



Tents, Temporary Special Event Structures, and other Membrane Structures Requirements



General

Temporary and permanent tents and membrane structures shall comply with this section and a permit is required.

Combustible Materials

Hay, straw, shavings or similar combustible materials shall not be located within any tent or membrane structure containing an 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 that the sawdust and shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time.

Smoking

Smoking shall not be permitted in tents or membrane structures. Approved "No Smoking" signs shall be conspicuously posted.

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 or membrane structures while open to the public unless approved by the fire code official.

Fireworks

Permitted commercial fireworks displays shall not be located within 100 feet of tents, canopies or membrane structures.

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 9¹/₄ inches (235 mm) thick.

Safety Film

Motion pictures shall not be displayed in tents or membrane structures unless the motion picture film is safety film.

Clearance

There shall be a clearance of not less than 3 feet (914 mm) between the fabric envelope and all contents located inside membrane structures.

Portable Fire Extinguishers

Approved portable fire extinguishers shall be provided and placed in locations as required by the fire marshal.

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 marshal.

Occupant Load Factors

The occupant load allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10 of the IBC and IFC.

Heating and Cooking Equipment

Heating and cooking equipment shall be in accordance with the following:



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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 building and fire code official.

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 where required. Where vents or flues are used, all portions of the tent or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

Location

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

Operations.

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

Cooking Tents

Tents with sidewalls or drops where cooking is performed shall be separated from other tents or membrane structures by not less than 20 feet (6096 mm).

Outdoor Cooking

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

Electrical Heating and Cooking Equipment

Electrical cooking and heating equipment shall comply with NFPA 70.

LP-gas

The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with the following:

General

LP-gas equipment such as containers, tanks, piping, hoses, fittings, valves, tubing and other related components shall be approved and in accordance with IFC Chapter 61 and with the International Fuel Gas Code.

Location of Containers

LP-gas containers and tanks shall be located outside in accordance with IFC Table 6104.3. Pressure relief devices shall be pointed away from the tent or membrane structure.

Protection and Security

Portable LP-gas containers, tanks, piping, valves and fittings that are located outside and are being used to fuel equipment inside a tent 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 secured to prevent unauthorized movement.

Flammable and Combustible Liquids

The storage of flammable and combustible liquids and the use of flammable-liquid-fueled equipment shall be in accordance with the following:



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Use

Flammable-liquid-fueled equipment shall not be used in tents or membrane structures.

Flammable and Combustible Liquid Storage

Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet (15 240 mm) from tents or membrane structures. Storage shall be in accordance with IFC Chapter 57.

Refueling

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

Display of Motor Vehicles

Liquid- and gas-fueled vehicles and equipment used for display within tents or membrane structures shall be in accordance with the following:

Batteries

Batteries shall be disconnected in an appropriate manner.

Fuel

Vehicles or equipment shall not be fueled or defueled within the tent or membrane structure.

Quantity Limit

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

Inspection

Fuel systems shall be inspected for leaks.

Closure

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

Location

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

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 document.

Competitions and Demonstrations

Liquid and gas-fueled vehicles and equipment used for competition or demonstration within a tent or membrane structure shall comply with the following:

Fuel Storage

Fuel for vehicles or equipment shall be stored in approved containers in an approved location outside of the structure in accordance with this document.

Fueling

Refueling shall be performed outside of the structure in accordance with this document.



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Spills.

Fuel spills shall be cleaned up immediately.

Separation of Generators.

Generators and other internal combustion power sources shall be separated from tents or membrane structures by not less than 20 feet (6096 mm) and shall be isolated from contact with the public by fencing, enclosure or other *approved* means.

Standby Personnel

Where, in the opinion of the fire marshal, it is essential for public safety in a tent 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.

Duties

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.

Crowd Managers.

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

Combustible Vegetation

Combustible vegetation that could create a fire hazard shall be removed from the area occupied by a tent or membrane structure, and from areas within 30 feet (9144 mm) of such structures.

Combustible Waste Material.

The floor surface inside tents or membrane structures and the grounds outside and within a 30-foot (9144 mm) perimeter shall be kept free of combustible waste and other combustible materials that could create a fire hazard. Such waste shall be stored in approved containers and removed from the premises not less than once a day during the period the structure is occupied by the public.