



CITY OF MANTECA - FIRE DEPARTMENT

FIRE PREVENTION BUREAU

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TEMPORARY MEMBRANCE STRUCTURES AND TENTS OPERATIONAL PERMIT REQUIREMENTS

105.6.45 Temporary membrane structures and tents. An operational permit is required to operate an air-supported temporary membrane structure, a temporary stage canopy or a tent having an area in excess of 400 square feet.

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents open on all sides which comply with all of the following:
 - a. Individual tents having a maximum size of 700 square feet.
 - b. The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total.
 - c. A minimum clearance of 12 feet tall structures and other tents.

Tent. Structure, enclosure or shelter, with or without side walls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.

CCR, title 19, division 1, 310

- A. Tent. A shelter, structure or enclosure made of fabric or similar pliable material.
- B. Large tent. A tent designed for use by 10 or more people.
- C. Small tent. A tent designed for use by less than 10 people

Temporary Stage Canopy. A temporary ground supported membrane-covered frame structure used to cover state area and support equipment in the production of outdoor entertainment events.

Membrane Structure. An air-inflated, air-supported, cable or frame-covered structure as defined by the California Building Code and not otherwise defined as a tent.

Air-inflated Structure. A structure that uses air-pressurized membrane beams, arches or other elements to enclose space. Occupants of such a structure do not occupy the pressurized areas used to support the structure.

Air-supported Structure. A structure wherein the shape of the structure is attained by air pressure and occupants of the structure are within the elevated pressure area. Air supported structure are of two basic types:

Single skin. Where there is only the single outer skin and the air pressure is directly against that skin.

Double skin. Similar to a single skin, but with an attached liner that is separated from the outer skin and provides an airspace which serves for insulation, acoustic, aesthetic or similar purposes.

3103.2 Approval required. Tents and membrane structures 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.

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents open on all side comply with all of the following:
 - a. Individual tents having a maximum size of 700 square feet.
 - b. The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total.
 - c. A minimum clearance of 12 feet to all structures and other tents.

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 premise.

3103.8.1 Access. Fire apparatus access roads shall be provided

3103.8.2 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.

Exceptions:

Separation distance between membrane structures and tents not used for cooking is not required when the aggregate floor area does not exceed 15,000 square feet.

Membrane structures or tents need not be separated from buildings when all of the following conditions are met:

1. The aggregate floor area of the membrane structure or tent shall not exceed 10,000 square feet.
 - a. 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 California Building Code.
 - b. Required means of egress are provided for both the building and the membrane structure or tent including travel distances.
 - c. Fire apparatus access roads are provided in accordance with Section 503.

- d. When approved by the enforcing agency, tents may be located in or on permanent buildings provided such use does not constitute an undue hazard.
2. Tents and other membrane structures must be properly secured and braced to prevent a collapse and/or unsafe conditions.

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 or more shall be located not less than 50 feet from any other tent or structure as measured from the side wall of the tent or membrane structure unless joined together by a corridor.

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.

3103.11 Seating arrangements. Seating in tents or membrane structures shall be in accordance with Chapter 10.

3104.5 Combustible materials. Combustible materials including hay, straw or shavings are not allowed in a tent holding an assembly of people unless the materials are necessary for the daily care of animals. Hay, straw, shavings or similar combustible materials shall not be located within any tent or membrane structure containing 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 is not allowed in tents and “No Smoking” signs must be posted. 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, cooking devices, charcoal and any other flammable or combustible liquids are not allowed in tents or within 20 feet of tents and canopies unless specifically approved by the Fire Code Official. Fireworks, 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 or membrane structures while open to the public unless approved by the fire code official.

3104.12. Portable fire extinguishers. At least one 2-A fire extinguisher will be needed for tents between 500 and 1,000 square feet. One additional extinguisher will be needed for each additional 2,000 square feet. One 10 B-C extinguisher will be needed for each generator and any kitchen or dining areas.

Portable fire extinguishers shall be provided as follows:

- A. One class 2-A fire extinguisher shall be provided in every tent having a floor area between 500 square feet and 1,000 square feet plus one 2-A fire extinguishers in each auxiliary adjacent tent. One additional extinguisher shall be provided for each additional 2,000 square feet or fraction thereof.
- B. At least one class 10 B-C fire extinguisher shall be provided with each generator or transformer.
- C. C. At least on class 10 B-C fire extinguisher shall be provided in kitchen, dining areas, and at locations where flammable or combustible liquids or flammable gases are used, stored or dispensed.

605.9.1. Temporary wiring. Temporary wiring attached to a structure must be done in an approved manner. Temporary wiring attached to a structure shall be attached in an approved manner.

3103.12.1. Distribution. Exits should be spaced at equal intervals around the structure and all points should be 100 feet or less from an exit.

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 or less from an exit. 3101.1.12.2. Tents must have at least one exit and not less than the exit required in Table 3103.12.2.

3103.12.3. Exit opening from tents. Exit opening must remain open unless flame-resistant coverings in contrasting colors of the tent are used. Coverings must be free sliding and a minimum of 80 inches in height. 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 metal support. The support shall be a minimum of 80 inches above the floor level at the exit. The 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 contrast with the color of the tent.

3103.12.6. Exit Signs. Exits must be clearly marked with approved 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 when the exit serves an occupant load of 50 or more.

3103.12.6.1. Exit signs must be illuminated. For occupant loads greater than 49, exit signs shall be either listed and labeled in accordance with UL 931 as the internally illuminated type and used in accordance with the listing or shall be externally illuminated by luminaries supplied in the following manner:

1. Two separate circuits, one of which shall be separate from all other circuits, for occupant loads of 300 or less; or
2. Two separate sources of power, one of which shall be approved emergency system, shall be provided when 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.

3103.12.7. Means of egress illumination. Emergency lighting is required for all tents. Means of egress shall be illuminated with light having an intensity of not less than 1 foot-candle 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. Exit openings must be free of obstructions including guy ropes and support members. 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. The surface of means of egress shall be maintained in an approved manner.

3104.2. Flame propagation performance treatment. Proof must be submitted that all parts of the tent are approved by the California State Fire Marshal's office. Before a permit is granted, the owner or agent shall file with the fire code official a certificate executed by an approved testing laboratory certifying that the tents and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects, including sawdust when used on floors or passageways, are composed of material meeting the flame propagation performance criteria of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation performance criteria of NFPA 701, and such flame propagation performance criteria are effective for the period specified by the permit.

3104.3. Label. Every panel of the tent must have the seal of the State Fire Marshal attached. Membrane structures or tents shall have a permanently affixed label bearing the identification of size and fabric or material type.

3104.14 Occupant load factors. The occupant load allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10.

3104.15.5. Cooking tents. Tents where cooking is performed shall be separated from other tents by at least 20 feet. Tents with sidewalks or drops where cooking is performed shall be separated from other tents or membrane structures by a minimum of 20 feet.

3104.15.3. Location. Cooking and heating equipment cannot be located within 10 feet of exits or combustible materials. Cooking and heating equipment shall not be located within 10 feet of exits or combustible materials.

3104.15.6. Outdoor cooking. Outdoor cooking processes that produce sparks or grease-laden vapors have to be 20 feet from any tent. Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet of a tent or membrane structure.

3104.17.1. Use. Equipment using flammable liquid fuels cannot be used in tents. Flammable-liquid fueled equipment shall not be used in tents or membrane structures.

3104.17.2. Flammable and combustible liquids storage. Flammable and combustible liquids must be stored 50 feet from tents. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from tents or membrane structures. Storage shall be in accordance with Chapter 57.

3104.17.3. Refueling. Refueling of appliances should be done at least 20 feet away from tents or canopies. Refueling shall be performed in an approved location not less than 20 feet from tents or membrane structures.

3104.16.2. Location of containers. LP containers must be located outside the tent and safety release valves should be pointed away from the tent. 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. LP-gas containers less than 500 gallons must be at least 10 feet away from the tent. Portable LP-gas containers with a capacity of 500 gallons or less shall have a minimum separation between the container and the structure not less than 10 feet.

3104.16.2.2. Containers more than 500 gallons. LP-gas containers more than 500 gallons must be at least 25 feet from the tent. Portable LP-gas containers with a capacity of more than 500 gallons shall have a minimum separation between the container and structures not less than 25 feet.

3104.16.3. Protection and security. LP-gas containers should be protected from tampering or damage from vehicles or other hazards including tipping. Portable LP-gas containers, piping, valves and fittings which 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.

3104.19. Separation of generators. Generators must be at least 20 feet from any tent and shall be isolated from the public with fencing or other enclosures. Generators and other internal combustion power sources shall be separated from tents or membrane structures by a minimum of 20 feet and shall be isolated from contact with the public by fencing, enclosure or other approved means.

3104.20. Standby personnel. Standby Personnel may be required.

When in the opinion of the fire marshal, it is essential or public safety in a tent or membrane structure used as a place of assembly because of the number of persons or the nature of the performance or exhibition, the owner shall employ one or more qualified persons to remain on duty during the times that the structure is open to the public. See California Fire Code Chapter 31 for standby personnel requirements.

3104.21. Combustible vegetation. Combustible vegetation must be cleared within 30 feet around any tent. 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 of such structures.

3104.22. Combustible waste material. The area inside and outside of tents must be maintained free of combustible materials that could create a fire hazard. The floor surface inside tents or membrane structures and the grounds outside and within a 30-foot perimeter shall be kept free of combustible waste and other combustible materials that could create a fire hazard. Such waste shall be stored in approved containers and removed from the premise at least once a day during the period the structure is occupied by the public.

3104.23. Obstructions. Exits, aisles and passageways must remain clear at all times. Exits, aisles and passageways shall not be blocked or have their minimum clear width obstructed in any manner by ticket offices, turnstiles, concessions, chairs equipment, animal chutes, poles or guy ropes, or anything whatsoever, nor shall they be blocked by persons for whom no seats are available.

Additional requirements may apply.