

# CHAPTER 20

## TENTS AND AIR-SUPPORTED STRUCTURES

### SECTION F-2001.0 GENERAL

**F-2001.1 Scope:** All tents, air-supported, air-inflated and tension membrane structures shall comply with this chapter. An air-supported structure is a structure wherein the shape of the structure is attained by air pressure, and occupants of the structure are within the elevated pressure area.

#### F-2001.2 Deleted

**F-2001.3 Inspections:** The entire tent or membrane structure system shall be inspected at regular intervals, but not less than four times per year, to determine that the installation complies with the Uniform Construction Code listed in Chapter 44 and is maintained in accordance with NFPA 102 listed in Chapter 44.

**F-2001.4 Maintenance inspection:** The *owner* of the tent or air-supported structure shall file a maintenance inspection report every three months. The inspection report shall verify that the structure has been inspected and serviced by a representative of the manufacturer of the structure.

**F-2001.5 Anchor inspection:** All anchors shall be inspected regularly and adjusted or repaired immediately to ensure a secure base attachment and seal.

**F-2001.6 Fabric inspection:** The fabric envelope shall be inspected regularly, and any fabric damage shall be repaired immediately to prevent more extensive damage.

**F-2001.7 Construction:** All membrane or air-supported structures shall be constructed of flame-resistant materials or materials treated to render the material flame resistant in a manner approved by the fire official. The membrane material shall be either noncombustible as defined in Section F-202.0 or flame resistant conforming to NFPA 701 listed in Appendix 3-A, incorporated herein by reference.

**F-2001.8 Records:** A copy of an affidavit or affirmation shall be retained on the premises on which the membrane or air-supported structure is located, attesting to the following information relative to the flame resistance of the fabric:

1. The names and addresses of the owners of the membrane or air-supported structure;
2. The date the fabric was last treated with flame-resistant solution;
3. The trade name or kind of chemical used in treatment;
4. The name of the person or firm treating the material; and
5. The name of the testing agency and test standard by which the fabric was tested.

### SECTION F-2002.0 FIRE SAFETY REQUIREMENTS

**F-2002.1 Combustible materials:** Hay, straw, shavings or similar combustible materials shall not be located within any tent or air-supported 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 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 will create a fire hazard within 20 feet (6096 mm) from the structure. All combustible *trash* shall be removed at least once a day from the structure during the period the structure is occupied by the public.

**F-2002.2 Exposed flames:** Gasoline, gas, charcoal or other *cooking* device or any other unapproved open flame shall not be permitted inside or located within 20 feet (6096 mm) of the tent or air-supported structure.

**F-2002.3 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  $\frac{1}{4}$ -inch (6 mm) thick.

**F-2002.4 Safety film:** Motion pictures shall not be displayed in tents or air-supported structures unless the motion picture film is safety film.

**F-2002.5 Clearance:** There shall be a minimum clearance of at least 3 feet (914 mm) between the fabric envelope and all contents located inside the air-supported structure.

**F-2002.6 Portable fire extinguishers:** At least one portable fire extinguisher with a minimum 4-A rating, or two portable fire extinguishers with a minimum 2-A rating each, shall be provided in all tents or air-supported structures.

### SECTION F-2003.0 AIR-SUPPORTED STRUCTURES

**F-2003.1 Inflation pressure:** Operating pressure shall be maintained at the design pressure specified by the manufacturer.

**F-2003.2 Door operation:** During high winds exceeding 50 miles per hour (80 kph) or in snow conditions, the use of doors in air-supported structures shall be controlled to avoid excessive air loss. Doors shall not be left open.

**Guidelines for determining permit requirements for tents, tensioned membrane structures, canopies, and outdoor combustible mazes.**

	<b>UFC Permit Required</b>	<b>UCC Permit Required</b>	<b>No Permit Required</b>
Tent, tensioned membrane structure, or canopy less 900 square feet in area or less <b>and</b> 30 feet or less in any dimension without platforms or bleachers			<b>X</b>
Tent, tensioned membrane structure, or canopy greater than 900 square feet in area <b>and</b> more than 30 feet in any dimension, less than 16,800 square feet in area 140 feet or less in any dimension	Type 1 <b>X</b>		
Tent, tensioned membrane structure, or canopy greater than 900 square feet in area <b>and</b> more than 30 feet in any dimension, less than 16,800 square feet in area 140 feet or less in any dimension that contains platforms or bleachers 11 feet or less in height	Type 1 <b>X</b>		
Tent, tensioned membrane structure, or canopy greater than 16,800 square feet and greater than 140 feet in any dimension		<b>X</b>	
Tent, tensioned membrane structure, or canopy of any size remaining in place for more than 180 days		<b>X</b>	
Tent, tensioned membrane structure, or canopy of any size used or occupied between December 1 and March 31		<b>X</b>	
Tent, tensioned membrane structure, or canopy of any size having a permanent anchoring system		<b>X</b>	
Tent, tensioned membrane structure, or canopy of any size containing platforms or bleachers greater than 11 feet in height		<b>X</b>	
Tent, tensioned membrane structure, or canopy greater than 900 square feet in area <b>and</b> more than 30 feet in any dimension, less than 16,800 square feet in area 140 feet or less in any dimension that installs any electrical equipment, electrical wiring or mechanical equipment	Type 1 <b>X</b>	<b>X</b>	
Outdoor combustible maze less than 6 feet in height and does not contain electrical equipment	Type 1 <b>X</b>		
Outdoor combustible maze 6 feet or greater in height or outdoor combustible maze of any size containing electrical equipment		<b>X</b>	

**Canopy:** A structure, enclosure, or shelter constructed of fabric or pliable materials supported by any manner, except by air or the contents it protects, and is open without sidewalls or drops on 75 percent or more of the perimeter.

**Tent:** A structure, enclosure, or shelter constructed of fabric or pliable material supported by any manner, except by air or the contents it protects.

**Outdoor Combustible Maze:** An attraction that lacks a roof and is designed to disorient patrons, reduce vision, present barriers, or otherwise impede the flow of traffic and does not consist solely of living rooted plants such as corn stalks or trees, but includes mazes created from plants that have been cut and attached to an object to support them.

(A) Mazes consisting solely of living, rooted plants, such as corn stalks or trees, may be repaired using cut, replacement plants that are otherwise the same as those of which the maze is created without the need for a permit.

(B) No permit shall be required for mazes up to 42 inches in height created of bales of hay or straw.