

Pyrotechnic Safety Act

19-405. State Board of Pyrotechnic Safety.

(Statutory Authority: 1976 Code Section 40-56-20)

19-405.1. Applicability of Regulations.

Pursuant to legislation enacted in the State of South Carolina relating to the manufacture, storage, sale and possession of fireworks, the Rules and Regulations set forth herein are adopted by the State Board of Pyrotechnic Safety who directs compliance therewith by any person who shall manufacture, store, sell or possess fireworks in the State of South Carolina.

19-405.2. Definitions.

For the purpose of these Rules and Regulations, the following terms are defined as meaning:

- A. Board--The State Board of Pyrotechnic Safety.
- B. Division--The Office of General Services of the State Budget and Control Board.
- C. Pyrotechnics--The art of making or the manufacture and use of fireworks.

19-405.3. Scope of Jobbers, Retailers and Wholesale Distributors

A. Jobber

A Jobber may sell fireworks to retailers only. A Jobber must purchase fireworks from a wholesale distributor licensed to do business in South Carolina.

B. Retailer

A Retailer may sell fireworks to the general public, except as provided in Regulation 405.6 (H). A Retailer must purchase fireworks from a jobber or wholesale distributor licensed in South Carolina.

C. Wholesale Distributor

A Wholesale Distributor may sell fireworks to licensed jobbers and/or retailers, supply Class "B" Displays and/or import foreign and/or domestic fireworks.

19-405.4. Enforcement.

The enforcement of these Rules and Regulations and the responsibility thereof is as follows:

A. The General Services Division of the State Budget and Control Board shall supervise the enforcement of the laws and regulations of the State Board of Pyrotechnic Safety and shall employ and supervise personnel necessary to carry out the duties of this Board.

B. The Agent in Charge of the Pyrotechnic Enforcement Section, his Agents, Municipal Fire Chiefs and their Inspectors, Sheriffs, Deputy Sheriffs, City and County Chiefs of Police, their Officers and/or SLED Officers shall have authority to inspect any building where pyrotechnic material (fireworks) may be stored or sold to see that the laws of the State are enforced.

C. Upon determining violations of the law, any official named in this section, having the authority, shall contact the Agent in Charge of the Pyrotechnic Enforcement Section, who may either confiscate or direct the agent to confiscate any fireworks or fireworks in a facility not being in compliance with the laws of the State.

19-405.5. Facilities for Retail Sale of Pyrotechnics.

A. Fireworks Stands:

1. This facility consists of a temporary structure and shall be located in such a manner as to make it immobile and to prevent it from shifting or blowing over. Tie down devices shall be affixed and wheels shall be removed.

2. Any such structure, if attached, adjacent or within thirty (30) feet of any other structure must provide a minimum of two-hour fire separation.

3. The structure shall be tied down in the following manner: Definitions:

a. Diagonal Tie--Any tiedown designed to resist horizontal or sheer forces and which deviates not less than thirty (30) degrees from a vertical direction.

b. Ground Anchor--Any device designed for the purpose of securing a temporary structure to the ground.

c. Hurricane Zone--The first two (2) tiers of coastal counties.

d. Tiedown--Any device designed for the purpose of anchoring a temporary structure to ground anchors.

Tiedown Spacing and Sizes:

Over the top tiedowns shall be positioned at stud and rafter locations near each end of the temporary structure. Others, if needed, may be positioned between them. Whenever feasible, over the top tiedowns and diagonal ties directly beneath them may use the same ground anchors. Cable or strapping, or other approved methods or materials shall be used for ties. All ties shall be fastened to ground anchors and drawn tight with turn buckles, yoke-type fasteners or other such tensioning devices listed with the ground anchor. Cable shall be either seven thirty-seconds ($7/32$) of an inch in diameter or greater (7×7) steel cable, or one quarter ($1/4$) inch diameter or greater (7×19) aircraft cable. All cable ends shall be secured with at least two (2) U-bolt cable clamps. The material shall be capable of resisting an allowable working load of three thousand, one hundred fifty (3,150) pounds with no more than two (2) percent elongation and shall withstand a fifty (50) percent overload (4,725 pounds total). Tiedowns exposed to weathering shall be resistant to deterioration at least equivalent to that provided by a coating of zinc on steel of not less than thirty-hundredths (0.30) ounces per square foot of surface coated. Note: Type 1, Class B, Grade 1 steel strapping 1 1/4 inches wide and 0.035 inch thick, conforming with Federal

Specification QQ-S-781-F is judged to conform with these requirements. Materials used for ties must terminate with D-ring bolts, or other fastening devices which will not cause distortion of the band or reduce its breaking strength (4,725 pounds). Connection of the cable frame tie to the I-beam (or other shape) main structural frame should be by a five eighths (5/8) inch drop-forged closed eye, bolted through a hole in the center of the I-beam web. A washer or equivalent shall be used so that the beam is sufficiently reinforced around the hole. If steel strap ties are used, care must be exercised to insure that minimum bending radius is adhered to so that the breaking strength of the strap is not reduced. Frame ties shall connect the anchor and the steel I-beam (or other shape) main structural frame member which runs lengthwise under the temporary structure. Frame ties shall never be connected to any steel outrigger beams which fasten to and intersect the main I-beam at right angles. Ground anchors shall be aligned with the centers of all piers. In addition, they must be situated immediately below the outer wall to accommodate over the top ties as well as frame ties. All ground anchors, cables, straps, etc., shall be installed in strict compliance with the manufacturers' recommendations. All temporary structures shall contain the minimum number of ties as specified below:

- (a) Hurricane Zone--Up to 14 feet in width;
- (b) Non-Hurricane Zone--Up to 14 feet in width;

LENGTH OF STRUCTURE

UP TO 40' 41' TO 60' 61' TO 82'

- (a) (b) (a) (b) (a) (b)

Diagonal Ties Per side 4 3 6 5 8 6

Over the Roof Ties 2 2 3 3 4 3

Min. Anchors Per Structure 8 6 12 10 16 12

- 4. Customers shall be prohibited entrance to said facility or access to displayed fireworks.
- 5. An approved fireworks extinguisher having a minimum classification of 2A or equivalent shall be provided and easily accessible.
- 6. An independent electrical supply shall be provided for the facility and all electrical, heating and cooling equipment and connections shall be installed so as not to constitute a fire hazard.

7. Smoking shall be prohibited within thirty (30) feet of said facility and shall be strictly enforced by the operator. Sufficient NO SMOKING signs shall be posted in conspicuous locations (front, rear and sides).

8. All fuses shall be taped or covered while on display, to prevent direct exposure of said fuse.

B. Permanent Fireworks Retail Outlets:

This type facility displays and offers for sale fireworks in a permanent location, to include the following:

1. All fireworks displayed in this facility and the cashier must be so situated that NO SMOKING can be controlled within the facility at all times by the cashier.

2. NO SMOKING signs shall be painted on each entrance door at eye level with letters no less than four (4) inches in height. Letters shall be on a contrasting background. (Decals are acceptable.)

3. A fire extinguisher having a minimum classification of 2A or equivalent shall be provided for each 600 square feet of floor space. Extinguishers shall be located throughout the facility and placed at a height easily accessible.

4. NO SMOKING signs with letters no less than four (4) inches in height shall be posted in conspicuous locations, one sign for each 600 square feet of floor space.

5. All exposed fuses shall be taped or covered, while on display, to prevent direct exposure to said fuse.

19-405.6. General Provisions for Sale of Pyrotechnics.

A. These general provisions do not exempt retail fireworks establishments from other Rules and Regulations where applicable.

B. The State Board of Pyrotechnic Safety shall adopt the 1985 Edition of the Standard Building Code with the 1986 and 1987 Amendments including Appendix "P" for the construction of all fireworks facilities.

C. The State Board of Pyrotechnic Safety shall adopt the 1987 Edition of the National Electrical Code for the construction of all fireworks facilities.

D. No fireworks shall be stored, displayed or offered for sale in any area so situated that the rays of the sun shining through glass will be directly on them.

E. All retailers shall store backup stocks of Class "C" Fireworks in the original unbroken DOT containers in which such fireworks were shipped and received.

F. Separation of fireworks storage areas from other areas of the same building shall be not less than one-hour fire rated construction with a separate exit/entrance combination.

G. The operator's, salesman's or handler's conduct or condition shall be as such as not to imperil the public safety, and shall be capable of reading, writing, speaking and understanding the English language.

H. No person under the age of eighteen (18) shall be employed or allowed to participate as a salesman or handler of fireworks and no person under the age of fourteen (14) shall be sold permissible fireworks unless accompanied by a parent.

I. No fireworks shall be permitted to be sold from automobiles, trucks, campers, or any other motor driven vehicle.

J. No flame shall be allowed within thirty (30) feet of any structure housing fireworks for sale.

K. The area surrounding a fireworks facility shall be kept clean of debris, empty boxes, trash or any other materials that would constitute a fire hazard.

L. The Division shall have the authority, to inspect any vehicle or building where fireworks may be stored or sold, to see that the laws of the State are enforced.

M. All disputes arising as a result of these Rules and Regulations shall be referred to the State Board of Pyrotechnic Safety.

1. Any party involved in a dispute arising under these Rules and Regulations may within fifteen (15) days of the occurrence giving rise to such dispute petition the Board, in writing via Certified or Registered Mail, for an appearance before the Board. The petition shall plainly and substantially set forth the details of the occurrence including its time, location and date, and state petitioner's reasoning for request to appear before the Board.

2. The Board shall within twenty (20) days of receipt of a written request for appearance make a determination as to the necessity of the appearance and notify the petitioner, in writing via Certified or Registered Mail, of its decision to grant or deny the appearance, and the reasons therefor.

19-405.7. Wholesale Distributors and Jobbers.

A. All Wholesale Distributors and Jobbers shall store permissible fireworks in their original packaging and in unopened cases or cartons so as to take advantage of the insulation provided by such packaging, provided however, unopened fireworks packages which have been returned by retailers may be temporarily retained in bins for repackaging or resale.

B. A fire extinguisher having a minimum classification of 2A or equivalent shall be provided for each 600 square feet of floor space and so located that accessibility is not hampered.

C. Such areas where fireworks are stored shall have signs posted containing the words, NO SMOKING, in letters not less than four inches in height on a contrasting background. The owner or operator shall strictly enforce NO SMOKING at all times.

D. No open flame type heat shall be allowed and all electrical, heating or cooling equipment and connections shall be installed so as not to constitute a fire hazard.

E. All fireworks storage warehouses, where closer than thirty (30) feet to adjacent buildings shall provide a minimum of two-hour fire separation.

F. No person under the age of eighteen (18) shall be employed or allowed to participate as a salesman or handler of fireworks.

G. The salesman's or handler's conduct or condition of sobriety shall be such as not to imperil the public safety, and this individual shall be capable of reading, speaking and understanding the English language.

H. The Division shall have the authority, to inspect any building or vehicle where fireworks may be sold or stored to see that the laws of the State are enforced.

I. All disputes arising as a result of these rules and regulations shall be referred to the State Board of Pyrotechnic Safety.

19-405.8. Storage of Class "B" Pyrotechnics.

A. Outdoor facilities are to be fire-resistant, weather-resistant and theft-resistant. The ground around outdoor facilities must slope away for drainage or other adequate drainage be provided. When unattended, vehicular facilities must have wheels removed or otherwise be effectively immobilized by locking devices.

B. Outdoor facilities are to be constructed of masonry, metal-covered wood, fabricated metal, or a combination of these materials. Foundations are to be constructed of brick, concrete, cement block, stone or metal or wood posts. If piers or posts are used in lieu of a continuous foundation, the space under the building is to be enclosed with fire-resistant material. The walls and floors are to be constructed of, or covered with, a non-sparking material or lattice work. The doors must be metal or solid wood covered with metal.

C. Indoor storage facilities are to be fire-resistant and theft-resistant. They need not be weather-resistant if the buildings in which Class "B" pyrotechnics are stored provide protection from the weather. No indoor facility is to be located in a residence or dwelling. The indoor storage of low explosives must not exceed a quantity of fifty (50) pounds. More than one indoor facility may be located in the same building if the total quantity of explosive materials stored does not exceed fifty (50) pounds.

D. Indoor facilities are to be constructed of masonry, metal-covered wood, fabricated metal, or a combination of these materials. The walls and floors are to be constructed of, or covered with, a non-sparking material. The doors must be metal or solid wood covered with metal.

E. Hinges and hasps for all storage facilities are to be attached to doors by welding, riveting, or bolting (nuts inside of door). Hinges and hasps must be installed so that they cannot be removed when the doors are closed and locked.

F. Each door in a facility is to be equipped with (i) two (2) mortise locks; (ii) two (2) padlocks fastened in separate hasps and staples; (iii) a combination of a mortise lock and a padlock; (iv) a mortise lock that requires two (2) keys to open; or (v) a three-point lock. Padlocks must have at least five (5) tumblers and case-hardened shackle of at least 3/8 inch diameter. Padlocks must be protected with not less than 1/4 inch steel hoods

constructed so as to prevent sawing or lever action on the locks, hasps and staples. These requirements do not apply to facility doors that are adequately secured on the inside by means of a bolt, lock or bar that cannot be actuated from the outside.

G. Smoking, matches, open flames, and spark producing devices are not permitted--

(1) In any facility;

(2) Within fifty (50) feet of any outdoor facility; or

(3) Within any room containing an indoor facility.

H. Explosive materials within a facility are not to be placed directly against interior walls and must be stored so as not to interfere with ventilation. To prevent contact of stored explosive materials with walls, a non-sparking lattice work or other non-sparking material may be used.

19-405.9. Sale of Class "B" Pyrotechnics.

A. Storage and Sale of Class "B" Pyrotechnics shall be prohibited in a facility that offers Class "C" Common Fireworks for sale.

B. Each distributor of Class "B" display pyrotechnics shall provide to the purchaser necessary permit forms for fireworks displays in South Carolina and all sales records shall be kept open for inspection by the authorities for no less than eighteen (18) months.

C. No one under the age of eighteen (18) shall be employed as a salesman or handler of Class "B" pyrotechnics.

D. The Division shall have the authority, to inspect any building or vehicle where Class "B" pyrotechnics may be stored and sold to see that the laws of the State are enforced.