



**DEPARTMENT OF FORESTRY AND FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
Fire and Life Safety Division**

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Purpose:

The purpose of this document is to provide the festivities coordinator, owner, lessee and the vendors the necessary information to ensure that tents used are in conformance with California State law.

Scope: 2016 CFC 3101

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 California Building Code.

These building standards govern the use of tents, awnings or other fabric enclosures, including membrane (air-supported and air-inflated) structures and places of assemblage, in or under which 10 or more persons may gather for any lawful purpose.

California Code of Regulations, Title 19, Division 1, 303. (a) and (b)

- (a) The provisions of California Code of Regulations, Title 19, Division 1, Chapter 2 apply to the sale, offering for sale, manufacture for sale, rental and use of tents within this state.
- (b) For building standards relating to tents and membrane structures, see California Code of Regulations, Title 24, Part 9.

Approval Required: 2016 CFC 105.7.16 & 3103.2

A permit is required to use tents for places of assembly, ceremony, fairs and carnivals, worship, cooking, display of vehicles or equipment, competition, or the like. *Exception:* A tent permit is not required for funeral services.

Tents, with or without sides, having an area in excess of 400 square feet shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

Use Period: 2016 CFC 3103.5

Tents shall not be erected for a period of more than 180 days within a 12-month period on a single premise.

Construction Documents: 2016 CFC 3103.6 & CBC 107.2.5

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.

Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

Stage Canopies Documents: 2016 CFC 3105.2

Temporary stage canopies in excess of 40 square feet shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the fire code official and the building official.

Required Documents: 2016 CFC 3103.5

Construction documents shall be prepared in accordance with CBC by a registered design professional and include:

- 1) A summary sheet showing the building code used, design criteria, loads and support relations.
- 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 g and cross-bracing, ground anchors or ballast for different ground conditions.

Designation of responsible part: The owner of the temporary stage canopy shall designate in writing a person to have responsibility for the temporary stage canopy on site. The designated person shall have sufficient knowledge of the construction documents, Manufacturer's recommendations and operations plan to make judgements regarding the structure's safety and coordinate with the fire code official.

Operations plan: The operations plan shall reflect manufacturer's operation guidelines, procedures for environmental monitoring and action to be taken under specified conditions consistent with the construction documents.

Independent Inspector: 2016 CFC 3103.6.1

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.

Inspection Procedure: 2016 CFC 3103.7

The State Fire Marshal's Office will conduct an inspection to determine compliance with these requirements. In the event fire and life safety violations are found, the responsible person will be given one opportunity for compliance. Failure to adhere to these requirements may result in closure of the

respective operation. It shall be the responsibility of the promoter to insure vendors are aware of these regulations.

Location & Access: 2016 CFC 3103.8

Access. Fire apparatus access roads shall be provided in accordance with Section 503.

Location. Tents or membrane structures shall not be located within 20 feet 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.

[CCR, Title 19, Division 1, § 312] Vehicles necessary to the operation of the establishment shall be parked at least 20 feet from any tent. No other vehicle shall be parked less than 100 feet from any tent except vehicles parked on a public street shall park at least 20 feet from any tent.

Required Anchorage: 2016 CFC 3103.9

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.

Fabric Certification and Labeling for LARGE Tents: CCR, Title 19, Division 1

Before a permit is granted, the owner or agent shall file with the fire department a Certificate of Flame Resistance issued by a State Fire Marshal approved testing laboratory or by a State Fire Marshal approved applicator of a State Fire Marshal approved flame retardant chemical or by a State Fire Marshal approved manufacturer certifying that the tent(s) and their appurtenances; sidewalls, drops, tarpaulins, floor coverings, bunting and combustible decorative materials and effects, including hay and sawdust when used on floors, has been treated in an approved manner or is made of State Fire Marshal approved and listed inherently flame resistant fabric and that the flame retardant treatment is effective for the use period specified by the permit. Tent tops and sidewalls shall have a permanently affixed label by a California State Fire Marshal licensed applicator or manufacturer bearing the following information:

- 1) The Seal of Registration
- 2) If treated fabric, the name and registration number of the approved application concern and approved chemical used, and the date of treatment.
- 3) If registered fabric, the trade name and registration number of the approved fabric, and the date of production.

Label: 2016 CFC 3104.3

Tents shall have a permanently affixed label bearing the identification of size and fabric or material type.

Required Labels:



REGISTERED FABRIC OR CONCERN NUMBER		PLANS #	Date tested or manufactured
[]		[]	[]
This is to certify that the materials described on the reverse side hereof have been flame-retardant treated (or are inherently nonflammable).			
FOR	ADDRESS		
CITY	STATE		
Certification is hereby made that: (Check "a" or "b")			
<input type="checkbox"/>	a) The articles described on the reverse side of this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in accordance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.		
	Name of chemical used	Chem. Reg. No.	
	Method of application		
<input type="checkbox"/>	b) The articles described on the reverse side hereof are made from a flame-resistant fabric or material registered and approved by the State Fire Marshal for such use.		
	Trade name of flame-resistant fabric or material used		Reg. No.
The Flame Retardant Process Used _____ Be Removed By Washing _____			
Name of Applicant or Production Subcontractor		By _____ Title _____	
F-9-3			

24 pt. type
WARNING
 16 pt. type
**KEEP ALL FLAME
 AND HEAT SOURCES
 AWAY FROM THIS
 TENT FABRIC**

12 pt. type
*This tent is made with flame-resis-
 tant fabric which meets CPAI-84
 specifications. It is not fire proof.
 The fabric will burn if left in con-
 tinuous contact with any flame
 source.*

*The application of any foreign sub-
 stance to the tent fabric may render
 the flame resistant properties
 ineffective.*

Required Certificate

Fabric Certification and Labeling for SMALL Tents: CCR, Title 19, Division 1

Small tents shall have a permanently affixed label bearing the following information as specified in CPAI-84.

- 1) Certification- A statement that the materials used in the manufacture of the item meet the flame resistance requirements of CPAI-84.
- 2) Manufacturer Identification.
- 3) Warning label stating the following: Warning, Keep all flame and heat sources away from this tent fabric. This tent is made with flame resistant fabric which meets CPAI-84 specifications. It is not fireproof. The fabric will burn if left in continuous contact with any flame source. The application of any foreign substance to the tent fabric may render the flame resistant properties ineffective.

Combustible Materials for Assembly Occupancies: CCR Title 19, Division 1

No person shall use or display any combustible decorations such as hay, straw, shavings, dry vegetation, large dimensions of fabric, for example curtains, tablecloths and other decorations or visual effects, or any other hazard, without first treating said material with a State Fire Marshal approved fire retardant chemical. All treated material shall have proof of treatment affixed to it in accordance with the State Fire Marshal's regulations. A 3" x 3" sample of the decorative fabric shall be submitted for acceptance, at least 72 hours in advanced, and accompanied by a Certificate of Flame Resistance. *Exception:* Materials necessary for the daily feeding and care of animals.

Fire Protection: CCR, Title 19, Division 1, 2016 CFC 3104.12

Portable fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use along normal paths of travel. Portable fire extinguishers shall not be

obstructed or obscured from view and shall be provided with a locating sign when deemed necessary by the authority having jurisdiction.

- 1) One Class 2A-10BC fire extinguisher shall be provided in every tent having a floor area between 500 square feet and 1000 square feet. One additional fire extinguisher shall be provided for each additional 2000 square feet or fraction thereof or at the discretion of the authority having jurisdiction. [Title 19]
- 2) Tents having a capacity of 1000 or more persons shall be protected on each of the long sides with fire hose lines of at least 1 ½ inch internal diameter and of sufficient length to reach either end of the tent. The water supply shall be either from the public water mains or from tanks having a capacity of not less than 500 gallons. There shall be at least 65 pounds of flowing pressure at the nozzle of the hose line when a ½ inch tip is used. [Title 19]
- 3) Any booth or tent using combustible or flammable liquids must have a U.L. listed fire extinguisher with a rating of not less than 2A:10B:C, be fully charged, bearing the California State Fire Marshal label and be placed in an accessible location near the exit of the structure. [Title 19, 2013 CFC]
- 4) Every tent which prepares or serves heated food shall be equipped with a 2A:10B:C fire extinguisher bearing a current California State Fire Marshal service tag, and be fully charged, and placed in an accessible location near the exit of the structure. Or a new fire extinguisher, minimum five (5) pounds, with the sales receipt taped to the side of it for visual inspection. [Title 19, AHJ]
- 5) At least one Class 10BC fire extinguisher shall be provided with each generator or transformer. [Title 19]

Fire Protection for Cooking: CCR, Title 19, Division 1

A K-rated fire extinguisher shall be provided for all cooking applications utilizing grease or combustible cooking media. (vegetable or animal oils or fats)

Fire Safety Personnel: CCR, Title 19, Division 1

The owners or operators of any tent used as a place of assemblage shall provide at least one qualified fire safety person in every tent having a capacity of 500 persons and one additional qualified person for each 1,000 additional persons or fraction thereof. Such persons shall be on duty in the tent at all times when the tent is open to the public. They shall be proficient in the handling of fire extinguishers and equipment and shall be familiar with the fire and panic safety regulations. The individual designated under this section shall meet the approval of the fire authority having jurisdiction.

Standby Personnel: 2016 CFC 3104.20-3104.20.1

When in the opinion of the fire code official, it is essential for public safety in a tent due to the use or the nature of the activity 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 and or activities are being conducted. Standby personnel shall keep diligent watch for fires and take prompt measures for extinguishment, assist in evacuation, and call 9-1-1.

Crowd Managers: 2016 CFC 3104.20.2

There shall be trained crowd managers or crowd managers/supervisors at a ratio of one crowd manager/supervisor for every 250 occupants.

Abatement of Fire and Panic Hazards: CCR, Title 19, Division 1

Any condition that presents a fire hazard, would contribute to the rapid spread of fire, interfere with the rapid exit of persons from the tents, or interfere with or delay the extinguishment of a fire, shall be immediately corrected as ordered by the enforcing authority.

Housekeeping and Combustible Vegetation: 2016 CFC 3104-21

The areas within and adjacent to the tent shall be maintained clear of all combustible materials and vegetation that could create a fire hazard within 30 feet. Combustible trash shall be removed at least once per day during the period that the tent is occupied by the public. The accumulation of combustible trash in the form of papers, boxes, etc., when stored next to open flame or hot cooking devices present a tremendous fire hazard. Hot oil can ignite other items and can cause serious and/or lethal burns. Use common sense and pay attention! Do not block your exits - always leave a clear and open path to the outside when you are working in a portable structure.

Weed Abatement and Vegetation Removal: CCR, Title 19, Division 1

Vegetation, weeds, hay, straw trash, flammable materials and the like, shall be removed and stored a minimum of 50 feet from a tent.

Combustible Waste Material: 2016 CFC 3104.22

The floor surface inside tents and the grounds outside and within 30 feet in perimeter shall be kept free of combustible waste and other combustible materials that could create a fire hazard.

Clearance: 2016 CFC 3104.11

There shall be a minimum clearance of at least 3 feet between the fabric envelope and all contents located inside membrane structures.

Smoking: CCR, Title 19, Division 1 & 2016 CFC 3104.6

Smoking shall not be permitted in tents or in any areas adjacent to where hay or other highly flammable materials are kept. Approved NO SMOKING signs shall be conspicuously posted in all tents open to the public and wherever otherwise specified by the enforcing authority.

Open Flames: 2016 CFC 3104.7 & CCR Title 19, Division 1

Open flame or other devices (candles, torches, and the like) emitting flame, fire or heat, lanterns or any flammable or combustible liquid, gas, charcoal or other cooking device, shall not be permitted inside or located within 20 feet of a tent unless approved by the fire code official.

Fireworks: 2016 CFC 3104.8 & CCR Title 19, Division 1

Fireworks shall not be used within 100 feet of tents or membrane structures.

Heating and Cooking Equipment: 2016 CFC 3104.7, 3104.15 & AHJ

- 1) Electrical heating and cooking equipment shall comply with the California Electrical Code.
- 2) 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 of the tent while open to the public unless approved by the fire code official.
- 3) Heating and cooking equipment shall not be located within 10 feet of exits or combustible materials.
- 4) Tents with sidewalls or drops where cooking is performed shall be separated from other tents by a minimum of 20 feet.
- 5) Outdoor cooking that produces sparks or grease laden vapors shall not be performed within 20 feet of a tent.
- 6) Solid flammables, butane or other similar devices which do not pose an ignition hazard shall be approved for cooking demonstrations and warming of food. Solid fuel cooking shall be isolated from contact with the public by physical guards, fencing, or enclosure.
- 7) Electrical heating and cooking equipment shall be approved by the fire code official.
- 8) All commercial cooking equipment located inside of a trailer or fully enclosed constructed booth made of permanent materials shall be provided with an approved automatic fire extinguishing system which is U.L. 300 compliant, bearing an approved service label as certified by the Office of the State Fire Marshal.
- 9) All barbeque cooking shall be conducted only outside of tents. Gas-fired barbeque shall be placed a minimum of 20 feet from any structure, overhang or fabric.
- 10) Solid fuel cooking shall be a minimum of 20 feet from any structure, overhang or fabric.
- 11) No combustible or flammable liquids shall be heated directly on any heater or cooking appliance. Substance such as candle wax shall be melted in containers set in boiling water (double boiler) to keep the wax from reaching its ignition temperature.
- 12) All deep fryers and other cooking appliances (i.e. pots, pans, woks, etc.) with a capacity of one (1) gallon (4 quarts) of cooking oil or more shall be kept outside of tents, trailers, or the like and placed a minimum of 20 feet away, or shall be located under a commercial kitchen hood provided with a U.L. 300 compliant fire extinguishing system bearing an approved service label as certified by the Office of the State Fire Marshal.

Compressed Gas Cylinders: 2016 CFC 3104.16.2-3104.16.3

- 1) Propane fired devices must be approved by Underwriters Laboratories (UL) or by the American Gas Association (AGA). These labels must be accessible for inspection.
- 2) Liquefied Petroleum (LP) gas containers of 500 gallons or less shall be located outside of the tent with a minimum separation distance of least 10 feet between container and structure and shall have the safety release valve pointed away from the tent.
- 3) Liquefied Petroleum (LP) gas containers of 500 gallons or more shall be located outside of the tent with a minimum separation distance of least 25 feet between container and structure and shall have the safety release valve pointed away from the tent.
- 4) All cylinders shall be stored in an upright position, adequately secured in place and protected to prevent accidental tip-over, tampering, unauthorized movement and damage by vehicles or other hazards.

- 5) Cylinders not in use shall be capped.
- 6) All compressed gas cylinders in use shall be equipped with individual regulators with approved hose and appliances.
- 7) All L.P. gas cylinders shall be within current hydrostatic test date, (no more than 12 years from date of manufacture, or no more than five (5) years from last hydrostatic test).

Flammable and Combustible Liquid Storage: 2016 CFC 3104.17

Flammable-liquid-fueled equipment shall not be used in tents. Storage of flammable and combustible liquids shall be stored outside in an approved manner and not less than 50 feet from tents. Refueling shall be performed in an approved location and not less than 20 feet from tents

Electrical: 2016 CFC & CEC

Electrical equipment and installations shall comply with the California Electrical Code.

Some temporary lighting may require an electrical permit. Contact the City of Elk Grove Building Department for requirements. Before an extension cord can be used with a portable appliance all the following must be met:

- 1) Extension cords shall be plugged directly into an approved receptacle.
- 2) Extension cords shall serve only one appliance or fixture.
- 3) Extension cords shall not exceed 75 feet in length and be no smaller than 16 gauge wire.
- 4) The current capacity of the cord shall not be less than the rated capacity of the appliance or fixture.
- 5) The extension cord is maintained in good repair, without splices, deterioration or damage.
- 6) The extension cord shall be of the grounded type when servicing grounded appliances or fixtures.
- 7) If an extension cord has to go across a traffic area, then an approved traffic pad shall be used. (All extension cords shall be secured to prevent a tripping hazard).
- 8) Extension cords shall not be connected in series.

Internal Combustion Power Sources – Generators and Similar Equipment: 2016 CFC 3104.19

Generators and other internal combustion power sources shall be separated from tents by a minimum of 20 feet and shall be isolated from contact with the public by fencing, enclosure or other approved means. All tripping hazards shall be secured.

Display of Motor Vehicles: 2016 CFC 3104.18

Batteries shall be disconnected in an appropriate manner. Vehicles shall not be fueled or defueled within and tent. Fuel tanks shall not exceed one-quarter of the tank capacity or 5 gallons whichever is less. Fuel systems shall be inspected for leaks and fuel tank openings shall be sealed to prevent the escape of vapors.

Seating Arrangements: 2016 CFC 3103.11

Where chairs and/or tables are used, the arrangement shall be such to provide aisles 44" wide where obstructions are placed on both sides.

With standard row seating, the spacing of chairs shall provide a space of not less than 12" from the back of one chair to the front of the most forward projection of the chair immediately behind. The rows of chairs shall be spaced not less than 33" back to back.

There shall be no more than 14 seats in any row of seats with aisles at each end. All loose seats, folding chairs or similar seating facilities that are not fixed to the floor shall be bonded together in groups of not less than three. EXCEPTION: When not more than 200 such seats, chairs or facilities are provided, bonding thereof may be deleted. [CCR Title 19 Division 1]

Aisles:

The width of aisles without fixed seating shall be a minimum of 44 inches in seating areas and be progressively increased in width to provide not less than one foot of aisle width for each 50 persons served by the aisle. Arrangement of aisles shall be subject to approval by the fire code official.

Exiting and Occupant Load: 2016 CFC 3103.12

Tents shall have proper exiting in place. Each tent shall at least one exit and no less than the number of exits as indicated in the table below. Number of exits are based on the size of the tent, number of walls (sides) and occupant load. Maximum occupant load signs shall be posted when required by the fire code official.

Exits shall be spaced at approximately equal intervals around the perimeter of the tent and shall be located such that all points within the tent are within 100 feet or less from an exit.

OCCUPANT LOAD	MINIMUM NUMBER OF MEANS OF EGRESS	MINIMUM WIDTH OF EACH MEANS OF EGRESS (inches)	
		Tent	Membrane
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 ^a	7	120	96

For SI: 1 inch = 25.4 mm.

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

Exit Signs: 2016 CFC 3103.12.6 & 3103.12.61

otherwise necessary to indicate clearly the direction of egress where the exit serves an occupant load of 50 or more.

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 the *California Electrical Code*. The emergency system provided shall have a minimum duration of 90 minutes when operated at full design demand.

Exits shall be clearly marked with exit signs in tents having an occupant load of 50 or more. Illuminated exit signs shall be installed at all required exit doorways for occupant loads of 51 to 299 person or as determined by the fire code official. Illuminated exit signs shall be an approved self-luminous type or shall be internally illuminated. Two separate circuits are required, one of which separate from all other circuits. For occupant loads of 300 or more, two separate sources of power, one of which is an emergency system consisting of onsite storage batteries or and on site generator, shall be provided.

Emergency Lighting 2016 CFC 3103.12.7

Means of egress illumination shall be provided whenever the tent is occupied. An intensity of not less than one foot-candle at floor level is required. Fixtures shall be supplied from a separate circuit or source of power. In the event of power failure an emergency electrical system shall automatically illuminate the means of egress system.

Parking of Vehicles

Vehicles necessary to the operation of the establishment and parked on a public street shall be parked at least 20 feet from any tent. No other vehicles shall be parked less than 100 feet from any tent.