



# Policy Statement

## Hopkins Fire Prevention Bureau

**Date:** May 22, 2019

**Subject:** CANOPIES AND MEMBRANE STRUCTURES

**3103.1 General.** All tents, canopies and membrane structures, both temporary and permanent, shall be in accordance with this section. Permanent tents, canopies and membrane structures shall also comply with the *International Building Code*.

**3102.2 Flame propagation performance treatment.** Before a permit is granted, the owner or agent shall file with the fire code official a certificate executed by an approved testing laboratory certifying that the tents; canopies and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects, including sawdust when used on floors or passageways, shall be composed of material meeting the flame propagation performance criteria of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation performance criteria of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.

**3103.3 Label.** Membrane structures, tents or canopies shall have a permanently affixed label bearing the identification of size and fabric or material type.

**3104.4 Certification.** An affidavit or affirmation shall be submitted to the fire code official and a copy retained on the premises on which the tent or air-supported structure is located.

The affidavit shall attest to the following information relative to the flame propagation performance criteria of the fabric:

1. Names and address of the owners of the tent, canopy or air-supported structure.
2. Date the fabric was last treated with flame-retardant solution.
3. Trade name or kind of chemical used in treatment.
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.

**3104.5 Combustible materials.** Hay, straw, shavings or similar combustible materials shall not be located within any tent, canopy or membrane structure containing assembly occupancy, except the materials necessary for the daily feeding and care of animals. Sawdust and shavings utilized for a public performance or exhibit shall not be prohibited provided the sawdust and shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time. The areas within and adjacent to the tent or air-supported structure shall be maintained clear of all combustible materials or vegetation that could create a fire hazard within 20 feet (6096 mm) of the structure. Combustible trash shall be removed at least once a day from the structure during the period the structure is occupied by the public.

**3104.6 Smoking.** Smoking shall not be permitted in tents, canopies or membrane structures. Approved "No Smoking" signs shall be conspicuously posted in accordance with Section 310.

**3104.7 Open or exposed flame.** Open flame or other devices emitting flame, fire or heat or any flammable or combustible liquids, gas, charcoal or other cooking device or any other unapproved devices shall not be permitted inside or located within 20 feet (6096 mm) of the tent, canopy or membrane structures while open to the public unless approved by the fire code official.



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**3104.8 Fireworks.** Fireworks shall not be used within 100 feet (30 480 mm) of tents, canopies or membrane structures.

**3104.9 Spot lighting.** Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with approved noncombustible insulation not less than 9.25 inches (235 mm) thick.

**3104.10 Safety film.** Motion pictures shall not be displayed intents, canopies or membrane structures unless the motion picture film is safety film.

**3104.11 Clearance.** There shall be a minimum clearance of at least 3 feet (914 mm) between the fabric envelope and all contents located inside the tent or membrane structure.

**3104.12 Portable fire extinguishers.** Portable fire extinguishers shall be provided as required by Section 906.

**3104.13 Fire protection equipment.** Fire hose lines, water supplies and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as required by the fire code official.

**3104.14 Occupant load factors.** The occupant load allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10.

**3104.15 Heating and cooking equipment.** Heating and cooking equipment shall be in accordance with Sections 3104.15.1 through 3104.15.7.

**3104.15.1 Installation.** Heating or cooking equipment, tanks, piping, hoses, fittings, valves, tubing and other related components shall be installed as specified in the *International Mechanical Code* and the *International Fuel Gas Code*, and shall be approved by the fire code official.

**3104.15.2 Venting.** Gas, liquid and solid fuel-burning equipment designed to be vented shall be vented to the outside air as specified in the *International Fuel Gas Code* and the *International Mechanical Code*. Such vents shall be equipped with approved spark arresters when required. Where vents or flues are used, all portions of the tent, canopy or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

**3104.15.3 Location.** Cooking and heating equipment shall not be located within 10 feet (3048 mm) of exits or combustible materials.

**3104.15.4 Operations.** Operations such as warming of foods, cooking demonstrations and similar operations that use solid flammables, butane or other similar devices which do not pose an ignition hazard, shall be approved.

**3104.15.5 Cooking tents.** Tents where cooking is performed shall be separated from other tents, canopies or membrane structures by a minimum of 20 feet (6096 mm).

**3104.15.6 Outdoor cooking.** Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet (6096 mm) of a tent, canopy or membrane structure.



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### **3104.15.7 Electrical heating and cooking equipment.**

Electrical cooking and heating equipment shall comply with the *International Code Council Electrical Code Administrative Provisions*.

**3104.16 LP-gas.** The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with Sections 2406.16.1 through 2404.16.3.

**3104.16.1 General.** LP-gas equipment such as tanks, piping, hoses, fittings, valves, tubing and other related components shall be approved and in accordance with Chapter 38 and with the *International Fuel Gas Code*.

**3104.16.2 Location of containers.** LP-gas containers shall be located outside. Safety release valves shall be pointed away from the tent, canopy or membrane structure.

**3104.16.2.1 Containers 500 gallons or less.** Portable LP-gas containers with a capacity of 500 gallons (1893 L) or less shall have a minimum separation between the container and structure not less than 10 feet (3048 mm).

**3104.16.2.2 Containers more than 500 gallons.** Portable LP-gas containers with a capacity of more than 500 gallons (1893 L) shall have a minimum separation between the container and structures not less than 25 feet (7620 mm).

**3104.16.3 Protection and security.** Portable LP-gas containers, piping, valves and fittings which are located outside and are being used to fuel equipment inside a tent, canopy or membrane structure shall be adequately protected to prevent tampering, damage by vehicles or other hazards and shall be located in an approved location. Portable LP-gas containers shall be securely fastened in place to prevent unauthorized movement.

**3104.17 Flammable and combustible liquids.** The storage of flammable and combustible liquids and the use of flammable-liquid-fueled equipment shall be in accordance with Sections 2404.17.1 through 2404.17.3.

**3104.17.1 Use.** Flammable-liquid-fueled equipment shall not be used in tents, canopies or membrane structures.

**3104.17.2 Flammable and combustible liquid storage.**



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Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet (15 240 mm) from tents, canopies or membrane structures. Storage shall be in accordance with Chapter 34.

**3104.17.3 Refueling.** Refueling shall be performed in an approved location not less than 20 feet (6096 mm) from tents, canopies or membrane structures.

**3104.18 Display of motor vehicles.** Liquid- and gas-fueled vehicles and equipment used for display within tents, canopies or membrane structures shall be in accordance with Sections 2404.18.1 through 2404.18.5.3.

**3104.18.1 Batteries.** Batteries shall be disconnected in an appropriate manner.

**3104.18.2 Fuel systems.** Vehicles or equipment shall not be fueled or defueled within the tent, canopy or membrane structure.

**3104.18.2.1 Quantity limit.** Fuel in the fuel tank shall not exceed one-quarter of the tank capacity or 5 gallons (19 L), whichever is less.

**3104.18.2.2 Inspection.** Fuel systems shall be inspected for leaks.

**3104.18.2.3 Closure.** Fuel tank openings shall be locked and sealed to prevent the escape of vapors.

**3104.18.3 Location.** The location of vehicles or equipment shall not obstruct means of egress.

**3104.18.4 Places of assembly.** When a compressed natural gas (CNG) or liquefied petroleum gas (LP-gas) powered vehicle is parked inside a place of assembly, all the following conditions shall be met:

1. The quarter-turn shutoff valve or other shutoff valve on the outlet of the CNG or LP-gas container shall be closed and the engine shall be operated until it stops. Valves shall remain closed while the vehicle is indoors.
2. The hot lead of the battery shall be disconnected.
3. Dual-fuel vehicles equipped to operate on gasoline and CNG or LP-gas shall comply with this section and Sections 2404.18.1 through 2404.18.5.3 for gasoline-



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powered vehicles.

**3104.18.5 Competitions and demonstrations.** Liquid and gas-fueled vehicles and equipment used for competition or demonstration within a tent, canopy or membrane structure shall comply with Sections 2404.18.5.1 through 2404.18.5.3.

**3104.18.5.1 Fuel storage.** Fuel for vehicles or equipment shall be stored in approved containers in an approved location outside of the structure in accordance with Section 2404.17.2.

**3104.18.5.2 Fueling.** Refueling shall be performed outside of the structure in accordance with Section

**3104.18.5.3 Spills.** Fuel spills shall be cleaned up immediately.

**3104.19 Separation of generators.** Generators and other internal combustion power sources shall be separated from tents, canopies or membrane structures by a minimum of 20 feet (6096 mm) and shall be isolated from contact with the public by fencing, enclosure or other approved means.

**3104.20 Standby personnel.** When, in the opinion of the fire code official, it is essential for public safety in a tent, canopy or membrane structure used as a place of assembly or any other use where people congregate, because of the number of persons, or the nature of the performance, exhibition, display, contest or activity, the owner, agent or lessee shall employ one or more qualified persons, as required and approved, to remain on duty during the times such places are open to the public, or when such activity is being conducted.

Before each performance or the start of such activity, standby personnel shall keep diligent watch for fires during the time such place is open to the public or such activity is being conducted and take prompt measures for extinguishment of fires that occur and assist in the evacuation of the public from the structure.

There shall be trained crowd managers or crowd manager supervisors at a ratio of one crowd manager/supervisor for every 250 occupants, as approved.

**3104.21 Vegetation removal.** Combustible vegetation shall be removed from the area occupied by a tent, canopy or membrane structure, and from areas within 30 feet (9144 mm) of such structures.



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**3104.22 Waste material.** The floor surface inside tents, canopies or membrane structures and the grounds outside and within a 30-foot (9144 mm) perimeter shall be kept clear of combustible waste. Such waste shall be stored in approved containers until removed from the premises.

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