the upholstered furniture shall have a char length not exceeding 1 1/2 in. (38 mm) when tested in accordance with NFPA 261.

[101:10.3.2.1]

12.6.2.2* Rate of Heat Release Testing of Upholstered Furniture.

12.6.2.2.1 Where required by the applicable provisions of this Code, upholstered furniture and other seating furniture, unless the furniture is located in a building protected throughout by an approved automatic sprinkler system, shall have limited rates of heat release when tested in

accordance with ASTM E1537, Standard Test Method for Fire Testing of Upholstered Furniture, as follows:

- (1) The peak rate of heat release for the single furniture item shall not exceed 80 kW.
- (2) The total heat released by the single furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

[101:10.3.2.2.1]

~~12.6.2.2.2~~ When tests are conducted in accordance with ~~12.6.2.2~~, the formation of flaming droplets during the test shall be reported. [101:10.3.2.2.2]

13.3.2.4

New buildings three or more stories in height above grade shall be protected throughout by an approved automatic sprinkler system in accordance with Section **13.3** unless otherwise permitted by ~~13.3.2.5~~ 13.3.2.4.1.

13.3.2.4.1 One- and two-family dwellings otherwise exempt from the provisions of the Life Safety Code, as contained in the Florida Fire Prevention Code, shall not be required to be protected by an automatic sprinkler system unless the local government has adopted fire sprinkler requirements for one- and two-family dwellings pursuant to section 633.208, F.S.

13.3.2.5.1 Where the occupant load exceeds 100, the ~~The~~ following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 13.3.1.2:

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Bars
- (5) Restaurants
- (6) Assembly occupancies with festival seating

[101:12.3.5.1]

13.3.2.6.1 Where the occupant load exceeds 300 ~~400~~, the following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 13.3:

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Assembly occupancies with festival seating

[101:13.3.5.1]

~~13.3.2.18.1~~ All new one- and two-family dwellings shall be protected throughout by an approved automatic sprinkler system in accordance with ~~13.3.2.19.2~~. [101:24.3.5.1]

13.3.2.24.2* Existing high-rise buildings shall be protected throughout by an approved automatic sprinkler system in accordance with this chapter and 13.3.2.24.2.1 through 13.3.2.24.2.3.

13.3.2.24.2.1 Each building owner shall, within 180 days of receiving notice, file an intent to comply with this regulation with the AHJ for approval.

13.3.2.24.2.2 The AHJ shall review and respond to the intent-to-comply submittal within 60 days of receipt.

13.3.2.24.2.3 The entire high-rise apartment building that is a condominium shall be required to be protected by an approved automatic sprinkler system by January 1, 2027 in compliance with the requirements of FFPC 101: Chapter 31.

~~13.3.2.24.2.3*~~ The entire building shall be required to be protected by an approved automatic sprinkler system within 12 years of adoption of this Code.

13.3.2.24.2.3.1 All existing high-rise apartment buildings that are condominiums shall be subject to the provisions of Section 718.111 and 718.112, Florida Statutes, which shall supersede the requirement for an approved automatic sprinkler system.

13.3.2.24.2.3.2 All existing high-rise apartment buildings that are cooperatives shall be subject to the provisions of Section 719.1055, Florida Statutes, which shall supersede the requirement for an approved automatic sprinkler system.

14.4.4 There shall be no storage above any component of the means of egress unless it is on a separate floor, mezzanine, or engineered and approved platform constructed in accordance with the Florida Building Code.

~~16.5.3 Fire Protection During Construction.~~ This sub-section ~~16.1.6~~ The fire protection during construction water supply provisions outlined in NFPA 241 shall apply to both commercial and residential developments.

16.5.3.1.3.4 16.1.6.1 Completion of the water mains and hydrants may be on an alternate schedule approved by the fire official.

18.2.3.2.1.2 When required by the authority having jurisdiction, road(s) or parking lots providing access to the main entrance door(s) shall be considered access roads and shall comply with the requirements of 18.2.3.5.

18.2.3.6.3 Fire lanes shall be marked with signs that are readily visible to the street with the wording, "NO PARKING FIRE LANE BY ORDER OF THE FIRE DEPARTMENT" or similar wording. Such signs shall be 12 in. by 18 in. with a white background and red letters and shall be a maximum of seven feet in height from the roadway to the bottom part of the sign. The signs shall be within sight of the traffic flow and be a maximum of 60 feet apart.

18.4.1.3 Sections 18.3 and 18.4 shall be considered a recommendation for construction of one- and two-family dwellings located on in-fill lots in existing neighborhoods and subdivisions.

18.5.7.2.1 Existing, previously approved hydrant installations shall be permitted to have clear space less than 60 inches.

20.2.4.2.2 Emergency egress drills shall include decision-based/option-based drills, including drills comprised of a unique set of circumstances that requires faculty and students to consider the response to that specific threat as well as evacuation or protection in place. Approved training programs designed for education and training and for the practice of emergency egress to familiarize occupants with the drill procedure, and to establish conduct of the emergency egress as a matter of routine, shall be permitted to receive credit on a one-for-one basis for not more than four of the emergency egress drills required by 20.2.4.2.3, provided that a minimum

~~of four emergency egress drills are completed prior to conduct of the first such training and practice program. [101:14.7.2.2; 101:15.7.2.2]~~

20.2.4.2.3 Emergency egress drills shall be conducted as follows:

~~(1) Elementary schools shall conduct six fire drills and six emergency drills every school year; middle and high schools shall conduct four fire drills and six emergency drills every school year. Not less than one emergency egress drill shall be conducted every month the facility is in session, unless both of the following criteria are met:~~

~~(a) In elementary schools, four of the six fire drills shall involve evacuating the building to a designated meeting location outside of the building; two of the six fire drills can be age-appropriate fire prevention training with content approved by the AHJ; of the six emergency drills, four of the drills shall address active threats (active assailant, hostage, bomb threat, etc.); two drills shall address events such as severe weather, natural disasters, reunification, etc. In climates where the weather is severe, the monthly emergency egress drills shall be permitted to be deferred.~~

~~(b) In high schools and middle schools, three of the four fire drills shall involve evacuating the building to a designated meeting location outside of the building; one of the drills can be age appropriate fire prevention training with content approved by the AHJ; of the six emergency drills, four of the drills shall address active threats (active assailant, hostage, bomb threat, etc.); and two drills shall address events such as severe weather, natural disasters, reunification, etc. The required number of emergency egress drills shall be conducted, and not less than four shall be conducted before the drills are deferred.~~

~~(c) ESE students and exceptional student centers may be afforded some alternatives to these requirements, where approved by the AHJ.~~

~~(2) All students, faculty, safe-school officers, guardians, and volunteers must participate in emergency drills; that law enforcement officers be physically present on campus and directly involved in the execution of active assailant emergency drills; emergency drills include the exercise of all necessary aspects of the drill including panic buttons, simulated communications with first responders, notification to parents of the drill, student/faculty movement, turning lights off, covering windows, etc. All occupants of the building shall participate in the drill.~~

~~(3) The first fire and emergency drills shall take place within the first ten days of school. One additional emergency egress drill, other than for educational occupancies that are open on a year-round basis, shall be required within the first 30 days of operation.~~

~~(4) Each school shall complete an after-action report subsequent to every fire and emergency drill on campus. After-action report shall be provided to the Authority Having Jurisdiction upon request.~~

~~[101:14.7.2.3; 101:15.7.2.3]~~

20.2.4.2.5 All emergency drill alarms shall be sounded on the fire alarm system or by other methods approved by the AHJ. [101:14.7.2.5; 101:15.7.2.5]

20.2.4.2.4*

~~Where permitted by the authority having jurisdiction, up to two of the emergency egress drills required by 20.2.4.2.3 shall be permitted to consist of alternative emergency drills for one or both of the following:~~

- ~~(1) Targeted violence events~~
 - ~~(2) Natural hazard events~~
- ~~[101:14.7.2.4; 101:15.7.2.4]~~

50.6.6.1 If upon inspection, the exhaust system is found to be contaminated with deposits from grease-laden vapors, the contaminated portions of the exhaust system shall be cleaned by a properly trained qualified, and certified person(s) acceptable to the AHJ or through the use of an automated exhaust cleaning system installed in the exhaust system and acceptable to the AHJ.
[96:12.6.1]

65.10 Sale, Handling, and Storage of Consumer Fireworks.

65.10.1* Applicability.

65.10.1.1* General Requirements. Retail sales of consumer fireworks in both new and existing buildings, structures, and facilities shall comply with the requirements of this section unless otherwise indicated.

65.10.1.1.1 New Facilities.

65.10.1.1.1.1 For the purpose of applying the requirements of this section, the following consumer fireworks retail sales (CFRS) facilities and stores shall be considered to be new:

(1) Permanent CFRS facilities and stores that are not initially occupied until after the effective date of this Code, unless plans are submitted and accepted for review, plans have been approved for construction, or a building permit has been issued prior to the effective date of this Code.

(2) Permanent CFRS facilities and stores constructed prior to the effective date of this Code and in which the retail sales of consumer fireworks have not been conducted either seasonally or year-round within one year prior to the effective date of this Code.

(3) Temporary CFRS facilities and stores.

65.10.1.1.1.2 In a store where the area of the retail sales floor occupied by the retail displays of consumer fireworks is increased after the effective date of this Code, such that the area exceeds the limits to be specified in 65.10.5.1.1(1), the building shall be considered to be a new CFRS facility.

65.10.1.1.2 Existing Facilities. For the purpose of applying the requirements of Section 65.10, CFRS facilities and stores not considered to be new as specified in 65.10.1.1.1 shall be considered to be existing.

65.10.1.1.3 Minimum Requirements. Existing life safety features that do not meet the requirements for new buildings but that exceed the requirements for existing buildings shall not be further diminished.

65.10.1.1.4 Modernization or Renovation. Any alteration or any installation of new equipment shall meet, as nearly as practicable, the requirements for new construction.

65.10.1.1.4.1 Only the altered, renovated, or modernized portion of an existing building, system, or individual component shall be required to meet the provisions of this Code that are applicable to new construction.

65.10.1.1.4.2 If the alteration, renovation, or modernization adversely impacts required life safety features, additional upgrading shall be required.

65.10.1.1.4.3 Except where another provision of this Code exempts a previously approved feature from a requirement, the resulting feature shall not be less than that required for existing buildings.

65.10.1.2 Facility Classification. The requirements of this section shall apply to the following:

- (1) Permanent buildings and structures, including the following:
 - (a) Stores
 - (b) CFRS facilities
- (2) Temporary facilities, including the following:
 - (a) CFRS stands
 - (b) Tents
 - (c) Canopies
 - (d) Membrane structures

65.10.2 Special Limits for Retail Sales of Consumer Fireworks.

65.10.2.1 Retail sales of consumer fireworks, including their related storage and display for sale of such fireworks, shall be in accordance with this Code.

65.10.2.2 Retail sales of consumer fireworks shall be limited to mercantile occupancies defined in ~~3.3.203.19~~ 3.3.19.19 and NFPA 101.

65.10.2.3 Any building or structure used for the retail sales of consumer fireworks, including their related storage, shall comply with Section 20.12 and NFPA 101 for mercantile occupancies, except as provided in this Code.

65.10.2.4 Retail sales of display fireworks and pyrotechnic articles, including the related storage and display for sale of such fireworks and articles, shall be prohibited at a CFRS facility or store.

65.10.2.5 Retail sales of certain explosive devices prohibited by the *Child Safety Act of 1966*, including the related storage and display for sale of such devices, shall be prohibited at a CFRS facility or store.

65.10.2.6 The retail sales of pest control devices, including their related storage and display for sale, shall be prohibited at a CFRS facility or store.

65.10.2.7 The retail sales of fireworks that do not comply with the regulation of the U.S. Consumer Product Safety Commission as set forth in 16 CFR 1500 and 1507 and the regulations of the U.S. Department of Transportation as set forth in 49 CFR 100 to 178, including their related storage and display for sale, shall be prohibited.

65.10.3 General Requirements for All Retail Sales.

65.10.3.1 Exempt Amounts.

65.10.3.1.1 The requirements of this section shall not apply to CFRS facilities or stores where the consumer fireworks are in packages and where the total quantity of consumer fireworks on hand does not exceed 125 lb (net) [56.8 kg] of pyrotechnic composition or, in a building protected throughout with an approved automatic sprinkler system installed in accordance with Section 13.3, 250 lb (net) [113.6 kg] of pyrotechnic composition.

65.10.3.1.2 Where the actual weight of the pyrotechnic composition of consumer fireworks is not known, 25 percent of the gross weight of the consumer fireworks, including packaging, shall be permitted to be used to determine the weight of the pyrotechnic composition.

65.10.3.2* Permits. Where required by state or local laws, ordinances, or regulations, a permit for the following shall be obtained:

- (1) Construction, erection, or operation of the following:
 - (a) Permanent building or structure
 - (b) Temporary structure such as a stand, tent, or canopy used for the purpose of the retail display or sale of consumer fireworks to the public

(2) Storage of consumer fireworks in connection with the retail display or sale of consumer fireworks to the public.

65.10.3.3 Plans. Plans for facilities other than stands and tents shall include the following:

(1) Minimum distances from the following:

(a) Public ways

(b) Buildings

(c) Other CFRS facilities

(d) Motor vehicles fuel-dispensing station dispensers

(e) Retail propane-dispensing station dispensers

(f) Flammable and combustible liquid aboveground tank storage

(g) Flammable gas and flammable liquefied gas bulk aboveground storage and dispensing areas within 300 ft (91.5 m) of the facility used for the retail sales of consumer fireworks

(2) Vehicle access and parking areas

(3) Location and type of portable fire extinguishers

(4) Floor plan and layout of storage and displays to indicate compliance with this chapter and applicable state or local laws, ordinances, or regulations

(5) Means of egress

(6) Construction details

65.10.3.4 Fire Department Access. Any portion of an exterior wall of a building, sidewall of a tent, or other defined perimeter of a CFRS facility or store shall be accessible within 150 ft (45.7 m) of a public way or an approved fire apparatus access.

65.10.3.5 Construction of Buildings and Structures. Consumer fireworks shall only be permitted to be sold at retail in any of the following buildings or structures, provided that any new building or structure does not exceed one story in height:

(1) Permanent buildings or structures constructed in accordance with the building code enforced by the AHJ

(2) Tents, canopies, or temporary membrane structures complying with NFPA 102, *Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures*

(3) Temporary structures constructed in accordance with this chapter

(4) Temporary CFRS stands greater than 800 ft² (74 m²) in area that also meet the requirements for a permanent structure

(5) Vehicles, such as vans, buses, trailers, recreational vehicles, motor homes, travel trailers, trucks, and automobiles, complying with the applicable requirements for CFRS stands.

65.10.3.6 An automatic sprinkler system designed and installed in accordance with Section 13.3 and NFPA 13 shall be provided throughout permanent CFRS facilities and stores in which CFRS are conducted in the following buildings:

(1) New buildings greater than 6000 ft² (557.2 m²) in area

(2) Existing buildings greater than 7500 ft² (694 m²) in area

65.10.3.6.1 Door and window openings in the fire barrier wall shall be protected by self-closing fire doors or fixed fire windows having a fire protection rating of not less than 1 hour and shall be installed in accordance with Section 12.4 and NFPA 80, *Standard for Fire Doors and Other Opening Protectives*.

65.10.3.6.3 Every CFRS facility and store shall have no fewer than two portable fire extinguishers with a minimum rating of 2A, at least one of which shall be of the pressurized water type.

65.10.3.7 Storage Rooms. Storage rooms containing consumer fireworks in a new permanent CFRS facility or store shall be protected with an automatic sprinkler system installed in accordance with Section 13.3 and NFPA 13 or separated from the retail sales area by a fire barrier having a fire resistance rating of not less than 1 hour.

65.10.3.7.1 Consumer fireworks, except for sparklers, novelties, and trick noisemakers as defined in Section 791.01(4)(b) and (c), F.S., stored in a building that is also used for other purposes shall be stored in a room or area used exclusively for the storage of consumer fireworks.

65.10.3.7.2 When approved by the AHJ, noncombustible materials shall be permitted to be stored in the same room or area with consumer fireworks.

65.10.3.7.3 Sparklers shall be stored or kept for sale in accordance with Section 791.055, F.S.

65.10.3.8 Portable Fire Extinguishers.

65.10.3.8.1 Specification. Portable fire extinguishers shall be provided as required for extra (high) hazard occupancy in accordance with Section 13.6 and NFPA 10.

65.10.3.8.2 Extinguisher Type. Where more than one portable fire extinguisher is required, at least one fire extinguisher shall be of the multipurpose dry chemical type if the facility is provided with electrical power.

65.10.3.8.3 Location. Portable fire extinguishers for permanent consumer fireworks retail sales facilities and stores shall be located so that the maximum distance of travel required to reach an extinguisher from any point does not exceed 75 ft (23 m), as specified in NFPA 10.

65.10.3.9 Fire Alarms. A fire alarm system shall be provided as required by Section 13.7 and NFPA 101.

65.10.3.10 Smoke Control.

65.10.3.10.1 Smoke and heat vents designed and installed in accordance with NFPA 204, *Standard for Smoke and Heat Venting*, shall be provided in the CFRS area of new permanent CFRS facilities or stores where the ceiling height is less than 10 ft (3.05 m) and the travel distance to reach an exit is greater than 25 ft (7.6 m).

65.10.3.10.2 The smoke and heat vents required by 65.10.3.10.1 shall be automatically activated by a smoke detection system installed throughout the CFRS area in accordance with NFPA 72.

65.10.3.11 No Smoking Signs.

65.10.3.11.1 Smoking shall not be permitted inside or within 50 ft (15.5 m) of the CFRS area.

65.10.3.11.2 At least one sign that reads as follows, in letters at least 2 in. (51 mm) high on a contrasting background, shall be conspicuously posted at each entrance or within 10 ft (3.05 m) of every aisle directly serving the CFRS area in a store: FIREWORKS – NO SMOKING

65.10.3.12 Distance from Bulk Dispensing and Bulk Storage.

65.10.3.12.1 CFRS facilities and stores shall not be located within 50 ft (15.2 m) of the following:

(1) Retail propane-dispensing station dispensers

(2) Aboveground storage tanks for flammable or combustible liquid, flammable gas, or flammable liquefied gas

(3) Compressed natural gas-dispensing station dispensers

65.10.3.12.2 New CFRS facilities and stores, existing CFRS stands and tents, and temporary CFRS facilities shall not be located within 50 ft (15.2 m) of motor vehicle fuel-dispensing station dispensers.

65.10.3.12.3 Existing CFRS facilities, other than CFRS stands, tents, and temporary facilities, and existing stores shall not be located within 25 ft (7.6 m) of motor vehicle fuel-dispensing station dispensers.

65.10.3.12.4 Fuel tanks on vehicles or other motorized equipment shall not be considered bulk storage.

65.10.3.12.5 Fuel storage for generators shall be in accordance with 65.10.4.9.2.

65.10.3.12.6 CFRS areas and storage areas shall not be located within 300 ft (91.2 m) of any aboveground bulk storage or bulk dispensing areas for the following:

- (1) Flammable or combustible liquid
- (2) Flammable gas
- (3) Flammable liquefied gas

65.10.3.13* **Fire Safety and Evacuation Plan.** For a CFRS facility or store, an approved fire safety and evacuation plan shall be prepared in writing and maintained current.

65.10.3.14 Means of Egress.

65.10.3.14.1 Number of Exits.

65.10.3.14.1.1 The minimum number of exits provide from the retail sales area shall be not less than three or as determined in accordance with Chapter 14 and NFPA 101, whichever number is greater.

65.10.3.14.1.2 Required means of egress from the retail sales area shall not be allowed to pass through storage rooms.

65.10.3.14.2 Egress Travel Distance. Exits provided for the retail sales area of tents, membrane structures, canopies, and permanent CFRS facilities, including Class C stores, shall be located so that the maximum egress travel distance, measured from the most remote point to an exit along the natural and unobstructed path of egress travel, does not exceed 75 ft (22.9 m).

65.10.3.14.3 Aisles. Aisles serving as a portion of the exit access in CFRS areas shall comply with this paragraph.

65.10.3.14.3.1 Aisle Width.

65.10.3.14.3.1.1 Aisles shall have a minimum clear width of 48 in. (1.2 m).

65.10.3.14.3.1.2 The required width of aisles shall be maintained unobstructed at all times the facility is occupied by the public.

65.10.3.14.3.2 Aisle Arrangements.

65.10.3.14.3.2.1 Not less than one aisle shall be provided and arranged so that travel along the aisle leads directly to an exit.

65.10.3.14.3.2.2 Other required exits shall be located at, or within 10 ft (3.05 m) of, the end of an aisle or a cross-aisle.

65.10.3.14.3.2.3 Aisles shall terminate at an exit, another aisle, or a cross-aisle.

65.10.3.14.3.2.4 Dead-end aisles shall be prohibited.

65.10.3.14.3.2.5 Where more than one aisle is provided, not less than one cross-aisle shall have an unobstructed connection with every aisle, other than cross-aisles.

65.10.3.14.3.2.6 Cross-aisle connections shall be provided for each aisle at intervals not greater than 40 ft (15.2 m) as measured along the aisle.

65.10.3.14.3.2.7 Where cross-aisles are required, not less than one cross-aisle shall have at least one end terminate at, or within 10 ft (3.05 m) of, an exit.

65.10.3.14.4 Doors and Doorways. Doors and doorways used in the means of egress shall comply with this paragraph.

65.10.3.14.4.1 Egress doors shall not be less than 36 in. (910 mm) in width [providing a minimum of 32 in. (813 mm) clear width].

65.10.3.14.4.2 Every egress door that has a latching device shall be provided with panic hardware complying with Chapter 14 and NFPA 101.

65.10.3.14.4.3 Means of egress doors shall be of the side-hinge swinging type and shall be arranged to swing in the direction of egress travel.

65.10.3.14.5 Exit Signs.

65.10.3.14.5.1 Exits shall be marked by an approved exit sign in accordance with Section 14.14 and NFPA 101.

65.10.3.14.5.2 Exit signs shall be required to be self-luminous or internally or externally illuminated.

65.10.3.14.6 Emergency Lighting.

65.10.3.14.6.1 The means of egress, including the exit discharge, shall be illuminated whenever the facility is occupied in accordance with Section 14.12 and NFPA 101.

65.10.3.14.6.2 Emergency lighting shall be provided for CFRS facilities and stores and shall comply with Section 14.13 and NFPA 101.

65.10.3.15* Retail Sales Displays.

65.10.3.15.1 General. The requirements of this section shall apply only to CFRS areas, unless otherwise specifically indicated.

65.10.3.15.2* Height of Sales Displays. To provide for visual access of the retail sales area by the employees and customers, partitions, counters, shelving, cases, and similar space dividers shall not exceed 6 ft (1.8 m) in height above the floor surface inside the perimeter of the retail sales area.

65.10.3.15.2.1 Merchandise on display or located on shelves or counters or other fixtures shall not be displayed to a height greater than 6 ft (1.8 m) above the floor surface within the CFRS area.

65.10.3.15.2.2 Where located along the perimeter of the consumer fireworks retail sales area, the maximum height of sales displays shall be limited to 12 ft (3.66 m).

65.10.3.15.3* Flame Breaks.

65.10.3.15.3.1 Where continuous displays of consumer fireworks are located on shelving, cases, counters, and similar display fixtures, a flame break shall be provided so that the maximum distance between flame breaks does not exceed 16 ft (4.9 m) where measured along the length of the display.

65.10.3.15.3.2 The flame break shall extend as follows:

(1) From the display surface to not less than 6 in. (150 mm) above the full height of the displayed merchandise or to the underside of the display surface directly above

(2) For the full depth of the displayed merchandise

65.10.3.15.3.3* Where packaged fireworks merchandise is displayed on the same level as individual unpackaged fireworks devices, the flame break required in 65.10.3.15.3.1 shall not be required where both of the following criteria are met:

(1) The length of the display level containing individual unpackaged fireworks devices is interrupted by packaged fireworks merchandise, or open space, or any combination thereof, having a continuous length of not less than 8 ft (2.4m)

(2) The distance between flame breaks does not exceed 32 ft (9.8 m).

65.10.3.15.3.4 Where a merchandise display level contains packaged fireworks merchandise, such merchandise shall be permitted to be displayed in a continuous length on the same level, where the display does not exceed 32 ft (9.8 m) without the flame break required in 65.10.3.15.3.1.

65.10.3.15.3.5 An aisle having a minimum width of 48 in. (1.2 m) shall be permitted to substitute for the flame break required in 65.10.3.15.3.1.

65.10.3.15.3.6 Where displays of merchandise face aisles that run along both long sides of the display fixtures or display surface, a flame break shall be installed lengthwise between the abutting display fixtures or along the approximate longitudinal centerline of the display surface so as to separate the merchandise facing one of the aisles from the merchandise that abuts it facing the other aisle.

65.10.3.15.3.7 Freestanding display racks, pallets, tables, or bins containing packaged fireworks merchandise shall be permitted without flame breaks, provided the dimensions of the area occupied by the fireworks merchandise do not exceed 4 ft (1.2 m) in width, 8 ft (2.4 m) in length, and 6 ft (1.8 m) in height, and the displayed fireworks merchandise is separated from other displays of merchandise by aisles having a minimum clear width of 4 ft (1.2 m).

65.10.3.15.3.8 Where both of the facing vertical surfaces of the abutting display fixtures are constructed of perforated hardboard panels not less than ¼ in. (6 mm) thick that are separated from each other by an open space not less than 1 ½ in. (38 mm) wide, a flame break specified in 65.10.3.15.3.6 shall not be required.

65.10.3.15.4 Shelving.

65.10.3.15.4.1 Shelving or other surfaces used to support fireworks display merchandise shall be permitted to have not more than 10 percent of the area of the shelf contain holes or other openings.

65.10.3.15.4.2 The 10 percent limitation on the area of holes or other openings in the shelf used to support fireworks display merchandise shall not be applicable under the following conditions:

(1) Where both of the facing vertical surfaces of the abutting display fixtures are constructed of perforated hardboard panels not less than ¼ in. (6 mm) thick and separated from each other by an open space not less than 1 ½ in. (38 mm) wide

(2) Where such merchandise is suspended from or fastened to the shelf or surface or is displayed as packaged merchandise on the surface or in bins.

65.10.3.15.4.3 Flame breaks and solid display surfaces shall not be required for packaged fireworks merchandise displayed in bins or display racks or on pallets or tables located at the end of a row of display fixtures where the following conditions are met:

(1) Such end displays are separated from the ends of the display fixtures by an open space not less than 3 in. (76 mm) wide.

(2) The fireworks merchandise occupies an area having dimensions not greater than the width of the end of the row of display fixtures and a depth not greater than 36 in.

(3) The minimum required widths of the adjacent aisles are maintained, but in no case is the aisle width less than 48 in. (1.2 m).

65.10.3.15.5 Covered Fuses.

65.10.3.15.5.1 Only consumer fireworks meeting the criteria for covered fuses as defined in 3.3.311 or as described in 65.10.3.15.5.2 shall be permitted where the retail sales of consumer fireworks are conducted.

65.10.3.15.5.2 A consumer fireworks device shall be considered as having a covered fuse if the fireworks device is contained within a packaged arrangement, container, or wrapper that is arranged and configured such that the fuse of the fireworks device cannot be touched directly by a person handling the fireworks without the person having to puncture or tear the packaging or wrapper, unseal or break open a package or container, or otherwise damage or destroy the packaging material, wrapping, or container within which the fireworks are contained.

65.10.3.15.6* Aerial Devices. Aerial devices shall be packaged and displayed for sale in a manner that will limit travel distance of ejected pyrotechnic components if ignition of the fireworks occurs.

65.10.3.15.7* Horizontal Barriers. Combustible materials and merchandise shall not be stored directly above the consumer fireworks in retail sales displays unless a horizontal barrier is installed directly above the consumer fireworks.

65.10.3.16 Electrical Equipment. All electrical wiring shall be in accordance with *NFPA 70*.

65.10.3.17 Heating Equipment.

65.10.3.17.1 Heating units shall be listed and shall be used in accordance with their listing.

65.10.3.17.2 Temporary heating sources shall have tip-over and temperature-overheat protection.

65.10.3.17.3 Open-flame and exposed-element heating devices shall be prohibited.

65.10.3.18 Portable Generators.

65.10.3.18.1 Class II and Class III combustible liquid generator fuel shall be limited to not more than 5 gal (18.9 L).

65.10.3.18.2 Portable generators shall be permitted to use Class I flammable liquids as fuel, provided the quantity of such fuel is limited to 2 gal (7.6 L).

65.10.3.19 Operations.

65.10.3.19.1 General. Means of egress, including but not limited to aisles, doors, and exit discharge, shall be clear at all times when the facility or the building is occupied.

65.10.3.19.2 Distances from Entrances and Exits.

65.10.3.19.2.1 No consumer fireworks shall be displayed for sale or stored within 5 ft (1.5 m) of any public entrance in an enclosed building or structure.

65.10.3.19.2.2 No consumer fireworks shall be displayed for sale or stored within 2 ft (0.6 m) of any exit or private entrance in an enclosed building or structure.

65.10.3.19.3 Security.

65.10.3.19.3.1 CFRS facilities and stores shall be secured when unoccupied and not open for business, unless fireworks are not kept in the facility during such times.

65.10.3.19.3.2 The fireworks displayed or stored in a CFRS facility or store shall be allowed to be removed and transferred to a temporary storage structure or location.

65.10.3.19.4 Fireworks shall not be ignited, discharged, or otherwise used within 300 ft (91.5 m) of a CFRS facility or store.

65.10.3.20 Display and Handling. Not less than 50 percent of the available floor area within the retail sales area shall be open space that is unoccupied by retail displays and used only for aisles and cross-aisles.

65.10.3.21* Housekeeping.

65.10.3.21.1 CFRS areas and storage rooms shall be kept free of accumulations of debris and rubbish.

65.10.3.21.2 Any loose pyrotechnic composition shall be removed immediately.

65.10.3.21.3 Vacuum cleaners or other mechanical cleaning devices shall not be used.

65.10.3.21.4 Brooms, brushes, and dustpans used to sweep up any loose powder or dust shall be made of nonsparking materials.

65.10.3.21.5 Consumer fireworks devices that are damaged shall be removed and not offered for sale.

65.10.3.21.6 Damaged consumer fireworks shall be permitted to be returned to the dealer or shall be disposed of according to the manufacturer's instructions.

65.10.3.22* Training. All personnel handling consumer fireworks shall receive safety training related to the performance of their duties.

65.10.3.23 Under the Influence. Any person selling consumer fireworks shall not knowingly sell consumer fireworks to any person who is obviously under the influence of alcohol or drugs.

65.10.3.24 Records.

65.10.3.24.1 Records shall be maintained on available inventory on the premise.

65.10.3.24.2 Records shall be made available to the AHJ upon request.

65.10.4 Consumer Fireworks Retail Sales (CFRS) Facility Requirements.

65.10.4.1 Plan. Where required, plans for CFRS facilities shall be submitted to the AHJ with the permit application.

65.10.4.2 Site Plan. The site plan for tents shall show the location of the tent on the site and indicate the minimum separation distances required by 65.10.4.7.

65.10.4.3 Construction Materials. The following construction materials requirements shall apply to new permanent CFRS facilities in jurisdictions that have not adopted a local building code:

(1) Buildings having an area up to and including 8000 ft² (743 m²) shall be permitted to be constructed of any approved construction materials.

(2) Buildings having an area greater than 8000 ft² (743 m²) shall be constructed in accordance with one of the following:

(a) Buildings shall be constructed of noncombustible or limited-combustible materials.

(b) Buildings with exterior walls having a fire resistance rating of not less than 2 hours shall be permitted to have the roof decking and its supporting structure and interior partitions constructed of combustible materials.

(3) Roof coverings for any building shall have a minimum rating of Class C as determined in accordance with ASTM E108, *Standard Test Methods for Fire Tests of Roof Coverings*.

65.10.4.4 Multiple-Tenant Buildings.

65.10.4.4.1 Where new CFRS facilities are located in a building containing other tenants, the CFRS facility shall be separated from the other tenants by fire barriers having no openings and a fire resistance rating of not less than 2 hours.

65.10.4.4.2 Where the new CFRS facility is protected per Section 13.3 and NFPA 13, the fire resistance rating of the fire barrier required by 65.10.4.4.1 shall be permitted to be not less than 1 hour.

65.10.4.4.3 Any penetrations of the fire barrier shall be protected in accordance with NFPA 101.

65.10.4.5 Fire Protection.

65.10.4.5.1 Automatic Sprinkler System Alarm. Any waterflow alarm device shall be arranged to activate audible and visual alarms throughout the CFRS facility in accordance with Section 13.7 and NFPA 72.

65.10.4.5.2 Portable Fire Extinguishers. Portable fire extinguishers for temporary CFRS facilities shall be installed and located so that the maximum distance of travel required to reach an extinguisher from any point does not exceed 35 ft (10.6 m).

65.10.4.5.3 Public Notification. In permanent CFRS facilities greater than 3000 ft² (278.6 m²) in area, a public address system or a means for manually activating audible and visible alarm indicating devices located throughout the facility in accordance with Section 13.7 and NFPA 72 shall be provided at a constantly attended location when the CFRS facility is occupied.

65.10.4.6 Site Requirements.

65.10.4.6.1 Clearance to Combustibles. The area located within 30 ft (9 m) of a CFRS facility shall be kept free of accumulated dry grass, dry brush, and combustible debris.

65.10.4.6.2 Parking. No motor vehicle or trailer used for the storage of consumer fireworks shall be parked within 10 ft (3 m) of a CFRS facility, except when delivering, loading, or unloading fireworks or other merchandise and materials used, stored, or displayed for sale in the facility.

65.10.4.6.3 Fireworks Discharge. At least one sign that reads as follows, in letters at least 4 in. (102 mm) high on a contrasting background, shall be conspicuously posted on the exterior of each side of the CFRS facility:

NO FIREWORKS DISCHARGE
WITHIN 300 FEET

65.10.4.7 Separation Distances.

65.10.4.7.1 Permanent Facilities.

65.10.4.7.1.1 New Facilities. New permanent consumer fireworks retail sales facilities shall be separated from adjacent buildings and structures in accordance with Table 65.10.4.7.1.1.

TABLE 65.10.4.7.1.1 Separation Distances Between New Permanent Buildings and Structures

Separation Distances		Exterior Wall Fire Resistance Rating (hr)	Exterior Wall Opening Protection Rating (hr)
ft	m		
< 10	< 3.05	2	1½
≥ 10 to < 60	≥ 3.05 to < 18.3	1	¾
≥ 60	≥ 18.3	0	0

[1124: Table 7.4.7.1.1]

65.10.4.7.1.2 Existing Facilities. Existing permanent CFRS facilities shall be separated from adjacent permanent buildings and structures by not less than 10 ft (3.05 m) or shall be separated by a wall with a 1-hour fire resistance rating.

65.10.4.7.2 Temporary Facilities. Temporary CFRS facilities shall be located as specified in Table 65.10.4.7.2.

TABLE 65.10.4.7.2 Temporary CFRS Facilities — Minimum Separation Distances

	Buildings		Combustibles ^a		Tents ^b		Vehicle Parking		Stands ^c		Storage of Consumer Fireworks	
	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
Tents ^b	20	6.1	20	6.1	20	6.1	10	3.05	20	6.1	20	6.1
Stands ^c	20	6.1	10	3.05	20	6.1	10	3.05	5 ^d	1.5 ^d	20	6.1

^aThe required clearances to combustibles shall also comply with 65.10.4.6.1.

^bTents refers to temporary retail sales of consumer fireworks in tents, canopies, and membrane structures.

^cStands refers to temporary CFRS stands.

^dWhere stands are separated from each other by less than 20 ft (6.1 m), the aggregate area of such stands shall not exceed 800 ft² (74 m²). [1124: Table 7.4.7.2]

65.10.4.8 Means of Egress.

65.10.4.8.1 General.

65.10.4.8.1.1 Means of egress in CFRS facilities shall comply with the applicable requirements of Chapter 14 and NFPA 101, as modified by 65.10.3.14 and 65.10.4.8.

65.10.4.8.1.2 Means of egress in tents and membrane structures used for retail sales of consumer fireworks shall also comply with NFPA 102, as modified by 65.10.3.14 and 65.10.4.8.

65.10.4.8.2 The evacuation plan shall be posted in a conspicuous location that is accessible to the public as well as to persons employed or otherwise working in the CFRS facility.

65.10.4.8.3 Exit signs shall not be required to be illuminated in tents that are not open for business after dusk.

65.10.4.8.4 Emergency lighting shall not be required in tents that are not open for business after dusk.

65.10.4.8.5 Exit openings from tents shall have a clear opening width of not less than 44 in. (1100 mm).

65.10.4.9 Source of Ignition.

65.10.4.9.1 Temporary Electrical Equipment. Battery-powered equipment, electrical equipment, and electrical cords that are used in conjunction with a CFRS facility area shall be listed and shall be used in accordance with their listing.

65.10.4.9.1.1 Temporary wiring installed in a temporary structure, including tents and canopies, shall comply with *NFPA 70*.

65.10.4.9.1.2 Where temporary electrical conductors are placed on top of an outdoor surface to connect the permanent power source to the temporary CFRS facility's temporary electrical system, the conductors shall be provided with physical protection against damage caused by pedestrian or vehicular traffic.

65.10.4.9.2 Portable Generators.

65.10.4.9.2.1 Portable generators supplying power to CFRS facilities shall use only Class II or Class III combustible liquid fuels.

65.10.4.9.2.2 Portable generators shall be located not less than 20 ft (6.1 m) from the CFRS facility.

65.10.4.9.2.3 Generator fuels shall not be stored less than 20 ft (6.1 m) from the CFRS facility.

65.10.4.9.2.4* Where the generator fuel storage is located not less than 50 ft (15.2 m) from the CFRS facility, the quantity of such fuel shall not be limited by 65.10.3.18.

65.10.4.9.3 Cooking Equipment.

65.10.4.9.3.1 Cooking equipment of any type shall not be permitted within 20 ft (6.1 m) of tents, canopies, or membrane structures used for the storage or sale of consumer fireworks.

65.10.4.9.3.2 Open flame cooking equipment of any type shall not be allowed within 50 ft (15.2 m) of tents, canopies, or membrane structures used for the storage or sale of consumer fireworks.

65.10.4.10 Quantity Limitations. The floor area occupied by the retail displays of consumer fireworks in permanent CFRS facilities shall not exceed 40 percent of the available floor area within the retail sales area.

65.10.4.11 Flame Breaks. In CFRS facilities, the longitudinal flame break required in 65.10.3.15.3.6 shall not be required where the display fixture or surface is adjacent to an aisle that is not used for public egress.

65.10.5 Stores.

65.10.5.1 General.

65.10.5.1.1* For the purpose of this chapter, stores in which retail sales of consumer fireworks are conducted shall not be considered CFRS facilities as defined in 3.3.308 where both of the following conditions exist:

(1) The area of the retail sales floor occupied by the retail displays of consumer fireworks does not exceed 25 percent of the area of the retail sales floor in the building or 600 ft² (55.5 m²), whichever is less.

(2) The consumer fireworks are displayed and sold in a manner approved by the AHJ and comply with the applicable provisions of this code, federal and state law, and local ordinances.

65.10.5.1.2 Consumer fireworks displayed for sale in stores shall comply with the following:

(1) Such fireworks shall be under the visual supervision of a store employee or other responsible party while the store is open to the public.

(2) Such fireworks shall be packaged fireworks merchandise.

(3)* Such fireworks shall be packaged and displayed for sale in a manner that will limit travel distance of ejected pyrotechnical components if ignition of the fireworks occurs.

(4) Where consumer fireworks meeting the descriptions of C.3.1.2 or C.3.1.3 of NFPA 1124 for aerial devices and audible ground devices, respectively, are sold, such devices shall be displayed for sale in an area of the store that is physically separated from the rest of the store in a manner that restricts the entry by the public, and the area of the store shall be provided with not less than two means of egress, so located that there is no common path of travel and the distance to reach an egress point from the area does not exceed 35 ft (10.7 m).

65.10.5.2 Egress. Means of egress in stores shall comply with Chapter 14 and NFPA 101, unless otherwise specified in 65.10.3.14.

65.10.5.3 Storage Rooms. Storage rooms containing consumer fireworks in a new permanent store shall be protected with an automatic sprinkler system installed in accordance with Section 13.3 and NFPA 13 or separated from the retail sales area by a fire barrier having a fire resistance rating of not less than 1 hour.

65.10.5.3.1 Door and window openings in the fire barrier wall shall be protected by self-closing fire doors or fixed fire windows having a fire protection rating of not less than 1 hour and shall be installed in accordance with Section 12.4 and NFPA 80.

65.10.5.3.2 Any other openings or penetrations in the fire barrier wall shall be protected in accordance with NFPA 101.

65.10.5.4 Alarm Notification. In Class B stores, a public address system or a means for manually activating audible and visible alarm indicating devices located throughout the facility in accordance with Section 13.7 and NFPA 72 shall be provided at a constantly attended location when the store is occupied.

65.10.5.5 Flame breaks shall be allowed to be omitted in stores protected throughout with an automatic sprinkler system installed in accordance with Section 13.3 and NFPA 13.

65.10.6 Stands.

65.10.6.1 Site Plan. The site plan for stands shall show the location of the stand on the site and indicate the minimum separation distances required by 65.10.4.7.

65.10.6.2 Temporary Stands.

65.10.6.2.1 Portable Fire Extinguisher. Temporary CFRS stands of less than 200 ft² (18.6 m²) shall be required to have only one portable fire extinguisher.

65.10.6.2.2 Fire Safety and Evacuation Plan. An approved fire safety and evacuation plan shall not be required for temporary CFRS stands.

65.10.6.2.3 Means of Egress.

65.10.6.2.3.1 Retail sales areas within temporary CFRS stands shall have a minimum of two exits.

65.10.6.2.3.2 Exits provided for temporary fireworks retail sales stands shall be located such that the maximum egress travel distance as measured from the most remote point to an exit along the natural and unobstructed path of egress travel does not exceed 35 ft (10.6 m).

65.10.6.2.3.3 Customers shall not be permitted inside a temporary CFRS stand unless it complies with the means of egress requirements in 65.10.3.14.

65.10.6.2.3.4 Exit signs shall not be required to be illuminated in stands that are not open for business after dusk, or in temporary CFRS stands where the interior is not accessible to the public.

65.10.6.2.3.5 Emergency lighting shall not be required in stands that are not open for business after dusk or for temporary CFRS stands where the interior is not accessible to the public.

65.10.6.3 Minimum Separation Distances. Temporary CFRS stands shall be separated from adjacent buildings and structures in accordance with Table 65.10.4.7.2.

65.10.6.4 Stands Not Open to the Public.

65.10.6.4.1 Minimum Clear Width of Aisles. In temporary CFRS stands where the interior is not accessible to the public, the minimum clear width of the aisle shall be permitted to be not less than 28 in. (710 mm).

65.10.6.4.2 Egress Doors.

65.10.6.4.2.1 Egress doors provided for temporary CFRS stands where the interior is not accessible to the public shall be permitted to be not less than 28 in. (710 mm) in width.

65.10.6.4.2.2 For temporary CFRS stands where the interior is not accessible to the public, latching devices on doors shall be permitted without panic hardware.

65.10.6.4.3 Storage. In temporary CFRS stands where the interior is not accessible to the public, the maximum height of sales displays shall be limited to 8 ft (2.44 m).

65.10.6.4.4 Flame Breaks. Temporary CFRS stands where the interior is not accessible to the public shall not be required comply with 65.10.3.15.3.

65.10.6.4.5 Covered Fuses. Individual consumer fireworks items displayed for sale in temporary CFRS stands where the interior is not accessible to the public shall not be required to have covered fuses.

65.10.6.4.6 Sales Display. The following shall apply to the sales display of consumer fireworks in temporary CFRS stands that do not allow access to the interior of the stand by the public:

(1) Consumer fireworks shall be displayed in a manner that prevents the fireworks from being handled by persons other than those operating, supervising, or working in the temporary CFRS stand.

(2) The handling requirements of 65.10.6.4.6(1) shall not apply to packaged assortments, boxes, or similarly packaged containers of one or more items, regardless of type.

FL specific Annex sections:

3.3.309* Consumer Fireworks Retail Sales (CFRS) Stand. A temporary or permanent building or structure that has a floor area not greater than 800 ft² (74 m²), other than tents, canopies, or membrane structures, that is used primarily for the retail display and sale of consumer fireworks to the public.

3.3.310* Fireworks. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, or detonation, and that meets the definition of *Consumer Fireworks or Display Fireworks as set forth in this Code.*

3.3.310.1* Consumer Fireworks. Small fireworks devices containing restricted amounts of pyrotechnic composition, designed primarily to produce visible or audible effects by combustion, that comply with the construction, chemical composition, and labeling regulations of the U.S. Consumer Product Safety Commission (CPSC), as set forth in CPSC 16 CFR 1500 and 1507, 49 CFR 172, and APA Standard 87-1, *Standard for the Construction and Approval for Transportation of Fireworks, Novelties, and Theatrical Pyrotechnics.*

3.3.310.2* Display Fireworks. Large fireworks devices that are explosive materials intended for use in fireworks displays and designed to produce visible or audible effects by combustion, deflagration, or detonation, as set forth in CPSC 16 CFR 1500 and 1507, 49 CFR 172, and APA Standard 87-1, *Standard for the Construction and Approval for Transportation of Fireworks, Novelties, and Theatrical Pyrotechnics.*

3.3.311* Covered Fuses. A fuse or designed point of ignition that is protected against accidental ignition by contact with a spark, smoldering items, or small open flame.

3.3.312* Packaged Fireworks Merchandise. A consumer fireworks device or group of consumer fireworks devices that has been packaged within an unperforated container or packaging material by the manufacturer, distributor, or seller for retail display and sale as a unit.

A.3.3.309 Consumer Fireworks Retail Sales (CFRS) Stand. Stands can include, but are not limited to, small buildings, plywood or sheet metal structures, manufactured buildings, semitrailers, trailers, shipping containers, or similar structures or facilities.

A.3.3.310 Fireworks. Toy caps for use in toy pistols, toy canes, toy guns, and novelties and trick noisemakers are not considered to be fireworks (see Annex C of NFPA 1124). The regulations referred to limit the explosive content of each toy cap to not more than an average of 0.25 gr (16.2 mg). Also, each package containing such caps has to be labeled to indicate the maximum explosive content per cap. For information on the use of model rockets and model rocket motors, see NFPA 1122. For information on the use of high power rockets and high power rocket motors, see NFPA 1127. Model rockets, model rocket motors, high power rockets, and high power rocket motors designed, sold, and used for the purpose propelling recoverable aero models are not considered to be fireworks.

A.3.3.310.1 Consumer Fireworks. Consumer fireworks are normally classified as Explosives, 1.4 G and described as Fireworks, UN 0336 by the U.S. Department of Transportation (U.S. DOT) (see Annex C of NFPA 1124). Some small devices designed to produce audible effects are included, such as whistling devices, ground devices containing 0.8 gr (50 mg) or less of explosive composition (salute powder), and aerial devices containing 2 gr (130 mg) or less of explosive composition (salute powder) per explosive unit. Consumer fireworks that comply with the construction, chemical composition, and labeling regulations of the U.S. DOT for fireworks, 49 CFR 172, and the U.S. Consumer Product Safety Commission (CPSC) as set forth in CPSC 16 CFR 1500 and 1507, are not considered to be explosive materials for purposes of this Code.

A.3.3.310.2 Display Fireworks. Display fireworks are described as Fireworks, UN0335 and are classed as Explosives, 1.3G by the U.S. Department of Transportation (U.S. DOT). (See Annex C of NFPA 1124.)

Display fireworks include, but are not limited to, the following:

- (1) Salutes or firecrackers containing more than 2 gr (130 mg) of explosive composition (salute powder)
- (2) Aerial shells containing more than 2.1 oz (60 g) of total pyrotechnic and explosive composition
- (3) Other display pieces that exceed the limits for classification as consumer fireworks

Such fireworks are also described as fireworks, 49 CFR 172 by the U.S. DOT.

A.3.3.311 Covered Fuses. The purpose of the covered fuse is to minimize the accidental ignition of fireworks in a retail display by a lighted cigarette or a match, a cigarette lighter, or similar small open flame, as well as to reduce the potential for the rapid involvement of fireworks in, and the subsequent acceleration of, a fire originating within the retail display of consumer fireworks.

Protection of the fuse can be provided by means of tape covering the exposed (ignitable) end of a safety fuse or by covering the fuse or the entire fireworks device or group of fireworks devices with paper, plastic, cardboard, paperboard, or similar or equivalent materials.

Examples of covered fuses of fireworks devices include those contained within packaged assortments, multi-item packages, and similar retail merchandise arrangements that are displayed within unopened and unperforated containers so that they are not exposed to view, or they are covered with, or are contained within, plastic wrap, paper, paperboard, cardboard, or other types of wrapping or packaging materials designed to prevent the fuses from coming into direct contact with an ignition source.

A.3.312 Packaged Fireworks Merchandise. Packaged fireworks merchandise is generally fireworks items or groups of fireworks items that have been packaged by the manufacturer or distributor before they are offered for sale to the consumer. The packaging arrangement completely encapsulates the fireworks item or items within paperboard, cardboard, plastic wrap, or similar materials or combinations of materials. Such encapsulations ensures that a person must puncture, tear, unseal, or break open the package or otherwise damage or destroy the packaging materials in order to gain access to, and directly handle, each individual fireworks item to expose its fuse.

A.12.6.2.1

Flammability requirements for upholstered furniture are preempted by the Code of Federal Regulations.16 CFR Part 1640.5

(a) In general. All upholstered furniture must comply with the requirements in the California standard, Technical Bulletin (TB) 117-2013, "Requirements, Test Procedure and Apparatus for Testing the Smolder Resistance of Materials Used in Upholstered Furniture," June 2013 (incorporated by reference § 1640.6).

(b) Preemption. Notwithstanding section 16 of the Flammable Fabrics Act (15 U.S.C. 1203) and section 231 of the Consumer Product Safety Improvement Act of 2008 (15 U.S.C. 2051 note), and except as provided in sections 1374, 1374.2, and 1374.3 of 4 California Code of Regulations (CCR) (except for subsections (b) and (c) of section 1374 of that title) (incorporated by reference § 1640.6) or the California standard, no State or any political subdivision of a State may establish or continue in effect any provision of a flammability law, regulation, code, standard, or requirement that is designed to protect against the risk of occurrence of fire, or to slow or prevent the spread of fire, with respect to upholstered furniture.

(c) Preservation of certain State law. Nothing in Public Law 116-260 or the Flammable Fabrics Act (15 U.S.C. 1191 et seq.) and section 231 of the Consumer Product Safety Improvement Act of 2008 (15 U.S.C. 2051 note), may be construed to preempt or otherwise affect:

(1) Any State or local law, regulation, code, standard, or requirement that—

(i) Concerns health risks associated with upholstered furniture; and

(ii) Is not designed to protect against the risk of occurrence of fire, or to slow or prevent the spread of fire, with respect to upholstered furniture;

(2) Sections 1374, 1374.2, and 1374.3 of 4 CCR (except for subsections (b) and (c) of section 1374 of that title), as in effect on the date of enactment of Public Law 116-260; or

(3) The California standard. [101:A.10.3.2.1]

The Class I requirement associated with testing in accordance with NFPA 260 and the char length of not more than 11/2 in. (38 mm) required with testing in accordance with NFPA 261 are indicators that the furniture item or mattress is resistant to a cigarette ignition. A fire that smolders for an excessive period of time without flaming can reduce the tenability within the room or area of fire origin without developing the temperatures necessary to operate automatic sprinklers. [101:A.10.3.2.1]

The test results from NFPA 260 and from NFPA 261 are suitable for classification purposes but should not be used as input into fire models because they are not generated in units suitable for engineering calculations. [101:A.10.3.2.1]

Traditionally, NFPA 260 was equivalent to ASTM E1353, Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture, and NFPA 261 was equivalent to ASTM E1352, Standard Test Method for Cigarette Ignition Resistance of Mock-Up Upholstered Furniture Assemblies. However, that changed temporarily when NFPA 260 and NFPA 261 adopted the new NIST standard reference material (SRM 1196) as the igniting cigarette and ASTM E1352 and ASTM E1353 did not, meaning that ASTM E1352 and ASTM E1353 were using commercial cigarettes that are low ignition propensity and have a low likelihood of properly assessing smoldering potential. The 2016 editions of ASTM E1352 and ASTM E1353 adopted the NIST SRM 1196 cigarette as the igniting cigarette, making them, once more, equivalent to NFPA 261 and NFPA 260, respectively.

A.12.6.2.2

The intent of the provisions of 12.6.2.2 is as follows:

(1) The peak heat release rate of not more than 80 kW by a single upholstered furniture item was chosen based on maintaining a tenable environment within the room of fire origin, and the sprinkler exception was developed because the sprinkler system helps to maintain tenable conditions, even if the single upholstered furniture item were to have a peak rate of heat release in excess of 80 kW.

(2) The total heat release of not more than 25 MJ by the single upholstered furniture item during the first 10 minutes of the test was established as an additional safeguard to protect against the adverse conditions that would be created by an upholstered furniture item that released its heat in other than the usual measured scenario, and the following should also be noted:

(a) During the test for measurement of rate of heat release, the instantaneous heat release value usually peaks quickly and then quickly falls off, so as to create a triangle-shaped curve.

(b) In the atypical case, if the heat release were to peak and remain steady at that elevated level, as opposed to quickly falling off, the 80 kW limit would not ensure safety.

(c) Only a sprinkler exception is permitted in lieu of the test because of the ability of the sprinkler system to control the fire.

Actual test results for heat, smoke, and combustion product release from ASTM E1537, Standard Test Method for Fire Testing of Upholstered Furniture, might be suitable for use as input into fire models for performance-based design. Furthermore, California Technical Bulletin 133, "Flammability Test Procedure for Seating Furniture for Use in Public Occupancies," includes pass/fail criteria for a single upholstered furniture item of 80 kW peak heat release rate and 25 MJ total heat release over the first 10 minutes of the test.

[101:A.10.3.2.2]

A.65.10.1 The content of Section 65.10 has been extensively reorganized in order to provide all the requirements for a specific facility or store type to appear in one section. A guide to this reorganization has been provided in Annex H of NFPA 1124.

A.65.10.1.1 To assist the user of this *Code* in determining whether a CFRS facility or store is new or existing for the purpose of applying this *Code*, Table A.65.10.1.1 has been provided.

TABLE A.65.10.1.1 Applicability of Section 65.10 to New and Existing CFRS Facilities and Stores

Venue Type	Application
Temporary stand – seasonal	New
Temporary tent – seasonal	New
Temporary facility – seasonal	New
Temporary stores (including bulk retail) – seasonal	New
Permanent stand*	
– Year round	Existing
– Seasonal	Existing
Permanent stand [†]	
– Year round	New
– Seasonal	New
Permanent tent*	
– Year round	Existing
– Seasonal	Existing
Permanent tent [†]	
– Year round	New
– Seasonal	New
Permanent CFRS facility*	
– Year round	Existing
– Seasonal	Existing
Permanent CFRS facility [†]	
– Year round	New
– Seasonal	New
Permanent store*	
– Year round	Existing
– Seasonal	Existing
Permanent store [†]	
– Year round	New
– Seasonal	New

Note: Change in display or exit layout can require new permit based on local requirements.

* Sales conducted within 1 year prior to the effective date.

[†] Sales not conducted within 1 year prior to the effective date.

CFRS facility – consumer fireworks retail sales facility

[1124: Table A.7.1.1]

A.65.10.2.2 This requirement is not intended to preclude the retail sales of consumer fireworks in occupancies that might be classified as Group H High Hazard (Hazardous) by a building code.

A.65.10.3.2 Specific information and requirements for permits can be found in Section 1.12 for those jurisdictions that have not adopted a building code or fire code.

A.65.10.3.13 Fire safety and evacuation plans should be prepared by the owner or operator of the consumer fireworks retail sales facility or store in consultation with the AHJ.

A.65.10.3.14.3.2 The purpose of 65.10.3.14.3.1.1 is to ensure that a readily available path of travel is provided to reach the required exits and that such travel can occur under emergency conditions without significant impedance by the aisle arrangement. In fact, cross-aisles are required to facilitate access to alternate aisle system in a CFRS facility is shown in Figure A.65.10.3.14.3.2.

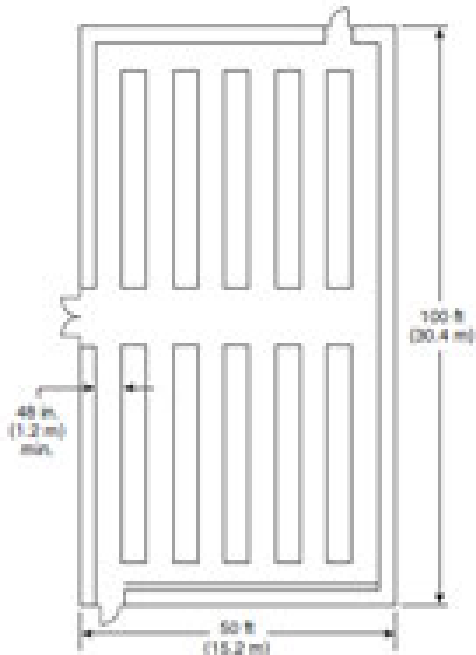


FIGURE A.65.10.3.14.3.2 Typical Design for Exit Access Aisle System in CFRS Facility. (1124: Figure A.7.3.14.3.2)

A.65.10.3.15 Consumer fireworks sealed in packaging meeting U.S. DOT standards for shipping would not be considered to be on display.

A.65.10.3.15.2 The ability to view the entire retail sales area is important for several reasons. For employees, such visibility allows easier supervision of the customers and helps to minimize the possibility of malicious mischief, such as the willful setting of fires in the fireworks merchandise displays. It also allows employees to quickly observe and respond to an incipient fire condition. Response might include the following:

- (1) Evacuation of the occupants
- (2) Notification of the local fire department
- (3) Initiation of a fire attack using the fire extinguishers in the facility, provided that the fire is still small enough

For the customers, such visibility allows them also to quickly see a developing fire condition and react accordingly. Exits and their corresponding paths of travel are more easily observed, thus minimizing panic and facilitating evacuation in a timely manner. Full visibility can be easily achieved by keeping the height of displays and displayed merchandise within the retail sales area below adult eye level. Where displays located around the perimeter of the retail sales area do not impact the ability to view the area, it is not necessary to limit their height. However, if it is desirable to have higher displays of merchandise within the retail sales area, equivalent means of achieving full visibility should be employed, such as the use of unobstructed surveillance mirrors strategically located throughout the sales area or the addition of more employees who can walk the sales floor and monitor the customers.

A.65.10.3.15.3 Flame breaks can be constructed of any of the following:

- (1) Sheet steel
- (2) Sheet aluminum not less than 0.010 in. (0.25 mm) thick
- (3) Hardboard not less than 1/8 in. (3 mm) thick

- (4) Gypsum board not less than 3/8 in. (10 mm) thick
- (5) Wood panels not less than 1/8 in. (3 mm) thick
- (6) Plywood not less than 1/4 in. (6 mm) thick
- (7) Particleboard not less than 1/4 in. (6 mm) thick
- (8) Cement fiberboard
- (9) Plastic laminate not less than 1/8 in. (3 mm) thick
- (10) Safety glass not less than 1/8 in. (3 mm) thick
- (11) Other approved material

Where installed within a retail display fixture containing consumer fireworks, the flame break should impede or retard the rapid spread of an incipient fire involving the fireworks and their packaging materials as any of the following occurs:

- (1) The fire progresses along a display level or shelf.
- (2) The fire attacks another display level or shelf above.
- (3) The fire attacks another display fixture abutting the display fixture of origin.

As a result of installing flame breaks to impede fire spread, the quantity and rate of smoke production can be retarded as well. Thus, flame breaks can provide the building occupants with additional time to react to an incipient fire and safely evacuate the building. See Figure A.65.10.3.15.3.

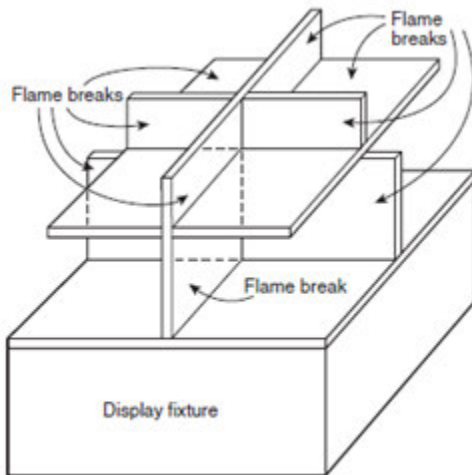


FIGURE A.65.10.3.15.3 Flame Break Design. [1124:Figure A.7.3.15.3]

A.65.10.3.15.3.3 The purpose of specifying packaged fireworks merchandise is to permit such merchandise to be used in longer lengths of displays of consumer fireworks without the installation of a flame break. It is presumed that packaged fireworks merchandise does not readily ignite when exposed to a fire developing within the retail display area merchandise and does not readily contribute to or accelerate a fire that might spread along the surface of a display. See Figure A.65.10.3.15.3.3. Since the purpose of a flame break is to slow down the rapid spread of a fire involving a retail display of consumer fireworks to allow occupants time to react and evacuate the immediate area, properly packaged fireworks merchandise can also serve the purpose of a flame break. For a description of packaged fireworks merchandise, see A.3.312.

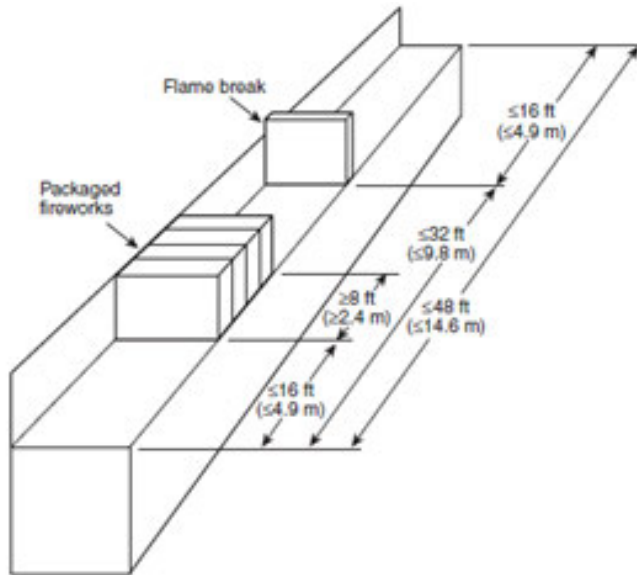


FIGURE A.65.10.3.15.3.3 *Packaged Fireworks Merchandise and Flame Break Requirements. [1124:Figure A.7.3.15.3.3]*

A.65.10.3.15.6 This paragraph describes performance criteria for how aerial devices, which are described in C.3.1.2 of NFPA 1124, are to be packaged, displayed, and restrained as needed, depending upon the device and the manner in which it is packaged and displayed. Thus, upon ignition by a fire in the retail sales display area containing devices, the resultant effect of the ejection of pyrotechnic components will be reasonably limited so as not to pose an undue threat to evacuating occupants or to cause rapid spread of the fire to areas remote from the immediate area of the fire.

The method and manner of packaging and displaying aerial devices have been demonstrated to be effective in accomplishing the intent of this section. This performance criterion could also be met by enclosing consumer fireworks within bins. The packaging material itself can be designed to contain the consumer fireworks. The placement and arrangement of the aerial devices within the packages or within bins or on shelves are also important factors. Other containment methods include fastening aerial devices together, restraining their movement with packaging materials, or placing aerial devices or packages of aerial devices within racks, containers, holders, or other structures.

A.65.10.3.15.7 Arrangement of horizontal plywood barriers should be as shown in Figure A.65.10.3.15.7.

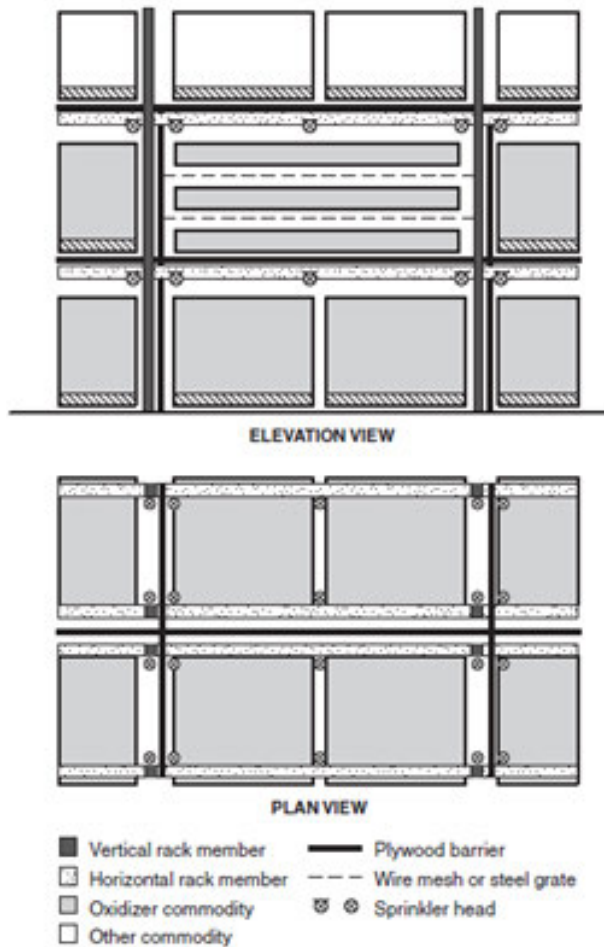


FIGURE A.65.10.3.15.7 Arrangement of Horizontal Barrier Separating Combustible Materials and Consumer Fireworks. [1124:Figure A.7.3.15.7]

A.65.10.3.21 Refer to Material Safety Data Sheet (MSDS) for additional information.

A.65.10.3.22 Training might be required by the U.S. Department of Transportation or the Occupational Safety and Health Administration as applicable for the purpose of being employed in the operation of a CFRS or storage facility.

A.65.10.4.9.2.4 See NFPA 30 for the separation distances.

A.65.10.5.1.1 Preliminary results of recent full scale fire tests indicate that automatic sprinkler systems designed for an Ordinary Hazard, Group 2 occupancy in accordance with NFPA 13 might be suitable for protecting retail displays of consumer fireworks where the ceiling height does not exceed 10 ft (3.1 m) and might also be adequate for ceiling heights up to 16 ft (4.9 m). This implies that there might be a need to design the sprinkler system in new buildings for an Extra Hazard, Group 1 occupancy for ceiling heights greater than 16 ft (4.9 m). For existing buildings, existing sprinkler systems designed for an Ordinary Hazard, Group 2 occupancy should suffice. Until such time as additional fire testing is completed and more conclusive design criteria can be verified, designers of automatic sprinkler systems for areas where retail sales of consumer fireworks are located might want to consider these design criteria. For additional information contact the American Pyrotechnic Association (APA), PO Box 30438, Bethesda, MD 20824.

A.65.10.5.1.2(3) This item describes performance criteria for how consumer fireworks displayed for sale in stores are to be packaged and displayed and restrained as needed, depending upon the device and the manner in which it is packaged and displayed. Thus, upon ignition by a fire in the retail sales display area containing consumer fireworks, the resultant effect of the ejection of pyrotechnic components will be reasonably limited so as not to pose an undue threat to evacuating occupants or to cause rapid spread of the fire to areas remote from the immediate area of the fire. The method and manner of packaging and displaying consumer fireworks have been demonstrated to be effective in accomplishing the intent of this section. The performance criteria might also be met by enclosing consumer fireworks within bins. The packaging material itself can be designed to contain the consumer fireworks. The placement and arrangement of the consumer fireworks within the packages or within bins or on shelves are also important factors. Other containment methods include fastening consumer fireworks together, restraining their movement with packaging materials, or placing consumer fireworks or packages of consumer fireworks within racks, containers, holders, or other structures.