



BUILDING AND LIFE SAFETY ISSUES FOR TENTS

States are allowing businesses to start opening back up, and with that comes a number of guidelines to minimize the spread of COVID-19. Restaurants specifically are trying to find innovative solutions to welcome diners under the new restrictions. Some of these restrictions may include:

- ✓ Offering outside seating areas
- ✓ Locating tables at least 6 ft (1.8 m) apart
- ✓ Limiting the number of patrons at each table

To create additional areas for outdoor dining, many restaurants have set up outdoor seating under tents. Several fire and life safety issues need to be considered when using them. While this information focuses mostly on the use of tents by restaurants, most of these considerations are applicable to the use of tents for any occupancy type.

How Long Can a Tent Be Used?



Tents are only permitted to be used on a temporary basis. They should not remain in place for more than 180 days.

GETTING STARTED

Multiple safety precautions must be followed to erect a tent or membrane structure, and this information is not an all-inclusive list of requirements. For any restaurant planning to use a tent, start by following these three rules:

1. Make sure to work with the authority having jurisdiction (AHJ).
2. Review all applicable requirements in *NFPA 1, Fire Code*, and *NFPA 101, Life Safety Code*.
3. Have the plans reviewed by a qualified person.

HOW THE CODES HELP ENSURE SAFETY

Requirements that address the use of tents and membrane structures are covered in:

- Section 11.11 of *NFPA 101*
- Chapter 25 of *NFPA 1*

These codes provide guidance for building and life safety issues that should be considered when using tents, some of which include:

- Egress and occupancy
- Location and placement
- Fabric flammability

EGRESS AND OCCUPANCY

The means of egress must comply with the requirements for the occupancy of the tent. Typically, restaurants are either an assembly or mercantile occupancy, depending on the occupant load. It is important to determine the **number of occupants in the space** to ensure that there are an appropriate number of exits providing adequate exit capacity.

Additional egress features to consider include:

- ✓ Are exits clearly marked?
- ✓ Is the tent required to have emergency lighting?
- ✓ Are all the exits accessible and clear of obstructions?

What type of occupancy does a restaurant fall under?

Restaurants with an occupant load of:



50 or more people are typically classified as **assembly** occupancies.



Fewer than 50 people are typically classified as **mercantile** occupancies.



BUILDING AND LIFE SAFETY ISSUES FOR TENTS *CONTINUED*

For example, 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. This could be mitigated with the use of barricades and signs and by properly educating staff members.

This education is important. The maintenance of the means of egress for these tents will ensure that nothing (including the tent wires and supports) obstructs the exits, aisles, and other portions of the means of egress.

LOCATION AND PLACEMENT

Tent location must be approved by the AHJ, who could be the local building department or fire department official in charge of inspecting and approving the use of the structure.

Special consideration should be given to ensure that the tent:

- ✓ Does not block fire department access
- ✓ Is not located too close to other buildings or lot lines
- ✓ Does not block the means of egress from other buildings
- ✓ 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

FABRIC FLAMMABILITY

One of the biggest concerns with a tent, as demonstrated during the 1944 Hartford Circus fire, is the flammability of the tent fabric. Because of this, both NFPA 1 and NFPA 101 require 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.

To verify the fabric of the tent meets the necessary requirements, the AHJ must require one of the following items for review: a certificate or other evidence of acceptance by an organization acceptable to the AHJ or a report of tests made by other inspection authorities or organizations acceptable to the AHJ.

Additionally, to limit the exposure to fire, several safety measures must be put in place:

- ✓ Smoking within the tent is not permitted, and “NO SMOKING” signs need to be posted.
- ✓ All 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.
- ✓ Fire extinguishers are required within the tent as directed by the AHJ.

Learn More

- ▶ Get free digital access to the codes by visiting:
 - nfpa.org/1
 - nfpa.org/101
 - nfpa.org/701
- ▶ Read a recent NFPA [blog](#) for more on this topic.
- ▶ Visit nfpa.org/coronavirus for the most up-to-date information from NFPA regarding fire and life safety in the midst of COVID-19.



IT'S A BIG WORLD.
LET'S PROTECT IT TOGETHER.®

This material contains some basic information about NFPA documents. It identifies some of the requirements in these documents as of the date of publication. This material is not the official position of any NFPA Technical Committee on any referenced topic which is represented solely by the NFPA documents on such topic in their entirety. For free access to the complete and most current version of all NFPA documents, please go to nfpa.org/docinfo. While every effort has been made to achieve a work of high quality, neither the NFPA nor the contributors to this material guarantee the accuracy or completeness of or assume any liability in connection with this information. Neither the NFPA nor the contributors shall be liable for any personal injury, property, or other damages of any nature whatsoever, whether special, indirect, consequential, or compensatory, directly or indirectly resulting from the publication, use of, or reliance upon this material. Neither the NFPA nor the contributors are attempting to render engineering or other professional services. If such services are required, the assistance of a professional should be sought.