

Vermont Department of Public Safety DIVISION OF FIRE SAFETY



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CODE INFORMATION SHEET

This information sheet is based on the 2015 edition of the Vermont Fire and Building Safety Code, and other adopted codes and standards

Tents/Membrane Structures

Used for Outdoor Dining or Gathering

There are several fire and life safety issues need to be considered when using a tent for a gathering of people. These safety precautions are applicable to the use of tents at any occupancy type. Approval of a temporary tent or membrane structure is finalized through a site inspection, which must be approved prior to the use and/or occupancy of the tent.

General Information

- A permit is required for any membrane structures, tent or canopies greater than 1200 square feet at public buildings or public event.
- Tents shall be permitted only on a temporary basis.
- Tents shall be erected to cover not more than 75 percent of the premises, unless otherwise approved.
- Smoking within the tent is not permitted, and "NO SMOKING" signs need to be posted.
- Fire extinguishers are required within the tent. Portable extinguishers shall be permitted to be located in secure locations accessible to staff.



Tent Fabric Flammability

One of the biggest concerns with a tent, is the flammability of the tent fabric. Because of this, it required that the tent material meets the flame propagation performance requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

This test is performed on the fabric of the tent by a testing organization that will issue a certificate if the fabric has passed the test.

Location and Spacing

Special consideration should be given to ensure that the tent:

- Does not block fire department access, fire hydrants and fire department connections.
- Is not located too close to other buildings or lot lines
- Does not block the means of egress from other building
- Has at least a 10 ft (3 m) distance around the tent that is free of combustible material
- Is a distance of at least 10 ft (3 m) between stake lines of multiple tents to provide means of egress from the tents.

Egress and Occupancy

If one or more sides will be added to a tent the means of egress must comply with the requirements for the occupancy of the tent.

It is important to determine the number of occupants that will be in in the space to ensure that there are an appropriate number of exits providing adequate exit capacity.

- if a tent is erected in a parking lot, measures should be taken to prevent a vehicle from parking in front of an exit and blocking it.
- · Exits must be clearly marked
- Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency.
- Tent stakes adjacent to any means of egress from any tent open to the public shall be railed off, capped, or covered so as not to present a hazard to the public.

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Heating Devices

- When using an alternative heat source, follow operating instructions, use fire safeguards and be sure to properly ventilate.
- Heaters are allowed as long as they are listed by a nationally recognized testing laboratory for the use and comply with the requirements of the Statewide Fire Prevention Code.
- All gas heating equipment used within the tent must be listed for that use, and all containers for LP gas need to be at least 5 ft (1.5 m) from the tent.
- Tanks shall be secured in the upright position and protected from vehicular traffic.
- Fuel-fired heaters and their installation shall be approved by the authority having jurisdiction.
- Electric Heaters shall be connected to electricity by electric cable that is suitable for outside use and is of sufficient size to handle the electrical load.

Open flame devices

- Open flame devices shall be permitted to be used in the following situations, provided that precautions satisfactory to the authority having jurisdiction are taken to prevent ignition of any combustible material or injury to occupants:
- (a) For ceremonial or religious purposes
- (b) On stages and platforms where part of a performance
- (c) Where candles on tables are securely supported on substantial noncombustible bases and candle flame is protected
- The requirement shall not apply to heat producing equipment complying with NFPA 101.
- The requirement shall not apply to food service operations in accordance with of NFPA 101.
- Gas lights shall be permitted to be used, provided that precautions are taken, subject to the approval of the authority having jurisdiction, to prevent ignition of any combustible materials



Electrical Safety

- The electrical system shall be installed, maintained, and operated in a safe and professional manner.
- When in use, portable electrical systems shall be inspected daily by a qualified person representing the owner, and any defects found shall be corrected before the public is admitted
- The electrical system and equipment shall be isolated from the public by proper elevation or guarding, and all electrical fuses and switches shall be enclosed in approved enclosures.
- Cables on the ground in areas traversed by the public shall be placed in trenches or protected by approved covers.
- All electrical devices and wiring used shall comply with NEC 70 including Ch. 5 Article 525.23 for GFI equipment.
- If you use a portable generator, it is critical that proper safety precautions be taken. Always read and follow all manufacturer operating instructions.
- Portable Generators and other internal combustion power sources shall be separated from temporary membrane structures and tents by a minimum of 5 ft (1.5 m) and shall be protected from contact by fencing, enclosure, or other approved means.
- Portable Generators shall be separated from all building openings and windows by a minimum of 20 ft

Severe Weather Tent Safety

Preparing for any weather emergency starts with staying informed of what the forecasts are. Tents are temporary structures made of fabric and are not intended to be occupied during extreme weather conditions.

If severe weather of any kind is present or anticipated, it may be best that the tent be evacuated immediately and taken down.

If the tent must remain up, there are a few things that can be done to prepare for the weather:

- Tension each staking point and include extra stakes and stake plates at corner locations, lace lines, and secondary poles.
- Tension the Tent: It is important that the stakes are secure, and the ratchet assemblies or ropes and tent top fabric are as tight as possible.
- Remove the Sidewalls: Sidewalls can be removed from the tent to reduce surface area and wind load pressures
- Add Anti-Sink Pole Plates: For pole tents, set all poles on anti-sink plates this keeps poles from sinking into the ground, making impressions in asphalt, or sliding on concrete.