



Hickory Fire Department
Division of Fire and Life Safety

City of Hickory
76 N Center St NE
Hickory, NC 28601
Phone: (828) 323-7522

**General Fire Safety Requirements
For the Use of
Tents and Membrane Structures**

The following information does not include all of the requirements that regulate the temporary use of tents, and membrane structures. The intent is to provide general information for those who are using them.

Prior to opening for business the code enforcement official must conduct an inspection and approve the operation. The officials include a fire inspector and depending on the event, it may include an electrical inspector and/or a health inspector. If additional information is needed, please call the Hickory Fire Department Division of Fire and Life Safety at (828) 323-7522. Questions pertaining to extension cords, illumination and other electrical matters need to be directed to Catawba County Building Service at (828) 465-8376, extension 1. Questions pertaining to food preparation and other related matters needs to be directed to Catawba County Environment Health Department (828) 465-8270.

Definitions:

Tent – a structure, enclosure or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.

Membrane Structure – Air supported or air-inflated structure.

General Requirements:

- **Vendors shall remain within their assigned spaces.** They are not allowed to occupy a space that is dedicated to fulfill the separation requirements between other tents. The separation requirements are outlined in the NC Fire Prevention Code.
- Tents shall be composed of flame-resistant material and shall have a permanently affixed label bearing the identification of size and fabric or material type. **There are some exceptions and must be approved by the Hickory Fire Department Division of Fire and Life Safety in advance.**
- Combustible material such as hay, straw, shaving or similar material shall not be located within any tent or membrane structure used for assembly purposes or cooking.
- Must be located at least 20 feet from lot lines, parked vehicles and internal combustion engines.
- Barricades must be provided to prevent vehicles from parking within 20 feet of the tent or membrane structure.

Fire Extinguishers:

- Fire extinguishers shall be serviced yearly, gauge in charged zone (green area) and readily available for use. Proof of yearly service required (inspection tag on extinguisher or receipt).
- At least one portable fire extinguisher with a minimum 2A rating shall be provided in each tent or membrane structure. If the structure is larger than 1,500 sq ft then one 4A or two 2A extinguishers shall be provided.
- When cooking, at least one portable fire extinguisher with a minimum rating of 3A:40BC is required.
- When cooking with deep fat fryer(s) a Class K portable fire extinguisher is required in addition to the 3A:40BC portable fire extinguisher.

Extension Cords:

- Extension and appliance cords shall be rated for hard or extra hard usage. Extension cords have their insulation ratings stamped into the jacket. Approved cords will have one or more of these ratings: SEW, SEOW, SEOOW, SJEW, SJEOW, SJEOWW, SJOW, SJOOW, SJTW, SJTOW, SJTOOW, SOW, or SOOW.
- The maximum wattage allowed for extension cords are as follows: 16ga.=1,560 watts, 14ga.=1,680 watts, 12ga.=1,920 watts. (Example: 16ga. Cord =1,560 watts. Using a 150 watt light, $1,560 \div 150 = 10$ lights.)

- Cords shall be plugged directly into a GFCI protected outlet, or the GFCI can be located in the cord within 12 inches of the plug.
- Power Strips or multi-plug adapters are permitted. Location of the power strip, multi-plug adapter, or cord end shall be installed in a dry location protected from the weather.
- Electrical boxes, receptacles, and receptacle covers shall be approved for a wet location requiring “in-use” type covers.
- Cords shall be grounded and maintained in good condition without splices, deterioration or damage.
- Cords shall be supported in place at intervals that insure that they will be protected from damage, not create a trip hazard, and remain in place. Support shall be in the form of staples, cable ties, straps, or running boards. The method used shall not cause damage to the cord.
- Where subject to vehicle traffic, the cords shall be protected with two wooden boards anchored to the ground and the cord shall be placed between the two boards.
- Where subject to pedestrian traffic the cords shall be protected by rubber mats or one layer of 30 pound roofing felt paper.

Illumination:

- All lamps, light bulbs, etc. shall be adequately secured.
- All light bulbs for general illumination shall be protected from accidental breakage by a suitable fixture with a guard. This guard shall fully protect the bulb.
- Light bulbs shall be located a minimum of 18 inches from combustible material. This includes tent and canopy fabric.

Exit Signs and Means of Egress Illumination:

- Means of egress shall be illuminated with light having an intensity of not less than 1 foot-candle (11 lux) at floor level.
- Exits shall be clearly marked and exits signs shall be installed at exit doorways.
- Exit signs shall be self-luminous or shall be internally or externally illuminated by fixtures supplied in the following manner:
 - Two separate circuits, one of which shall be separate from all other circuits, for occupant loads of 300 or less; or
 - Two separate sources of power, one of which shall be an approved emergency system when the occupant load exceeds 300. Emergency systems shall be supplied from storage batteries or an on-site generator set.

Cooking and Heating:

- Tents where cooking is performed shall be separated from other tents or membrane structures by a minimum of 20 ft. unless the size of the structure allows a reduction in separation. **The Hickory Fire Department Division of Fire and Life Safety must approve a reduction in separation in advance.**
- All cooking appliances shall be located near the outer edge of the tent with a maximum practical vertical clearance from the top of the cooking appliance to the fabric as approved by the fire official.
- The public is not allowed within a tent or membrane structure during cooking operations unless otherwise approved by the fire official.

LP-Gas:

- LP-gas containers shall be secured in such a manner as to prevent them from being knocked over. Vendors should bring mounting and support devices with them. Gas containers not adequately secured will have to be turned off and the regulators removed until they are properly secured.
- When used in conjunction with a tent the LP-gas containers shall be on the outer edge of the tent and away from open flames. The safety release valve shall be turned to prevent the vent from discharging into the structure or towards the public. **LP-gas containers shall not be located inside of a tent with sides.**
- LP-gas equipment such as tanks, piping, hoses, valves, and other related components shall be approved and in accordance with the *International Gas Code*.
- LP-gas containers used on a manifold system shall require a regulator attached at each tank and an approved gas shut-off valve immediately after the regulator. All related LP-gas piping shall be on the low-pressure side of the regulator.

Generators:

- Generators and other internal combustion power sources shall be located a minimum of 20 feet from a tent or membrane structure.
- Shall be isolated from contact with the public by fencing, enclosure, or other approved means.
- Flammable and combustible liquids shall be stored not less than 50 feet from a tent or membrane structure.