

HARRIS COUNTY FIRE CODE, LOCAL AMENDMENT

CHAPTER 33

EXPLOSIVES AND FIREWORKS

SECTION 3308

FIREWORKS DISPLAY

3308.11 Retail display and sale. Fireworks displayed for retail sale shall not be made readily accessible to the public. A minimum of one pressurized water portable fire extinguisher complying with Section 906 shall be located not more than 15 feet (4572 mm) and not less than 10 feet (3048 mm) from the hazard. “No Smoking” signs complying with Section 310 shall be conspicuously posted in areas where fireworks are stored or displayed for retail sale.

SECTION 3309

FIREWORKS 1.4G RETAIL STORAGE, DISPLAY, AND SALE

In addition to other provisions of the Harris County Fire Code, these sections apply:	APPLICABLE SECTIONS			
	3309.1	3309.2	3309.3	3309.4
STANDS only	X	X	X	
ALL EXCEPT STANDS, including BULK or HIGH PILE	X	X		X

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3309.1 General. The sale, storage, and display of Fireworks 1.4G is subject to the authority of the Harris County Fire Marshal, including the authority to inspect, determine the presence of fire hazards, and order correction pursuant to TEXAS LOCAL GOVERNMENT CODE, CHAPTER 352.016.

3309.1.1 Applicability. This Section 3309 provides standards for the design and construction of buildings in which Fireworks 1.4G are to be stored, sold, and/or displayed. **Such design and construction shall comply with this section and the Texas Fireworks Rules, current edition, as promulgated by the Texas State Fire Marshal.**

- a. **Compliance with Fire Code.** All structures used for the storage or sale of consumer fireworks 1.4G shall comply with the applicable provisions of the Harris County Fire Code for new structures, and with applicable sections of this sub-section.
- b. **Fire Code Permit and Certificate of Compliance.** Any structure that is erected, occupied, or moved into or within the jurisdiction, is considered new construction, and requires a Fire Code permit and a Certificate of Compliance.
- c. **Definitions.**

Temporary Structure. Any structure that is erected, occupied, or moved into or within the jurisdiction, for a period of less than 180 days.

Permanent Structure. Any structure that is erected, or moved into or within the jurisdiction, for a period of more than 180 days.

Fireworks Control Area. Spaces within a building where quantities of fireworks 1.4G, not exceeding the maximum allowable quantities, are stored, dispensed, used or handled.

3309.1.2 Conflict between provisions. If there is a conflict between the provisions of this section and the Fireworks Rules, the more stringent of the provisions shall apply.

3309.1.3 Limit of authority. This section does not limit the authority of the Fire Marshal to inspect any retail site location or storage facility to require additional fire protection measures.

3309.1.4 Existing Facilities and Conditions. Except as specifically allowed in this section, existing facilities and conditions which do not comply with the provisions of this chapter shall come into compliance within the following time:

- a. Retail fireworks stands – October 1, 2008
- b. Retail sales sites other than stands – February 1, 2009

3309.2 Requirements for All Retail Sales, Display and Storage Sites and Facilities. All Fireworks 1.4G retail sales sites, storage buildings, and control areas, including temporary storage facilities such as trailers, semi-trailers, or metal shipping containers must conform to the minimum standards of this section.

3309.2.1. General requirements.

3309.2.1.1 Change of Occupancy. Storing Fireworks 1.4G in a building for which a Permit and Certificate of Compliance has not been issued under this Code specifically in a manner not described in the application for Permit for such building shall be considered a change of occupancy.

3309.2.1.2 Physical address and emergency contact information. All retail sales sites and storage facilities must have the physical address and a 24-hour emergency contact number prominently posted on the outside of each site, close to the main entrance, in numbers at least 4 inches in height and ½ inch stroke in width on a contrasting background, and visible from the street or road fronting the property.

3309.2.1.3 Residential Storage. Fireworks 1.4G retail storage buildings shall not be used for residential occupancies. Use of a residential building for the storage of fireworks in excess of 125 pounds of pyrotechnic material shall be considered a change in occupancy.

3309.2.1.4 Maximum allowable quantity. No more than 125 pounds of pyrotechnic material may be stored and/or displayed in any control area. In the absence of documentation approved by the Fire Marshal, 25% of the gross weight of the fireworks, including all packaging, will be used to determine the 125 pound limitation.

- 4.1. The maximum allowable quantities can be increased 100 percent if the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 4.2. The maximum allowable quantities may be greater than allowed by this section, subject to approval by the County Fire Marshal, if the building meets all requirements for a Group H-3 occupancy and Section 3309.4.

4.3 The aggregate quantity in use and storage shall not exceed the quantity listed for storage in the Application for Permit.

3309.2.1.5 Minimum separation distances. Except as specified elsewhere in this section, structures shall be located in accordance with the requirements of Table 3309.2.1.5.

Exception: Trailers, semi trailers, and metal containers used for storage only must be separated by at least 50 ft from any building or structure other than other trailers, semi trailers, or metal shipping containers. There is no minimum distance between multiple trailers, semi trailers, or metal shipping containers when used for storage only.

Exception: Permanent facilities permitted before January 1, 2005 may be separated from adjacent buildings by less than 20 ft if they are separated by a wall with a 1-hour fire resistance rating, provided existing facilities are not enlarged or expanded.

Table 3309.2.1.5 Minimum Separation Distances of Fireworks 1.4G Retail Sales Buildings, including Trailers, Semi-trailers, and Metal Shipping Containers

Type of structure	Minimum distance
From other trailers, semi-trailers, and metal shipping containers used ONLY for storage of consumer fireworks	0 ft
From other stands	5 ft
From vehicle parking	10 ft
From other buildings ¹	20 ft
From combustibles	30 ft
From cooking equipment of any type, or any open flame equipment Aboveground storage tanks for flammable or combustible liquid, flammable gas, or flammable liquefied gas	50 ft
Motor vehicle fuel-dispensing station dispensers Retail propane-dispensing station dispensers Compressed natural gas dispensing facilities	100 ft
Aboveground bulk storage or bulk dispensing area for flammable or combustible liquid, OR Aboveground bulk storage or bulk dispensing area for flammable gas or flammable liquefied gas	300 ft
¹ If maximum quantity of pyrotechnic material per control area is greater than 125-lbs, refer to Table 3309.4.1.6.	

3309.2.2 Building Services. All building services in Fireworks 1.4G retail sales and storage buildings must comply with the provisions of this section.

3309.2.2.1 Electrical work. Electrical work performed in an unincorporated area of the state must be installed in accordance with the requirements of the Texas Electrical Code.

3309.2.2.2 Required listing. All electrical equipment, battery-powered equipment, and electrical cords shall be listed and shall be used in accordance with their listing.

3309.2.2.3 Temporary Power. The Fire Code Official is authorized to give permission to temporarily supply and use power for up to 180 days.

3309.2.2.4 Temporary electrical conductors. All temporary conductors shall comply with the Texas Electrical Code.

3309.2.2.5 Light fixture guards. All incandescent light fixtures within 25 ft of any consumer fireworks shall have metal or plastic guards. All fluorescent light fixtures within 25 ft of any consumer fireworks shall have plastic tube guards with caps or metal guards or plastic lens covers.

3309.2.2.6 Portable generators. Portable generators supplying power to consumer fireworks retail sales facilities shall comply with this section.

6.1 Portable generators shall be located not less than 20 ft from the consumer fireworks retail sales facility and in an area free from grass, trash, and other combustible flammable materials.

6.2 Generator fuel shall be stored in an approved safety container at least 20 ft from the consumer fireworks retail sales facility. If the fuel is located less than 50 feet from the sales facility, the quantity shall be limited to not more than 5 gal. Where the generator fuel storage is located at least 50 ft from the consumer fireworks retail sales facility, the quantity of such fuel is not limited.

3309.2.2.7. Internal Combustion Engines. Internal combustion engines shall not be operated inside a retail sales site. Fuels for internal combustion engines will not be stored inside a retail sales site.

3309.2.3 Means of Egress. 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.

3309.2.3.1 Semi-Trailers and Shipping Containers. Trailers, Semi-trailers, and Metal Shipping Containers that are not normally occupied shall be permitted to be locked during operation. Panic hardware on exit doors shall not be required. Where an aisle is provided, the aisle shall be not less than 28 inches in clear width.

3309.2.4 Fire Protection. All Fireworks 1.4G retail sales and storage facilities must comply with this section.

3309.2.4.1 Approved storage. Finished consumer fireworks at a manufacturing or distribution facility, or retail sales site, may be stored in approved buildings, trailers, semi trailers, metal shipping containers, or magazines.

3309.2.4.2 Fire lane access. Any portion of an exterior wall of a building, or other defined perimeter of a consumer fireworks retail sales facility, shall be accessible within 150 ft of a public way or an approved fire apparatus access.

3309.2.4.3 Fireworks accessibility. All sales and display areas shall be designed to prohibit ready access by the public.

3309.2.4.4 External Fire Protection. Each retail sites shall be designed to provide protection against small exterior fires.

- 4.1 An area of at least 30 feet in width on all sides of a retail fireworks site shall be kept free of high grass, empty cardboard boxes, and trash.
- 4.2 Each retail sales site shall have equipment or supplies capable of extinguishing small exterior fires that could threaten the retail sales site.

3309.2.4.5 Portable Fire Extinguishers. Each retail sales site must have portable fire extinguishers in accordance with this section. All fire extinguishers shall be inspected by a Texas licensed fire extinguisher contractor annually and have a current inspection tag attached or a receipt indicating the fire extinguisher was purchased within the last 12 months.

- 5.1 At least one portable fire extinguisher having a minimum 2A rating shall be located within 75 ft of trailers, semi-trailers, or shipping containers used for storage.
- 5.2 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.
- 5.3 If a portable generator is used, a portable fire extinguisher rated to at least 6:BC shall be immediately available and shall be located within 75 ft of the generator.
- 5.4 Temporary consumer fireworks retail sales stands of less than 200 sq ft shall be required to have at least one portable fire extinguisher, with a minimum 1A rating, located in the stand.

3309.2.4.6. Interior decorations. No more than 10% of the interior surface may be covered with combustible material such as posters, signs, and decorations.

3309.2.4.7 Smoking or Open Flame Devices. Smoking is not permitted inside or within 50 ft of the consumer fireworks retail sales or storage area.

3309.2.4.8 Signs. Signs complying with this section shall be conspicuously posted in areas where fireworks are stored or displayed for retail sale, including storage areas.

- 8.1 "FIREWORKS — NO SMOKING" signs, in letters not less than four inches high and ½-inch stroke in width on a contrasting background, shall be conspicuously posted on the exterior of each side of any fireworks 1.4G retail sales facility, on the inside and outside of each entrance door, at several locations inside and outside any fireworks 1.4G retail sales facility, AND within 10 ft of every aisle directly serving the fireworks 1.4G retail sales area in a store.
- 8.2 "NO FIREWORKS DISCHARGE WITHIN 300 FEET" signs, in letters not less than 4 inches high and ½-inche stroke in width on a contrasting background, shall be conspicuously posted on the exterior of each side of any fireworks 1.4G retail sales facility.

3309.2.4.9 Design of Fireworks Storage Areas. Consumer fireworks storage areas shall be designed and constructed in accordance with NFPA 230, Standard for the Fire Protection of Storage as follows:

- 9.1 Exterior door and window openings in consumer fireworks storage buildings shall be equipped with a means for locking.
- 9.2 Shelves and other storage areas shall provide storage for consumer fireworks in DOT approved packaging;

- 9.3 Cartons shall be stacked neatly and in a stable manner; and
- 9.4 Consumer fireworks returned to these buildings shall be permitted to be stored temporarily in non-DOT cartons until repackaging or repacking can be performed.

3309.2.4.10 Motor Vehicle Parking. Parking areas shall be designed to prevent a motor vehicle from being parked within 10 ft of a consumer fireworks retail sales facility, except when delivering, loading, or unloading fireworks or other merchandise and materials used, stored, or displayed for sale in the facility.

Section 3309.3 Specific Requirements for Retail Stands for Fireworks 1.4G. A retail fireworks stand is defined as “any retail sales site where the interior is not accessible to the public”.

3309.3.1 General Requirements

3309.3.1.1 Construction. Stands shall be constructed of wood, metal, masonry, or concrete, or combinations thereof.

3309.3.1.2 Maximum display height. The maximum height of sales displays shall be limited to 8 ft. as measured from the stand floor.

3309.3.1.3 Fireworks Accessibility. The stand design shall prevent the fireworks from being handled by persons other than those operating, supervising, or working in the stand.

3309.3.2 Building Services. All building services in Fireworks 1.4G retail stands must comply with the provisions of this section.

3309.3.2.1 Electrical service. Electrical service to the stand shall be installed in accordance with the Texas Electrical Code.

3309.3.2.2. Master switch. Each stand that utilizes electricity shall have an approved master electrical switch located near an exit door which interrupts all electric supply to devices and equipment located inside, on, and connected to the stand.

3309.3.2.3 Electrical equipment and wiring. All electrical wiring, equipment, light fixtures, and devices both inside and outside the stand, shall meet Texas Electrical Code requirements and shall be maintained to prevent electrical hazards.

3309.3.2.4 Splices. Splices in electrical wiring servicing equipment and devices inside the stand shall be enclosed in junction boxes.

3309.3.2.5 Prohibited electrical components. Drop cords with lights, extension cords, or bare wiring shall not be used in any manner inside a retail stand.

3309.3.3 Means of Egress. All exits and aisles in a retail stand must comply with this section. Customers shall not be permitted inside a consumer fireworks retail sales stand.

3309.3.3.1 Minimum number of exits. Each stand less than 16 feet in length shall have at least one walk door which opens outward, in a location approved by the Fire Marshal. Stands measuring 16 feet or longer must have at least two walk doors which open outward, in locations approved by the Fire Marshal.

3309.3.3.2 Maximum travel distance. Exits provided for all fireworks retail sales stands shall be arranged so that the maximum egress travel distance does not exceed 35 ft.

3309.3.3.3. Exit door (walk door) requirements. The minimum dimensions of any walk door are 28 inches wide X 72 inches high. Walk doors must not be locked from the outside when the stand is occupied, and must be immediately accessible from the inside.

3309.3.3.4 Minimum Aisle Width. A minimum distance of six feet shall be maintained from the front of the customer counter to the back side of the stand. The minimum clear exit aisle width is 28 inches.

3309.3.3.5 Exit signs. Exit signs shall not be required in all consumer fireworks retail sales stands where the interior is not accessible to the public.

3309.3.3.6 Emergency Lighting. Emergency lighting shall not be required in all consumer fireworks retail sales stands where the interior is not accessible to the public.

3309.3.4 Fire Protection. All Fireworks 1.4G retail stands must comply with this section.

3309.3.4.1 Smoke detectors. Each stand will have an operational smoke detector in each sales area. If sleeping or rest areas are provided in the stand, there must be one smoke detector in each sales area and one in each sleeping or rest area.

3309.3.4.2 Portable Space Heaters. Only heaters that do not produce open flames or those with no exposed heating elements are allowed in stands. Electric heaters shall be equipped with a tip-over switch and temperature-overheat protection.

3309.3.4.3 Cooking equipment. Cooking equipment of any type, or any open-flame equipment, shall not be permitted within 50 ft of all stands, trailers, or shipping containers used for the storage or sale of consumer fireworks.

3309.3.4.4 Security. If the fireworks stand is used for the unattended storage of Fireworks 1.4G, it must be equipped with suitable locking devices to prevent unauthorized entry.

3309.3.4.5 Storage areas. Vacuum cleaners or other mechanical cleaning devices shall not be present inside a stand where fireworks are stored. Brooms, brushes, and dustpans used to sweep up any loose powder or dust shall be made of non-sparking materials.

3309.3.4.6 Damaged goods storage. Each stand shall have an area to store damaged fireworks that allows them to be removed and not offered for sale. Damaged consumer fireworks shall be permitted to be returned to the dealer or shall be disposed of properly.

3309.3.4.7 Retail stand fireworks control areas. In Fireworks 1.4G retail stands, a flame break approved by the Fire Marshal, may be installed every 8-10 feet to establish retail stand fireworks control areas. No more than the amount of pyrotechnic material listed in Section 3309.2.1.4 may be stored and/or displayed in any retail stand fireworks control area.

3309.3.4.8 Approved Flame Break. An approved flame break, of not less than 3/4 inch plywood, shall be used to separate retail stand fireworks control areas. Separation shall begin at the back wall and extend to the furthest shelf point, and from the floor to the underside of roof. Fire caulking shall be applied at all penetrations and adjoining points along the 3/4 inch plywood separation.

3309.4 Specific Requirements for Retail Fireworks Sites Other Than Stands

3309.4.1 General requirements. All indoor retail fireworks sites and storage facilities, other than stands, shall comply with the requirements of this section.

3309.4.1.1 Applicability. The requirements of this section shall apply to any indoor retail sales or storage location, including those with:

- 1.1 More than 125 pounds of pyrotechnics materials¹;
- 1.2 Storage or display of fireworks 1.4G in excess of 12 ft. in height;
- 1.3 Storage of fireworks 1.4G at manufacturing and distribution facilities; or
- 1.4 Storage or display of fireworks 1.4G in any temporary or permanent buildings, structures, trailers, semi-trailers, and metal shipping containers, or control areas that meet the definition of BULK STORAGE / MERCHANDISING, or HIGH-PILED STORAGE.

3309.4.1.2 Building Design. The retail fireworks sales building shall be a free standing, durable structure with no basement, and only one story of space accessible to the public.

3309.4.1.3 Multi-use building prohibited. The fireworks sales area shall not be part of a multi-use or multi-tenant building, except that office areas and restrooms ancillary to the building are allowed if:

- 3.1 Offices and related spaces are separated from fireworks storage or sales areas by fire barriers having a fire resistance rating of not less than 1 hour; and
- 3.2 Door and window openings in the fire barrier wall are protected by self-closing fire doors or fixed fire windows having a fire protection rating of not less than 3/4 hour, and installed in accordance with NFPA 80, Standard for Fire Doors and Fire Windows.

¹ In the absence of documentation approved by the Fire Marshal, 25% of the gross weight of the fireworks, including all packaging, will be used to determine the 125 pound limitation.

3309.4.1.4 Assembly and Educational Occupancies Prohibited. Assembly or educational occupancies cannot be used for the storage or sale of fireworks 1.4G.

3309.4.1.5 Plans. Permit Applications shall include, but shall not be limited to, plans sealed by a licensed engineer or architect. For all retail sales sites other than stands, the site plan must indicate:

- 5.1 The address or location of the site;
- 5.2 The name of the person to whom the permit is issued;
- 5.3 The outline and length of all building exterior walls;
- 5.4 The floor area, location, and dimensions used for fireworks sales;
- 5.5 The floor area, location, and dimensions used for fireworks storage outside the sales area;
- 5.6 The floor area, location, and dimensions used for other than fireworks sales and storage;
- 5.7 The general location, description, and distances from the exterior walls to all buildings, fireworks storage magazines, highways, and equipment for storage or dispensing of flammable liquids or compressed gas;
- 5.8 The location of the master electrical cut-off switch;
- 5.9 The location and width of all building doors and paths of egress; and
- 5.10 The maximum estimated number of cases to be stored or displayed for sale in the site.

3309.4.1.6. Minimum distance requirements Consumer fireworks storage or work buildings shall be separated from other buildings and property lines as shown in Table 3309.4.1.6.

Exceptions:

- 1. Consumer fireworks storage or work buildings shall be separated from magazines and process buildings by the distances specified in NFPA 1124, Table 4.8.3.
- 2. Facilities in existence and continuously permitted before January 1, 2005 are exempt from compliance, provided such facilities are not enlarged or expanded beyond their January 1, 2005 operation.
- 3. An office area used for the operation of the site, separated by a one-hour fire rated wall from the fireworks sales or storage area, may be exempt from the distance requirements after it is reported to, and reviewed by, the Fire Marshal.

Table 3309.4.1.6 Minimum Separation Distances of Fireworks 1.4G, Processing Buildings, and Fireworks Storage Buildings from Inhabited Buildings, Passenger Railways, and Public Highways

Net Weight Of Fireworks 1.4G, lbs ¹	Distance in Feet from:		
	Passenger Rail and Highways	Inhabited Buildings	Property Lines
200	50	60	30
400	50	70	35
600	50	80	40
800	50	90	45
1,000	50	100	50
2,000	58	115	60
3,000	62	124	62
4,000	65	130	65
5,000	68	135	68
6,000	70	139	70
8,000	73	140	73
10,000 or more	Contact HCFMO		

¹ By actual manufacturer-supplied data. In absence of net weight, 25% of the gross weight shall be used.

3309.4.1.7 Emergency Response Plan. The operator of each indoor retail sales site or storage facility shall prepare a written emergency response plan in accordance with Chapter 4 of this Code. 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 facility.

3309.4.1.8 Maximum Occupant Load. The approved maximum occupant load shall be conspicuously posted near the main entrance using a format approved by the Fire Marshal. Records of occupant load will be maintained onsite and available for inspection by the Fire Marshal.

3309.4.2 Building Services. All building services in Fireworks 1.4G retail sales facilities other than stands must comply with the provisions of this section.

3309.4.2.1 Electrical fixtures and wiring. Electrical fixtures and wiring shall comply with the Texas Electrical Code.

3309.4.2.2. Master Switch. An outside electrical master switch shall be provided at each retail location.

3309.4.2.3 Extension cords and power strips. Extension cords, or other flexible cords and cables, shall not be used in place of permanent or fixed wiring. Further:

- 3.1 Where approved, an extension cord may be used to extend power to a single appliance or single power strip.
- 3.2 An extension cord providing power to a power strip shall be of the same or greater wire gauge.
- 3.3 Extension cords and power strips shall be protected from accidental damage by foot traffic, vehicles, or other means.
- 3.4 Extension cords and power strips cannot be located where the public could walk over them.
- 3.5 Power strips used for multiple appliances must contain an internal circuit breaker.

3309.4.3 Means of Egress. All means of egress in consumer fireworks retail sales facilities, other than stands, shall comply with the applicable requirements of this section.

Exception: Trailers and Containers. Trailers, semi trailers, and metal shipping containers that are not normally occupied shall not be required to comply with local codes with regard to means of egress.

3309.4.3.1 Minimum number of exits. The minimum number of exits provided from the retail sales area shall be not less than three, or more as determined in accordance with this Code.

3309.4.3.2 Maximum travel distance. Exits provided for the retail sales area of consumer fireworks retail sales facilities, other than stands, 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.

3309.4.3.3 Minimum aisle width. Aisles shall have a minimum clear width of 48 inches. Aisles and exit doors shall be kept free of any obstruction.

3309.4.3.4 Minimum exit door width. The minimum egress door width shall be not less than 36 inches in width and will provide a minimum clear opening width of 32 inches.

3309.4.3.5 Egress door swing. Unless approved by the Fire Marshal, all egress doors shall be of the side-hinge swinging type and shall be arranged to swing in the direction of egress travel.

3309.4.3.6 Panic hardware. Every egress door that has a latching device shall be provided with approved panic hardware.

3309.4.3.7 Roll-up, or lift, doors. Roll-up or lift doors may be used as egress doors when:

- 6.1 There is a readily distinguishable device that secures each door in the open position whenever the building is occupied.
- 6.2 A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background,
- 6.3 No more than 50% of all egress doors may be roll-up or lift type. At least 50% of all doors must swing in the direction of travel.

3309.4.3.8 Exit Door Locks. Exit doors shall be unlocked when the building is occupied; otherwise, doors shall be locked for security. All exit doors equipped with locks shall have a sign that reads "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS" conspicuously posted near the door.

3309.4.3.9 Exit signs. All exits shall be marked by an approved exit sign.

3309.4.3.10 Egress illumination. The means of egress illumination, including the exit discharge for consumer fireworks storage or work buildings or areas, shall be in accordance with Chapter 10 of this Code.

3309.4.4 Fire Protection. All Fireworks 1.4G retail sales facilities, other than stands, must comply with this section.

3309.4.4.1 General Fire Protection.

- 1.1 **Fire access.** Any portion of an exterior wall of a building or other defined perimeter of a consumer fireworks storage facility shall be accessible within 150 ft of a public way or an approved fire apparatus access.
- 1.2 **Exterior Fire Protection.** Each retail site shall be designed to provide protection against small exterior fires. The land surrounding an indoor retail or storage site shall be kept clear of brush, dried grass, leaves, and similar combustibles for a distance of at least 30 feet.
- 1.3 **Interior Fire Protection.**
 1. Any openings or penetrations in the fire barrier wall other than exit doors shall be protected in accordance with Chapter 7 of this Code.
 2. Facilities shall be designed so that the rays of the sun shall not come in contact with or shine through glass directly upon fireworks stored in the facility. Skylights which diffuse sun rays are permitted.
 3. No stoves, cooking equipment, exposed flames, or portable heaters shall be present in any part of a retail sales or storage building. Heating of storage or sales areas shall be by means of steam, indirect hot air radiation, or hot water.
 4. The facility must be designed to provide removal of trash, rubbish, and unused boxes from the sales, storage, and adjacent areas daily, to prevent unsafe accumulation. Small quantities stored in an orderly manner for reuse are allowed.
 5. All trash containers shall be metal or heavy plastic, and be located 10 feet from any displayed or stored fireworks.
 6. Access to fireworks when stored in a separate and distinct area away from general fireworks sales shall be restricted to employees only.
- 1.4 **Sales Area Design.**
 1. Fireworks sales display areas shall be sufficiently designed to prevent customers from handling fireworks, unless an attendant is directly assisting the customer.
 1. Fireworks in the sales area shall be limited to the displayed merchandise unless stored in closed, original DOT approved packaging not accessible to the public.
 2. Sales display areas must include a continuous durable restraint around displayed fireworks separating the customers from all merchandise. The height, weight, and stability of the restraint must be designed to prevent individuals from penetrating the barrier.
 3. Fireworks sales and storage areas shall be designed to prevent the placement of fireworks within 5 ft of any public entrance or exit in an enclosed building or structure.
 2. The sales area shall be designed and constructed so that fireworks shall be under the visual supervision of a store employee or other responsible party while the store is open to the public.
 1. Partitions, counters, shelving, cases, and similar space dividers shall not exceed 6 ft in height above the floor surface inside the perimeter of the retail sales area.
 2. Display areas shall be designed and constructed such that merchandise on display or located on shelves or counters or other fixtures will not be displayed to a height greater than 6 ft in height above the floor surface within the retail sales area.
 3. Where located along the perimeter of the retail sales area, the maximum height of sales displays shall be limited to 12 ft.

Exception: Where approved by the County Fire Official, the maximum height of sales displays may exceed 12 ft., but only in accordance with this section and Chapter 23 of this Code.

3. Display areas shall be designed and constructed in a manner that will limit travel distance of ejected pyrotechnic components of ignition of the fireworks occurs.
 1. Shelving must be designed and installed to allow a minimum of 24-inch clearance between stored or displayed materials and any ceiling (minimum of 18 in. for fully sprinklered areas or buildings).
 2. Display areas shall be designed and constructed such that combustible materials and merchandise will not be stored directly above the consumer fireworks in retail sales displays unless a horizontal barrier is installed directly above the consumer fireworks as prescribed in 7.4.1(e) of NFPA 430, Code for the Storage of Liquid and Solid Oxidizers.
 3. Where continuous displays of merchandise are located on shelving, cases, counters, and similar display fixtures, a flame break shall be provided in accordance with NFPA 1124.
4. Only fireworks 1.4G with approved covered or safety fuses shall be permitted in a facility in which the retail sales of consumer fireworks are conducted. Only fireworks in the original and undamaged packaging shall be displayed.

3309.4.4.2 Portable fire extinguishers. Portable fire extinguishers shall be specified as required for extra (high) hazard occupancy in accordance with NFPA 10, Standard for Portable Fire Extinguishers.

- 2.1 Every indoor retail sales building shall have not less than two portable fire extinguishers with a minimum 2A rating. At least one approved Class A fire extinguisher shall be provided for each 1,000 square feet of floor space.
- 2.2 Portable fire extinguishers for indoor retail sales facilities shall be located so that the maximum distance of travel required to reach an extinguisher from any point does not exceed 75 ft as specified in NFPA 10.

3309.4.4.3 Fire alarm system. A fire alarm system, installed in accordance with NFPA 72, shall be required in all consumer fireworks retail sales facilities. Facilities less than 3,000 sq ft in area AND in existence and continuously permitted before January 1, 2005 are exempt from compliance, provided such facilities are not enlarged or expanded beyond their January 1, 2005 operation.

3309.4.4.4 Automatic sprinkler system. An automatic sprinkler system shall be required in all consumer fireworks retail sales facilities. Facilities less than 6,000 sq ft in area AND in existence and continuously permitted before January 1, 2005 are exempt from compliance, provided such facilities are not enlarged or expanded beyond their January 1, 2005 operation.

- 4.1 All automatic sprinkler systems shall be installed in accordance with NFPA 13 for Bulk and High-Pile Storage.
- 4.2 The water flow alarm device shall be arranged to activate audible and visual alarms throughout the facility in accordance with Chapter 9 of this Code.
- 4.3 Storage rooms shall be protected with an automatic sprinkler system installed in accordance with NFPA 13, or separated from the retail sales area by a fire barrier having a fire resistance rating of not less than 1 hour.
- 4.4 For sprinkler design considerations, Fireworks 1.4G stored and sealed in DOT approved packaging shall be considered as a Class IV commodity. Fireworks 1.4G, NOT stored and sealed in DOT approved packaging, shall be classified as a high hazard commodity.

3309.4.4.5 Smoke control. All sites must have a minimum average ceiling height of 12 ft. Smoke and heat vents designed and installed in accordance with NFPA 204, Standard for Smoke and Heat Venting, shall be provided in consumer fireworks storage buildings. Facilities less than 50,000 sq ft in area AND in existence and continuously permitted before January 1, 2005 are exempt from compliance, provided such facilities are not enlarged or expanded beyond their January 1, 2005 operation.