



# ARLINGTON COUNTY FIRE DEPARTMENT



## Fire Prevention Office

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## Chapter 31 Tents and Other Membrane Structures

### Section 3101 General

#### 3101.1 Scope

[Tents](#), [temporary stage canopies](#), and [membrane structures](#) shall comply with this chapter. The provisions of [Section 3103](#) are applicable only to temporary [tents](#) and [membrane structures](#). The provisions of [Section 3104](#) are applicable to temporary and permanent [tents](#) and [membrane structures](#). Other temporary structures shall comply with the applicable [building code](#).

### Section 3102 Definitions

#### 3102.1 Definitions

The following terms are defined in [Chapter 2](#):

**[AIR-INFLATED STRUCTURE.](#)**

**[AIR-SUPPORTED STRUCTURE.](#)**

**[MEMBRANE STRUCTURE.](#)**

**[TEMPORARY STAGE CANOPY.](#)**

**[TENT.](#)**

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## Section 3103 Temporary Tents and Membrane Structures

### 3103.1 General

[Tents](#) and [membrane structures](#) used for temporary periods shall comply with this section. Other temporary structures erected for a period of 180 days or less shall comply with the applicable [building code](#).

### 3103.2 Approval Required

[Tents](#) and [membrane structures](#) having an area in excess of 900 square feet (84 m<sup>2</sup>) shall not be erected, operated or [maintained](#) for any purpose without first obtaining a [permit](#) and approval from the [fire code official](#) in accordance with [Table 107.2](#).

#### 3103.2.1 Multiple Tents

The aggregate area of multiple [tents](#) separated by less than 12 feet (3658 mm) shall not exceed 900 square feet unless [approved](#) in accordance with [Section 3103.2](#).

#### 3103.3 Place of Assembly

For the purposes of this chapter, a place of assembly shall include a circus, carnival, [tent](#) show, theater, skating rink, dance hall or other place of assembly in or under which persons gather for any purpose.

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### 3103.4 Permits

[Permits](#) shall be required as set forth in [Section 107.2](#).

### 3103.5 Use Period

Temporary [tents](#), air-supported, air-inflated or tensioned [membrane structures](#) shall not be erected for a period of more than 180 days within a 12-month period on a single premises.

### 3103.6 Construction Documents

A detailed [site](#) and floor plan for [tents](#) or [membrane structures](#) with an [occupant load](#) of 50 or more shall be provided with each application for approval. The [tent](#) or [membrane structure](#) floor plan shall indicate details of the [means of egress facilities](#), seating capacity, arrangement of the seating and location and type of heating and electrical equipment.

### 3103.7 Inspections

The entire [tent](#), air-supported, air-inflated or tensioned [membrane structure system](#) shall be inspected at regular intervals, but not less than two times per [permit use](#) period, by the permittee, [owner](#) or [agent](#) to determine that the installation is maintained in accordance with this chapter.

**Exception:** [Permit use](#) periods of less than 30 days.

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### 3103.7.1 Inspection Report

Where required by the [fire code official](#), an inspection report shall be provided and shall consist of maintenance, anchors and fabric inspections.

### 3103.8 Access, Location and Parking

Access, location and parking for temporary [tents](#) and [membrane structures](#) shall be in accordance with this section.

#### 3103.8.1 Access

[Fire apparatus access roads](#) shall be provided in accordance with [Section 503](#).

#### 3103.8.2 Location

[Tents](#) or [membrane structures](#) shall not be located within 20 feet (6096 mm) of [lot lines](#), buildings, other [tents](#) or [membrane structures](#), parked vehicles or internal combustion engines. For the purpose of determining required distances, support ropes and guy wires shall be considered as part of the temporary [membrane structure](#) or [tent](#).

Exceptions:

1. Separation distance between [membrane structures](#) and [tents](#) not used for cooking is not required where the aggregate floor area does not exceed 15,000 square feet (1394 m<sup>2</sup>).
2. [Membrane structures](#) or [tents](#) need not be separated from buildings when all of the following conditions are met:

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1. The aggregate floor area of the [membrane structure](#) or [tent](#) shall not exceed 10,000 square feet (929 m<sup>2</sup>).
2. The aggregate floor area of the building and [membrane structure](#) or [tent](#) shall not exceed the allowable floor area including increases as indicated in the *International Building Code*.
3. Required [means of egress](#) are provided for both the building and the [membrane structure](#) or [tent](#) including travel distances.
4. [Fire apparatus access roads](#) are provided in accordance with [Section 503](#).

### **3103.8.3 Location of Structures in Excess of 15,000 Square Feet in Area**

[Membrane structures](#) having an area of 15,000 square feet (1394 m<sup>2</sup>) or more shall be located not less than 50 feet (15 240 mm) from any other [tent](#) or structure as measured from the sidewall of the [tent](#) or [membrane structure](#) unless joined together by a [corridor](#).

### **3103.8.4 Membrane Structures on Buildings**

[Membrane structures](#) that are erected on buildings, balconies, decks or other structures shall be regulated as permanent [membrane structures](#) in accordance with [Section 3102](#) of the *International Building Code*.

### **3103.8.5 Connecting Corridors**

[Tents](#) or [membrane structures](#) are allowed to be joined together by means of [corridors](#). [Exit](#) doors shall be provided at each end of such [corridor](#). On each side of such [corridor](#) and approximately opposite each other, there

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shall be provided openings not less than 12 feet (3658 mm) wide.

### **3103.8.6 Fire Break**

An unobstructed fire break passageway or fire road not less than 12 feet (3658 mm) wide and free from guy ropes or other obstructions shall be maintained on all sides of all [tents](#) and [membrane structures](#) unless otherwise [approved](#) by the [fire code official](#).

### **3103.9 Anchorage Required**

[Tents](#) or [membrane structures](#) and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing. Documentation of structural stability shall be furnished to the [fire code official](#) on request.

### **3103.9.1 Tents and Membrane Structures Exceeding One Story**

[Tents](#) and [membrane structures](#) exceeding one [story](#) shall be designed and constructed to comply with applicable [building code](#).

### **3103.10 Temporary Air-Supported and Air-Inflated Membrane Structures**

Temporary air-supported and air-inflated [membrane structures](#) shall be in accordance with Sections [3103.10.1](#) through [3103.10.4](#).

### **3103.10.1 Door Operation**

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During high winds exceeding 50 miles per hour (22 m/s) 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.

### **3103.10.2 Fabric Envelope Design and Construction**

Air-supported and [air-inflated structures](#) shall have the design and construction of the fabric envelope and the method of anchoring in accordance with Architectural Fabric Structures Institute ASI 77.

### **3103.10.3 Blowers**

An [air-supported structure](#) used as a place of assembly shall be furnished with not less than two blowers, each of which has adequate capacity to maintain full inflation pressure with normal leakage. The design of the blower shall be so as to provide integral limiting pressure at the [design pressure](#) specified by the manufacturer.

### **3103.10.4 Auxiliary Inflation Systems**

Places of public assembly for more than 200 persons shall be furnished with an auxiliary inflation [system](#) capable of powering a blower with the capacity to maintain full inflation pressure with normal leakage in accordance with [Section 3103.10.3](#) for a minimum duration of 4 hours. The auxiliary inflation [system](#) shall be either a fully [automatic](#) auxiliary engine-generator set or a supplementary blower powered by an internal combustion engine that shall be [automatic](#) in operation. The [system](#) shall be capable of

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automatically operating the required blowers at full power within 60 seconds of a commercial power failure.

### **3103.11 Seating Arrangements**

Seating in [tents](#) or [membrane structures](#) shall be in accordance with [Chapter 10](#).

### **3103.12 Means of Egress**

[Means of egress](#) for temporary [tents](#) and [membrane structures](#) shall be in accordance with Sections [3103.12.1](#) through [3103.12.8](#).

#### **3103.12.1 Distribution**

[Exits](#) shall be spaced at approximately equal intervals around the perimeter of the [tent](#) or [membrane structure](#), and shall be located such that all points are 100 feet (30 480 mm) or less from an [exit](#).

#### **3103.12.2 Number**

[Tents](#), or [membrane structures](#) or a usable portion thereof shall have not less than one [exit](#) and not less than the number of [exits](#) required by Table 3103.12.2. The total width of [means of egress](#) in inches (mm) shall be not less than the total [occupant load](#) served by a [means of egress](#) multiplied by 0.2 inches (5 mm) per person.

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### TABLE 3103.12.2

#### MINIMUM NUMBER OF MEANS OF EGRESS AND MEANS OF EGRESS WIDTHS FROM TEMPORARY MEMBRANE STRUCTURES AND TENTS

<u>OCCUPANT LOAD</u>	MINIMUM NUMBER OF MEANS OF EGRESS	MINIMUM WIDTH OF EACH MEANS OF EGRESS (inches)	MINIMUM WIDTH OF EACH MEANS OF EGRESS (inches)
		<u>Tent</u>	<u>Membrane Structure</u>
10 to 199	2	72	36
200 to 499	3	72	72
500 to 999	4	96	72
1,000 to 1,999	5	120	96
2,000 to 2,999	6	120	96
Over 3,000 <sup>a</sup>	7	120	96

For SI: 1 inch = 25.4 mm.

1. When the occupant load exceeds 3,000, the total width of means of egress (in inches) shall be not less than the total occupant load multiplied by 0.2 inches per person.

### 3103.12.3 Exit Openings From Tents

Exit openings from tents shall remain open unless covered by a flame-resistant curtain. The curtain shall comply with the following requirements:

1. Curtains shall be free sliding on a metal support. The support shall be not less than 80 inches (2032 mm) above the floor level at the exit. The

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curtains shall be so arranged that, when open, no part of the curtain obstructs the [exit](#).

2. Curtains shall be of a color, or colors, that contrasts with the color of the [tent](#).

### 3103.12.4 Doors

[Exit](#) doors shall swing in the direction of [exit](#) travel. To avoid hazardous air and pressure loss in air-supported [membrane structures](#), such doors shall be [automatic](#) closing against [operating pressures](#). Opening force at the door edge shall not exceed 15 pounds (66 N).

### 3103.12.5 Aisle

The width of [aisles](#) without [fixed seating](#) shall be in accordance with the following:

1. In areas serving employees only, the minimum [aisle](#) width shall be 24 inches (610 mm) but not less than the width required by the number of employees served.
2. In public areas, smooth-surfaced, unobstructed [aisles](#) having a minimum width of not less than 44 inches (1118 mm) shall be provided from seating areas, and [aisles](#) shall be progressively increased in width to provide, at all points, not less than 1 foot (305 mm) of [aisle](#) width for each 50 persons served by such [aisle](#) at that point.

#### 3103.12.5.1 Arrangement and Maintenance

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The arrangement of [aisles](#) shall be subject to approval by the [fire code official](#) and shall be maintained clear at all times during occupancy.

### 3103.12.6 Exit Signs

[Exits](#) shall be clearly marked. [Exit](#) signs shall be installed at required [exit](#) doorways and where otherwise necessary to indicate clearly the direction of egress where the [exit](#) serves an [occupant load](#) of 50 or more.

#### 3103.12.6.1 Exit Sign Illumination

[Exit](#) signs shall be either [listed](#) and [labeled](#) in accordance with UL 924 as the internally illuminated type and used in accordance with the listing or shall be externally illuminated by luminaires supplied in either of the following manners:

1. Two separate circuits, one of which shall be separate from all other circuits, for [occupant loads](#) of 300 or less.
2. Two separate sources of power, one of which shall be an [approved](#) emergency [system](#), shall be provided where the [occupant load](#) exceeds 300. Emergency [systems](#) shall be supplied from storage batteries or from the on-site generator set, and the [system](#) shall be installed in accordance with NFPA 70. The emergency [system](#) provided shall have a minimum duration of 90 minutes when operated at full design demand.

#### 3103.12.7 Means of Egress Illumination

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[Means of egress](#) shall be illuminated with light having an intensity of not less than 1 footcandle (11 lux) at floor level while the structure is occupied. Fixtures required for [means of egress](#) illumination shall be supplied from a separate circuit or source of power.

### **3103.12.8 Maintenance of Means of Egress**

The required width of [exits](#), [aisles](#) and passageways shall be maintained at all times to a [public way](#). Guy wires, guy ropes and other support members shall not cross a [means of egress](#) at a height of less than 8 feet (2438 mm). The surface of [means of egress](#) shall be maintained in an [approved](#) manner.

### **Section 3104 Temporary and Permanent Tents and Membrane Structures**

#### **3104.1 General**

[Tents](#) and [membrane structures](#), both temporary and permanent, shall be in accordance with this section. Permanent [tents](#) and [membrane structures](#) shall also comply with the applicable [building code](#).

#### **3104.2 Flame Propagation Performance Treatment**

Before a [permit](#) is granted, the [owner](#) or [agent](#) shall file a certificate executed by an [approved](#) testing laboratory certifying that

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the [tents](#) and [membrane structures](#) and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting, and combustible [decorative materials](#) and effects, including sawdust where used on floors or passageways, are composed of material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall be treated with a flame retardant in an [approved](#) manner and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the [permit](#).

### **3104.3 Label**

[Membrane structures](#) or [tents](#) shall have a permanently affixed label bearing the identification of size and fabric or material type.

### **3104.4 Certification**

An affidavit or affirmation shall be submitted and a copy retained on the premises on which the [tent](#) or [air-supported structure](#) is located. The affidavit shall attest to all of the following information relative to the flame propagation performance criteria of the fabric:

1. Names and address of the [owners](#) of the [tent](#) or [air-supported structure](#).
2. Date the fabric was last treated with flame-retardant solution.
3. Trade name or kind of [chemical](#) used in treatment.
4. Name of person or firm treating the material.

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5. Name of testing [agency](#) and test standard by which the fabric was tested.

### 3104.5 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 the sawdust and shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time.

### 3104.6 Smoking

Smoking shall not be permitted in [tents](#) or [membrane structures](#). [Approved](#) "No Smoking" signs shall be conspicuously posted in accordance with [Section 310](#).

### 3104.7 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](#).

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### 3104.8 Fireworks

[Fireworks](#) shall not be used within 100 feet (30 480 mm) of [tents](#) or [membrane structures](#).

### 3104.9 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 9<sup>1</sup>/<sub>4</sub> inches (235 mm) thick.

### 3104.10 Safety Film

Motion pictures shall not be displayed in [tents](#) or [membrane structures](#) unless the motion picture film is safety film.

### 3104.11 Clearance

There shall be a minimum clearance of at least 3 feet (914 mm) between the fabric envelope and all contents located inside [membrane structures](#).

### 3104.12 Portable Fire Extinguishers

Portable fire extinguishers shall be provided as required by [Section 906](#).

### 3104.13 Fire Protection Equipment

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Fire hose lines, water supplies, and other auxiliary fire equipment shall be [maintained](#) at the [site](#) in such numbers and sizes as [approved](#)

### **3104.14 Occupant Load Factors**

The [occupant load](#) allowed in an assembly structure, or portion thereof, shall be determined in accordance with [Chapter 10](#) or applicable [building code](#).

### **3104.15 Heating and Cooking Equipment**

Heating and cooking equipment shall be in accordance with Sections [3104.15.1](#) through [3104.15.7](#).

#### **3104.15.1 Installation**

Heating or cooking equipment [tanks](#), piping, hoses, fittings, valves, tubing, and other related components shall be installed as specified by the applicable [building code](#) and shall be [approved](#).

#### **3104.15.2 Venting**

Gas, [liquid](#) and [solid](#) fuel-burning equipment designed to be vented shall be vented to the outside air as specified by the applicable [building code](#) and shall be [approved](#). 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.

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### 3104.15.3 Location

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

### 3104.15.4 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](#).

### 3104.15.5 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).

### 3104.15.6 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](#).

### 3104.15.7 Electrical Heating and Cooking Equipment

Electrical cooking and heating equipment shall comply with NFPA 70.

### 3104.16 LP-gas

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The storage, [handling](#) and [use](#) of LP-gas and LP-gas equipment shall be in accordance with Sections [3104.16.1](#) through [3104.16.3](#).

### **3104.16.1 General**

LP-gas equipment such as [tanks](#), piping, hoses, fittings, valves, tubing and other related components shall be [approved](#) and in accordance with [Chapter 61](#) and with the applicable [building code](#).

### **3104.16.2 Location of Containers**

[LP-gas containers](#) shall be located outside. Safety release valves shall be pointed away from the [tent](#) or [membrane structure](#).

#### **3104.16.2.1 Containers 500 Gallons or Less**

Portable [LP-gas containers](#) with a capacity of 500 gallons (1893 L) or less shall have a minimum separation between the [container](#) and structure not less than 10 feet (3048 mm).

#### **3104.16.2.2 Containers More Than 500 Gallons**

Portable [LP-gas containers](#) with a capacity of more than 500 gallons (1893 L) shall have a minimum separation between the [container](#) and structures not less than 25 feet (7620 mm).

### **3104.16.3 Protection and Security**

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Portable [LP-gas containers](#), 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 securely fastened in place to prevent unauthorized movement.

### **3104.17 Flammable and Combustible Liquids**

The storage of flammable and [combustible liquids](#) and the [use](#) of flammable-[liquid](#)-fueled equipment shall be in accordance with Sections [3104.17.1](#) through [3104.17.3](#).

#### **3104.17.1 Use**

Flammable-[liquid](#)-fueled equipment shall not be used in [tents](#) or [membrane structures](#).

#### **3104.17.2 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 [Chapter 57](#).

#### **3104.17.3 Refueling**

Refueling shall be performed in an [approved](#) location not less than 20 feet

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(6096 mm) from [tents](#) or [membrane structures](#).

### **3104.18 Display of Motor Vehicles**

[Liquid](#)- and gas-fueled vehicles and equipment used for display within [tents](#) or [membrane structures](#) shall be in accordance with Sections [3104.18.1](#) through [3104.18.5.3](#).

#### **3104.18.1 Batteries**

Batteries shall be disconnected in an appropriate manner.

#### **3104.18.2 Fuel**

Vehicles or equipment shall not be fueled or defueled within the [tent](#) or [membrane structure](#).

##### **3104.18.2.1 Quantity Limit**

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

##### **3104.18.2.2 Inspection**

Fuel [systems](#) shall be inspected for leaks.

##### **3104.18.2.3 Closure**

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Fuel [tank](#) openings shall be locked and sealed to prevent the escape of vapors.

### **3104.18.3 Location**

The location of vehicles or equipment shall not obstruct [means of egress](#).

### **3104.18.4 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 section and Sections [3104.18.1](#) through [3104.18.5.3](#) for gasoline-powered vehicles.

### **3104.18.5 Competitions and Demonstrations**

[Liquid](#) and gas-fueled vehicles and equipment used for competition or demonstration within a [tent](#) or [membrane structure](#) shall comply with Sections [3104.18.5.1](#) through [3104.18.5.3](#).

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### 3104.18.5.1 Fuel Storage

Fuel for vehicles or equipment shall be stored in [approved containers](#) in an [approved](#) location outside of the structure in accordance with [Section 3104.17.2](#).

### 3104.18.5.2 Fueling

Refueling shall be performed outside of the structure in accordance with [Section 3104.17.3](#).

### 3104.18.5.3 Spills

Fuel spills shall be cleaned up immediately.

### 3104.19 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.

### 3104.20 Standby Personnel

Where, in the opinion of the [fire code official](#), 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,

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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.

### **3104.20.1 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.

### **3104.20.2 Crowd Managers**

There shall be trained crowd managers or crowd manager/supervisors at a ratio of one crowd manager/supervisor for every 250 occupants, as [approved](#).

### **3104.21 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.

### **3104.22 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

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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.

### Section 3105 Temporary Stage Canopies

#### 3105.1 General

Operation and maintenance of [temporary stage canopies](#) shall be in accordance with [Section 3104](#), Sections [3105.2](#) through 3105.8, and ANSI E1.21.

#### 3105.2 Approval

[Temporary stage canopies](#) in excess of 400 square feet (37 m<sup>2</sup>) shall not be erected for any purpose without first obtaining approval and a [permit](#) from the [building official](#).

#### 3105.3 Permits

[Permits](#) shall be required as set forth in Sections [105.6](#) and [105.7](#).

#### 3105.4 Use Period

[Temporary stage canopies](#) shall not be erected for a period of more than 45

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days.

### 3105.5 Required Documents

Documents shall be submitted to the [building official](#) where required by the [USBC](#).

1. [Construction documents](#): [Construction documents](#) shall be prepared in accordance with the [International Building Code](#) by a [registered design professional](#). [Construction documents](#) shall include:
  1. A summary sheet showing the [building code](#) used, [design](#) criteria, loads and support reactions.
  2. Detailed construction and installation drawings.
  3. [Design](#) calculations.
  4. Operating limits of the structure explicitly outlined by the [registered design professional](#) including environmental conditions and physical forces.
  5. Effects of additive elements such as video walls, supported scenery, audio equipment, vertical and horizontal coverings.
  6. Means for adequate stability including specific requirements for guying and cross-bracing, ground anchors or ballast for different ground conditions.
2. Designation of responsible party: The [owner](#) of the [temporary stage canopy](#) shall designate in writing a person to have responsibility for the [temporary stage canopy](#) on the [site](#). The designated person shall have sufficient knowledge of the [construction documents](#), manufacturer's recommendations and operations plan to make

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judgments regarding the structure's safety and to coordinate with the [fire code official](#).

3. Operations plan: The operations plan shall reflect manufacturer's operational guidelines, procedures for environmental monitoring and actions to be taken under specified conditions consistent with the [construction documents](#).

### 3105.6 Inspections

Inspections shall comply with [Section 106](#) and Sections [3105.6.1](#) and [3105.6.2](#).

#### 3105.6.1 Independent Inspector

The [owner](#) of a [temporary stage canopy](#) shall employ a qualified, independent [approved agency](#) or individual to inspect the installation of a [temporary stage canopy](#).

#### 3105.6.2 Inspection Report

The inspecting [agency](#) or individual shall furnish an inspection report to the [building official](#) and [fire code official](#). The inspection report shall indicate that the [temporary stage canopy](#) was inspected and was or was not installed in accordance with the [approved construction documents](#). Discrepancies

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shall be brought to the immediate attention of the installer for correction. Where any discrepancy is not corrected, it shall be brought to the attention of the [building official](#) and [fire code official](#) and the designated responsible party.

### **3105.7 Means of Egress**

The [means of egress](#) for [temporary stage canopies](#) shall comply with [Chapter 10](#) and the applicable [building code](#).

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