



**Alameda County Fire Department  
Bureau of Fire Prevention**

**INFORMATIONAL BULLETIN**

---

## Tents and Other Membrane Structures

This Informational Bulletin has been developed by the Alameda County Fire Department to summarize the fire and life safety regulations relating to structures classified as tents or other membrane structures.

**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** – An air-inflated, air supported, cable or frame-covered structure as defined by the International Building Code and not otherwise defined as a tent.

### Fire Code Regulations:

1. A Fire Department permit is required to erect any tent or membrane structures having an area in excess of 400 square feet in floor area if it has one or more walls and 700 square feet if it has no walls. (2013 CFC 3103.2)
2. A tent may not be erected on any site for more than 180 days in any 12-month period. (2013 CFC 3103.5)
3. All tent fabric and interior decorative fabric used in tents or canopies is required to be flame retardant in accordance with NFPA 701. (2013 CFC 3104.2)

### Location Requirements:

1. Tents and canopies must be separated from each other, property lines, other structures and vehicles, by a minimum clear width of 20 feet or by the required exit width, which ever is greater. Please check the Fire Code for exceptions to the separation distance. For purposes of required distances, support ropes and guide wires are considered part of the tent. (2013 CFC 3103.8.2)
2. Fire apparatus roadways shall be 20 feet wide with 13'-6" vertical clearance capable of supporting the imposed load of fire apparatus. (2013 CFC Sections 3103.8.1 & 503)

### Exiting Requirements:

Exits from tents and canopies shall comply with the following table. (2013 CFC 3103.12.2)

**CFC TABLE 3103.12.2**

<b>OCCUPANT LOAD</b>	<b>MINIMUM NUMBER OF MEANS OF EGRESS</b>	<b>MINIMUM WIDTH OF EACH MEANS OF EGRESS (Inches) Tents</b>	<b>MINIMUM WIDTH OF EACH MEANS OF EGRESS(Inches) Membrane Structure</b>
<b>10 TO 199</b>	<b>2</b>	<b>72</b>	<b>36</b>
<b>200 TO 499</b>	<b>3</b>	<b>72</b>	<b>72</b>
<b>500 TO 999</b>	<b>4</b>	<b>96</b>	<b>72</b>
<b>1,000 TO 1,999</b>	<b>5</b>	<b>120</b>	<b>96</b>
<b>2,000 TO 2,999</b>	<b>6</b>	<b>120</b>	<b>96</b>
<b>OVER 3000</b>	<b>7</b>	<b>120</b>	<b>96</b>

1. Tents or canopies having an occupant load of 50 or more must be provided with exit signs and exit directional signs (2013 CFC 3103.12.6). If the occupant load is more than 100, the exit signs must be internally illuminated or of an approved self-luminous type. Internally illuminated signs must be supplied with power from two separate circuits, one of which shall serve no other purpose. If the occupant load exceeds 300, the exit signs shall be provided with an approved emergency power system such as back-up batteries or an automatic emergency generator. (2013 CFC 3103.12.6.1)
2. Aisles with a minimum width of 44 inches shall be provided for access to all exits. All portions of the interior of the tent or canopy shall be within 30 feet of an aisle. (2013 CFC 3103.12.5) A scale drawing showing the proposed arrangement of furniture and fixtures inside the tent or canopy shall be submitted to the Fire Department for approval as part of the permit process. (2013 CFC 3103.12.5.1)

**Housekeeping and General Fire Safety Requirements:**

1. Flammable and combustible liquids and LP-gas shall not be stored in or within 50 feet of tents and canopies. (2013 CFC 3104.17.2 & 3104.16)
2. All weeds, combustible vegetation, trash and combustible storage shall be removed from areas adjacent to and within 30 feet of tents and canopies. Floor surfaces inside and within 30 feet of canopies shall be kept free and clear of combustible waste. (2013 CFC 3104.21)
3. Gas, solid or liquid-fuel-burning equipment shall be vented to the exterior by means of an approved flue or vent. A 12-inch clearance shall be maintained between the flue or vent and all tent material. Solid-fuel-burning equipment shall be provided with an approved spark arrestor having openings not exceeding ¼ inch wire mesh. (2013 CFC 3104.15.2)
4. Fire extinguishers with a minimum rating of 2A-10BC shall be provided as follows: one extinguisher for tents and canopies up to 500 square feet in floor area; two extinguishers for 501 to 1,000 square feet; and one extinguisher for each additional 2,000 square feet of floor area or fraction thereof. (2013 CFC 906.3)
5. Smoking is prohibited in tents and canopies. Approved NO SMOKING signs shall be posted. The use of open flame devices such as candles is prohibited in tents and canopies. (2013 CFC 1304.6 & 3104.7)
6. The Fire Department strictly regulates cooking and heating equipment. Contact the Fire Prevention Division for your area for requirements. (2013 CFC 3104.15)

*If you have any questions or wish to apply for a permit to erect a tent or canopy, please contact the Fire Prevention Division for your area.*

City of Dublin	City of Emeryville	City of Newark	City of San Leandro	Unincorporated Alameda County	City of Union City
(925) 833-6606	(510) 596-3759	(510) 577-3317	(510) 670-5853	(510) 675-5470	(510) 675-5470