



STANDARDS AND REQUIREMENTS FOR SPECIAL EVENTS IN TENTS, TEMPORARY STRUCTURES AND OTHER TEMPORARY MEMBRANE STRUCTURES

This standard is to be followed when a Special Event in a tent, temporary structure and other membrane structure is within Monterey Fire Department jurisdictions. This standard is not to be interpreted as containing all requirements for proper design, installation, or approval. Not all requirements in this standard are required for every special event.

A. General Requirements and Required Permits

These standards shall apply to any temporary membrane structure or tent in or under which 10 or more persons may gather in accordance with California Code of Regulations (CCR) Title 19. Temporary membrane structures and tents shall be used for a period of not more than 180 days within any 12-month period at a single facility unless approved by the local building code official. A tent or temporary membrane structure having an area in excess of 400 square feet will be required to have a permit and/or an inspection prior to being erected. Permits and approvals shall be in accordance with requirements of the City of Monterey and its jurisdictions.

B. Procedure

Prior to fire department review and approval, proposed event area must first complete all requirements pursuant to Title 22, the California Fire Code (CFC); California Code of Regulations (CCR) Title 19 and City Code amendments. This includes receiving any necessary land use permit approval and issuance of construction and Conditional Use Permit requirements.

A **fire safety review** is required to ensure public safety in a place of assembly, or any other place where people congregate, including but not limited to; amusement buildings, carnivals and fairs, exhibits and trade shows, open burning, flames and torches, candles, places of assembly, temporary membranes structures and tents, pyrotechnics and special effects, live audiences and any event with public attendance over 250.

A written plan must be submitted to the fire code official **30** days prior to each event. Written submittal requirements will be in accordance with California Fire Code, Fire Safety and evacuation plans. A field inspection verifying compliance of fire and life safety conditions must be conducted prior to public occupancy of the event at the discretion of the fire code official. If modifications or additions to the event areas are made, an updated permit & inspection must be completed.

C. Permits, approvals and inspections shall be in accordance with the following:

Referenced Codes

- 2019 CALIFORNIA FIRE CODE (CFC) CHAPTERS 3, 4, 6, AND 10
- MONTEREY FIRE CODE AMENDMENT AND ORDINANCES
- CALIFORNIA CODE OF REGULATIONS, TITLE 19 and TITLE 24 PART 9
- CAL FIRE STATE FIRE MARSHAL
- UL300 Commercial Cooking Controls Standards
- NFPA 1, Fire Code
- NFPA 10, Standards for Portable Fire Extinguishers
- NFPA 17A, Standards for Wet Chemical Extinguisher
- NFPA 30, Flammable and Combustible Liquid Code
- NFPA 30A, Code of Motor Fuel Dispensing Facilities and RepairGarages
- NFPA 58, Liquefied Petroleum Gas Code
- NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
- NFPA 70, National Electrical Code
- NFPA 101, Life Safety Code
- NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures
- NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films
- NFPA 1123, Code for Fireworks Display
- NFPA 1124, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles
- NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience



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E. Definitions:

For the purposes of this document, the following definitions shall apply:

TEMPORARY MEMBRANE STRUCTURE - is any air-inflated, air supported, cable, or frame-covered structure as defined by Building Code Appendix Chapter 55 which is erected for less than 180 days and not otherwise defined as a tent, canopy or awning.

TENT - A shelter, structure or enclosure made of fabric or similar pliable material.

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. See Chapter 31 of the California Building Code.

CANOPY - is a temporary structure, enclosure or shelter constructed of fabric or pliable material 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.

F. Required submittal(s)

The following written submittal (s) are required for fire approval:

- 1) Contact information: Owner, and or manager crowd managers, fire watch and emergency medical staff. Emergency support staff shall include a reasonable and prudent number of trained and experienced emergency medical staff, with the equipment and ability to manage simultaneous medical, security, fire and life safety incidents.
- 2) Written Fire Safety and Evacuation Plans
- 3) Overall site plan showing public roadway access, fire access, and general layout of event.
- 4) Detailed site plan of event (floor plans)
- 5) If required by the fire code official, an structural engineer approval.

Contact Information By City for applying for a permit

City of Monterey - Voice: (831) 646-3890 or gogreen@monterey.org or website

City of Carmel-by-the-Sea - (831) 620-2010 or building@ci.carmel.ca.us or website

City of Pacific Grove - (831) 648-3191 or building@cityofpacificgrove.org or website

Monterey Fire Prevention Bureau - (831) 646-3908 or Fireprevention@monterey.org or website



G. Access, Location, and Parking

- 1) Location of tents, canopies and temporary membrane structures, shall be in accordance with Table No. 1. Fire access roadways and parking of automobiles or other internal combustion engines shall be regulated also as set forth in Table No. c

TABLE NO. 3205A
LOCATION, ACCESS AND PARKING FOR
TENTS, CANOPIES AND TEMPORARY
MEMBRANE STRUCTURES

| FLOOR AREA (Square Feet) | MINIMUM SEPARATION FROM ANY PROPERTY LINE, BUILDING, OTHER TENT, CANOPY, OR TEMPORARY MEMBRANE STRUCTURE ¹ | MINIMUM FIRE ACCESS ROADWAY WIDTH ² | MINIMUM DISTANCES FOR THE PARKING OF AUTOMOBILES OR OTHER INTERNAL COMBUSTION ENGINES |
|-----------------------------|--|--|---|
| 0 – 5,000 | 20 feet ³ | 12 feet | 30 feet |
| 5,001 – 15,000 | 30 feet ³ | 20 feet | 40 feet |
| Over 15,000 | 50 feet | 20 feet | 60 feet |

¹ For the purposes of required distances, support ropes and guywires are to be considered part of the tent, canopy and temporary membrane structure.

² A fire access roadway in accordance with Section 902.2 is required when deemed necessary by the chief.

³ Tents, canopies and temporary membrane structures are allowed to be separated from each other by a minimum of 10 feet (3048 mm) or the required exit width, whichever is greater, when the accumulated area of adjacent tents, canopies, or temporary membrane structures is less than 15,000 square feet (1394 m²).

- 1) Tents shall be arranged to exit independently of each other. Such tents may, however, be joined together by means of corridors, and such corridors shall be open to the sky. On each side of such corridor and directly opposite each other, there shall be provided openings equivalent to the width of corridor. These openings shall be equipped with sliding curtains or left entirely open and clear of any obstruction.
- 2) When approved by the Fire Marshal, tents may be located in or on permanent buildings provided such use does not constitute an undue hazard.
- 3) The Fire Marshal may also approve the location of tents closer than that specified in this section if required passageways are provided and, in his/her opinion, adequate safety is afforded.



G. Access, Location, and Parking cont.

- 1) Fire apparatus access shall be provided as outlined in CFC §503. Access roads shall have an unobstructed width of not less than 20 feet and an unobstructed vertical clearance of 13 feet, 6 inches.
- 2) Temporary membrane structures and tents shall not be located within 20 feet of buildings, lot lines, parked vehicles, internal combustion engines, or other temporary membrane structures or tents. 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: a.) Separation distance between temporary membrane structures and tents not used for cooking is not required when the aggregate floor area does not exceed 15,000 square feet; b.) Temporary membrane structures or tents need not be separated from buildings when all of the following conditions are met:
 - a. The aggregate floor area of the membrane structure or tent shall not exceed 10,000 square feet;
 - b. 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;
 - c. Required means of egress are provided for both the building and the membrane structure or tent including travel distances;
 - d. Fire apparatus access roads are provided in accordance with Section 503 of the California Fire Code; The fire code official may approve tents located in, or on, permanent buildings provided that such use does not constitute an undue hazard.
- 3) 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.





H. Standards for Flame Resistance, Flame Retardant Treatment and Decorative Materials

- 1) Before a permit is granted, the owner or agent shall file with the fire code official a certificate executed by the State Fire Marshal certifying that the tents and membrane structures and their appurtenances; sidewalls, drops and tarpaulins are made from a flame resistant fabric and or decorative material is approved by the State Fire Marshal.
- 2) Required Label, Stencil or Stamp: Each section of top and sidewall of large tents and temporary membrane structures (i.e., those designed for use by 10 or more persons) shall have a permanently-affixed a durable label bearing the following information:
 - i. The seal of registration.
 - ii. If treated fabric, the name and registration number of the approved application concern and approved chemical used and the date of treatment.
 - iii. If registered fabric, the trade name and registration number of the approved fabric and the date of production. In lieu of the permanent label, the registration information may be applied directly to the fabric by print, stamp or stencil.
- 3) Small tents shall have a permanently affixed label bearing all of the information listed above for large tents, or shall meet the provisions of CPAI-84 (1975), as follows:
- 4) A statement that the materials used in the manufacture of the item meet the flame resistance requirements of CPAI-84.
- 5) An identification of the manufacturer of the item. If the item bears a private label, it shall identify the private labeler and shall also contain a code mark which will permit the seller of the item to identify the manufacturer to the purchaser upon request.
- 6) A number enabling the manufacturer to identify from his records the suppliers and supplier lot number of the certified materials used in the item. The manufacturer shall also maintain records identifying the parties to whom he sold camping tentage. Further, the manufacturer shall maintain records identifying items manufactured from lots of certified material. Records shall be maintained for four years.
- 7) A warning label in accordance with the following, or its equivalent, must be permanently affixed to the tent at one conspicuous location and must be black letters on a white background.



H. Standards for Flame Resistance, Flame Retardant Treatment and Decorative Materials Continued

All curtains, draperies, hangings and other decorative materials suspended from walls or ceilings are required by the Seattle Fire Code to be flame retardant. A flame certificate indicating the product or item meets NFPA 701 or California State Fire Marshal requirements must be available on - site for verification. A flame certificate should be available from the manufacturer upon request.

When a product is not flame retardant or there is no flame certificate available, it must be treated by a third party to render it flame retardant. They should then provide a flame certificate indicating the product or item meets NFPA 701 or California State Fire Marshal requirements for flame retardancy.

- 24 point type WARNING
- 16 point type KEEP ALL FLAMES AND HEAT SOURCES AWAY FROM THIS FABRIC
- 12 point type 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.

See below 3 for example of California Fire Resistive Seal

California State Fire Marshal Seal for Tents.

It will be imprinted in the tent material or it can be available from the tent manufacture.

(4) Warning label.



This item is made with flame resistant fabric that meets CPAI-84 Sec. 6/ULCS109, NFPA 701 fire standard specifications. **IT IS NOT FIRE PROOF** The fabric will burn if left in continuous contact with any flame. The application of any foreign substances to this fabric may render the flame retardant properties ineffective.



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-resistant fabric which meets CPAI-84 specifications. It is not fire proof. 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.



I. Occupant Load

- 1) The occupant load allowed in an Assembly structure shall be determined in accordance with Chapter 10 of the CFC.
- 2) Every room or space that is an Assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place near the main exit or exit access doorway from the room or space.
- 3) For areas without fixed seating, the number of occupants shall be computed at the rate of one occupant per unit of area as prescribed below:

| | | |
|--|--|--------|
| Assembly without fixed seats | | |
| Concentrated (chairs only – not fixed) | | 7 net |
| Standing space | | 5 net |
| Unconcentrated (tables and chairs) | | 15 net |

J. Exits

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

TABLE 3103.12.2
MINIMUM NUMBER OF MEANS OF EGRESS AND MEANS OF
EGRESS WIDTHS FROM TEMPORARY MEMBRANE STRUCTURES AND TENTS

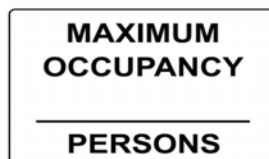
| OCCUPANT LOAD | MINIMUM NUMBER OF MEANS OF EGRESS | MINIMUM WIDTH OF EACH MEANS OF EGRESS (inches) | |
|-------------------------|-----------------------------------|--|--------------------|
| | | Tent | Membrane Structure |
| 10 to 199 | 2 | 72 | 36 |
| 200 to 499 | 3 | 72 | 72 |
| 500 to 999 | 4 | 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 be not less than the total occupant load multiplied by 0.2 inches per person.

* The total width of means of egress in inches shall not be less than the total occupant load served by a means of egress multiplied by 0.2 inches per person. Such widths of means of egress shall be divided approximately equally among the separate means of egress.

- 1) Exit openings from tents shall remain open unless covered by a flame-resistant curtain as follows:
 - a. Curtains shall be free sliding on a metal support. The support shall be a minimum of 80 inches above the floor level at the exit. Curtains shall be so arranged that, when open, no part of the curtains obstruct the exit; and
 - b. Curtains shall be of a color, or colors, that contrast with the color of the tent.





K. Doors

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

L. Means of Egress

- 1) The required width of exits, aisles and passageways to a public way shall be maintained at all times.
- 2) Guy wires, guy ropes, and other support members shall not cross a means of egress at a height of less than eight (8) feet.
- 3) The surface of means of egress shall be maintained in an approved manner.
- 4) 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 wires, or anything whatsoever, nor shall they be blocked by persons for whom no seats are available.

M. Exit Illumination and Signage

- 1) Means of egress shall be illuminated with light having an intensity of not less than one (1) footcandle 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.
- 2) Exit signs shall be clearly marked. Exit signs shall be installed at required exit doorways and where otherwise necessary to clearly indicate the direction of egress when the exit serves an occupant load of 50 or more.
- 3) Exit signs shall be either listed and labeled in accordance with UL 924 as the internally illuminated type and used in accordance with their listing or shall be externally illuminated by luminaries supplied in the following manner:
 - a. For occupant loads of 300 or less, two separate circuits, one of which shall be separate from all other circuits, shall be provided;
- 4) When the occupant load exceeds 300, two separate sources of power, one of which shall be an approved emergency system, shall be provided. Emergency systems shall be supplied from storage batteries or on-site generator set, and the system shall be installed in accordance with the Electrical Code.

The emergency system provided shall have a minimum duration of 90 minutes at full design demand.





N. Seating Arrangements and Aisle Spacing

- 1) Seating arrangements and aisle spacing shall be in accordance with Chapter 10 of the CFC and meet the approval of the fire code official.
 - 2) Aisle width for areas with no fixed seating shall be as follows:
 - a) In public areas without fixed seats, the minimum clear aisle width shall be 44 inches and aisles shall be progressively increased in width to provide, at all points, not less than 1 foot of aisle width for each 50 persons served by such aisle at that point.
 - b) In areas serving employees only, the minimum aisle width shall be 24 inches but not less than the width required by the number of employees served in accordance with CFC.
 - 3) Aisles shall terminate at a cross aisle, foyer, doorway, or dormitory having access to an exit.
 - 4) Aisles shall not have a dead end greater than 20 feet in length.
 - 5) Where seating rows have 14 or fewer seats, the minimum clear aisle access way shall not be less than 12 inches measured as the clear horizontal distance from the back of the row ahead and the nearest projection of the row behind.
 - a) For rows of seating served by aisles or doorways at both ends, there shall not be more than 100 seats per row. A minimum clear width of 12 inches between rows shall be increased by 0.3 inch for every additional seat beyond 14, but the minimum clear width is not required to exceed 22 inches.
 - b) For rows of seating served by an aisle or a doorway at one end only, the minimum clear width of 12 inches between rows shall be increased by 0.6 inch for every additional seat beyond seven, but the minimum The clear width shall be increased as follows:
 - i) For rows of seating served by aisles or doorways at both ends, there shall not be more than 100 seats per row. A minimum clear width of 12 inches between rows shall be increased by 0.3 inch for every additional seat beyond 14, but the minimum clear width is not required to exceed 22 inches.
 - ii) For rows of seating served by an aisle or a doorway at one end only, the minimum clear width of 12 inches between rows shall be increased by 0.6 inch for every additional seat beyond seven, but the minimum clear width is not required to exceed 22 inches.
 - 6) Aisle access ways serving arrangements of seating at tables shall provide a minimum of 12 inches of width plus ½ inch of width for each additional 1 foot, or fraction thereof, beyond 12 feet of aisle access way length measured from the center of the seat farthest from an aisle.
 - 7) The distance to the point where the occupant has a choice of two directions of travel to an exit shall not exceed 30 feet from the point where the occupant is seated. In addition, where one of the two paths of travel is across the aisle through a row of seats to another aisle, there shall not be more than 24 seats between the two aisles, and the minimum clear width between the rows for the row between the aisles shall be 12 inches plus 0.6 inch for each additional seat above seven in the row between aisles.
 - 8) When there are 300 or more loose seats, folding chairs, or similar seating facilities that are not fixed to the floor, chairs shall be bonded together in groups of three or more. Bonding of chairs is not required when tables are provided for dining or similar purposes.
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O. Flammable or Combustible Liquids and Liquefied Petroleum Gas (LP-gas)

1. Flammable-liquid-fuel equipment shall not be used in temporary membrane structures or tents. Refueling shall be performed in an approved location not less than 20 feet from temporary membrane structures and tents.
2. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from temporary membrane structures and tents.
3. LP-gas shall be located outside. Safety release valves shall be pointed away from temporary membrane structures and tents.
4. LP-gas shall be located outside. Safety release valves shall be pointed away from temporary membrane structures and tents.
5. Portable LP-gas containers having a capacity of 500 gallons or less shall have a minimum separation between the container and structure of not less than 10 feet.
6. Portable LP-gas containers having a capacity of 500 gallons or more shall have a minimum separation between the container and structure of not less than 25 feet.
7. Portable LP-gas containers, piping, valves and fittings located outside and 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.
8. Portable LP-gas containers shall be securely fastened to prevent unauthorized movement.

All LPG use shall meet NFPA 58, Liquefied Petroleum Gas Code, including the requirements listed below.

1. LPG Separation Distance: Containers for LPG installed not less than 5 ft. from any doorway or opening with at least two means of egress and 10 ft. from any opening with at least one means of egress. (NFPA 58:8.4.1.1)
2. No LPG Storage: NO ONSITE STORAGE of LPG cylinders is permitted per AHJ. LPG Containers that show excessive denting, bulging, gouging, or corrosion shall be removed from service. (NFPA 58:5.2.1.4)
3. LPG Cylinder Transportation. Cylinders in excess of 40 lb. (18 kg) total weight being transported to or from the site shall be carried on a hand truck or motorized truck. NFPA 1:41.5.5.3
4. LPG Limits: Maximum Allowable Quantity (MAQ), is based on cooking tent size or cooking tent area's square footage. Per NFPA and Monterey Fire Fire, Authority Having Jurisdiction (AHJ)
5. Maximum LPG cylinder size use per appliance 100 pounds
6. Maximum LPG use per 10 feet by 10 feet tent (or 100 square feet tent area) 200 pounds
7. Minimum separation distance per every 200 pounds LPG (100 square feet tent) 10 feet (58:8.4.1.1)
Example: A tent size of 20 ft. x 20 ft., has a maximum LPG use of 400 lbs., with a 10ft. separation distance to every 200 lbs. LPG use.
8. LPG Protection: LPG tank containers shall be secured in upright position and protected from vehicular traffic. (NFPA 1:25.1.10.1.7)
9. LPG Visual Inspection: Visual inspection shall be performed in accordance with the following: (NFPA 58:5.2.3.4)
 - (1) The cylinder is checked for exposure to fire, dents, cuts, digs, gouges, and corrosion according to CGA C-6, Standard for Visual Inspection of Steel Compressed Gas Cylinders.
 - (2) The cylinder protective collar (where utilized) and the foot ring are intact and are firmly attached.
 - (3) The cylinder is painted or coated to minimize corrosion.
 - (4) The cylinder pressure relief valve indicates no visible damage, corrosion of operating components, or obstructions.
 - (5) There is no leakage from the cylinder or its appurtenances that is detectable without the use of instruments.
 - (6) The cylinder is installed on a firm foundation and is not in contact with the soil



P. Heating and Cooking Equipment

- 1) Cooking equipment is permitted only inside tents and temporary membrane structures used exclusively for the cooking of food. No other uses such as public assembly, sales, displays, etc. are permitted inside a tent where cooking is allowed. Exception: 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 may be approved by the fire code official for use inside an tent or temporary membrane structure occupied by the public.
- 2) Gas, liquid and solid fuel-burning equipment shall be vented to the outside air as specified in the California Mechanical Code. Where vents or flues are used, all portions of the tent membrane structure shall be not less than 12 inches from the flue or vent. Solid fuel burning equipment shall be equipped with a spark arrester having openings not exceeding a ¼-inch wire mesh.
- 3) Tents with sidewalks or drops where cooking is performed shall be separated from other temporary membrane structures and tents by a minimum of 20 feet.
- 4) Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet of a tent or membrane structure.
- 5) Open flame or other devices emitting flame, fire, spark or heat or any flammable liquids, gas, charcoal or other cooking device or any other unapproved devices shall not be used in, or located within 20 feet of the tent or membrane structure while open to the public unless approved by the fire code official. All other cooking equipment shall be located a minimum of 10 feet from temporary membrane structures and tents.
- 6) Heating and cooking equipment shall not be located within 10 feet of exits or combustible materials.
- 7) All cooking and heating equipment, tanks, piping, hoses, fittings, valves, tubing, and other related components shall be installed in accordance with the California Mechanical Code and shall be approved by the fire code official.

Portable Heaters

Portable Outdoor Heaters shall not be used inside of a tent or enclosure unless the UL is intended for indoor use of commercial applications. Residential heaters are not permitted for tents. Heaters used for temporary heating shall be located at least 6 ft. (1.8 m) from any cylinder. (NFPA 58:6.19.4.4)

Patio Heaters

Patio heaters shall not be located within 5 ft. (1.5 m) of exits from assembly occupancy. (NFPA 58:6.20.2.3)

Carbon Monoxide Monitoring

All temporary tents or structures utilizing gas powered heating or cooking equipment or appliances shall be monitored for Carbon Monoxide (CO), gases. Monitor shall take place on an hourly basis.

Portable Outdoor Electric Heaters

Heaters shall be connected to electricity by electric cable that is suitable for outside use and is of sufficient size to handle the electrical load. (NFPA 101:11.11.6.2.3)



P. Heating Appliances

Requirements are not only California Fire Code but is also an OSHA requirement.

Portable outdoor gas-fired heating appliances, commonly known as patio heaters. These portable heating appliances are typically configured as a free-standing pole, fashioned with a heater and reflector dome/shield at the top, with a broad base arranged for the storage of a 20-pound propane (LPG) cylinder. These appliances may also be designed to appear and function as portable outdoor fireplaces or tall patio tables.

PORTABLE OUTDOOR GAS-FIRED HEATERS (PATIO HEATERS)

Prohibited locations.

The storage or use of portable outdoor gas-fired heating appliances is prohibited in any of the following locations:

1. Inside of any occupancy where connected to the fuel gas container.
2. Inside of tents, canopies and membrane structures.
3. On exterior balconies.

Clearance to Combustible Materials.

Portable outdoor gas-fired heating appliances shall not be located beneath, or closer than 5 feet to combustible decorations and combustible overhangs, awnings, sunshades, or similar combustible attachments to buildings.

Clearance to Buildings.

Portable outdoor gas-fired heating appliances shall be located at least 5 feet from buildings.

Prohibited Storage or Use. The storage or use of portable outdoor gas-fired heating appliances is prohibited in any of the following locations:

- Inside of any occupancy when connected to the fuel gas container
- Inside of tents, canopies and membrane structures.
- On exterior balconies.

Installation and Operational Requirements.

Proximity to Exits.

Portable outdoor gas-fired heating appliances shall not be located within 5 feet of exits or exit discharges.

Listing & Approval.

Only listed and approved portable outdoor gas-fired heating appliances utilizing a fuel gas container that is integral to the appliance shall be used.

Installation & Maintenance.

Portable outdoor gas-fired heating appliances shall be installed and maintained in accordance with the manufacturer's instructions.

Tip-over Switch Required.

Portable outdoor gas-fired heating appliances shall be equipped with a tilt or tip-over switch that automatically shuts off the flow of gas if the appliance is tilted more than 15 degrees from the vertical.

Guard Against Contact Required.

The heating element or combustion chamber of portable outdoor gas-fired heating appliances shall be permanently guarded to prevent accidental contact by persons or material.

Loose Propane tanks shall be staked and secured away from a tent no less than 20 feet. (If not possible please consult with the Fire Marshal) Cylinders that are stored shall be secured and chained together in an area away from the public. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from temporary membrane structures, tents, or canopies.

Refueling shall be performed in an approved location not less than 20 feet from temporary membrane structures, tents, or canopies.

FLAMMABLE OR COMBUSTIBLE LIQUIDS AND LIQUIFIED PETROLEUM CONT.

Required Fire Extinguishers

1. 2A-10BC fire extinguisher available within 10-feet of the heaters.
2. Each mushroom heater shall be supplied with only one propane bottle.
3. One 20-lb bottle per heater maximum.

Storage

- Minimize exposure to excessive temperature rise, physical damage or tampering.
- Store cylinders in an open-air storage unit or cage with a protective roof overhead.
- Cylinders stored inside must not be located near exits, stairways, or in areas normally used, or intended to be used, for the safe exit of people.
- In buildings not frequented by the public (such as industrial facilities), not more than 300-pounds of LP gas in cylinders can be stored in one location.
- Use and store cylinders in the proper position. Store cylinders with the relief valve in direct contact with the vapor space in the container.
- Cylinder valves must be protected - screw-on type caps or collars must be securely in place on all stored cylinders regardless of whether they are full, partially full or empty, and container outlet valves must be closed.
- Storage locations must be provided with at least one approved portable B:C rated fire extinguisher and no more than 50-feet from the storage location.
- Cylinders that are stored shall be secured and chained together in an area away from the public.
- Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from temporary membrane structures, tents, or canopies.

Comfort heating equipment

All fuel-fired comfort heating equipment shall be located on the exterior of the temporary membrane structure or tent a minimum of 10 feet away. Heated air shall be ducted from the equipment to the temporary membrane structure or tent.

Separate fuel supplies that are in use for comfort heating equipment shall be located a minimum of 20 feet from the temporary membrane structure or tent.

MUSHROOM HEATER USE

The installation of LP-gas containers and use of LP-gas is prohibited where a source of natural gas is within 300 feet of the nearest property line.

EXCEPTIONS - Not applicable if mushroom heater is supplied with natural gas, and installed according to the International Gas Code and one and two-family dwellings are not required to obtain a permit.

Requirements:

- Mushroom heaters containing propane bottles shall not be stored indoors.
- Mushroom heaters shall not be used under tents or canopies.
- Mushroom heaters shall not be permitted on roofs or balconies.
- Mushroom heaters shall be located 10 feet or more from any exit.
- Mushroom heaters shall be placed no closer than 10 feet apart from each other.
- Mushroom heaters shall have "NO SMOKING" signs posted.
- Mushroom heaters shall be located 10-feet away from any structure.
- Portable heaters shall be equipped with an approved automatic device to shut off the flow of gas to the main burner and to the pilot, if used, in the event of flame extinguishment or combustion failure.
- Portable Heaters shall be self-supporting unless designed for cylinder mounting.
- Portable heaters shall not be installed utilizing cylinder valves, connectors, regulators, manifolds, piping, or tubing as structural supports.
- Portable heaters having an input of more than 50,000 Btu/hr (53MJ/hr) shall be equipped with either a pilot that must be lighted and proved before the main burner can be turned on or an approved electric ignition system.
- There shall be a 2A-10BC fire extinguisher available within 10-feet of the heaters.
- Each mushroom heater shall be supplied with only one propane bottle.
- One 20-lb bottle per heater maximum.
- All specific guidelines for propane cylinders shall apply.
- Connections for propane cylinders shall be soap tested after every bottle change.
- Additional storage of propane bottles must be locked up outside in an approved cage.
- Mushroom heaters shall be protected from tampering. Propane bottles must be locked inside heater. The heater must be staked or chained or by some other method to prevent tipping.



Q. Smoking and Open or Exposed Flames

1. Smoking shall not be permitted in any tent or temporary membrane structure or in any adjacent areas where hay, straw, or any other combustible materials are stored or used. Approved “NO SMOKING” signs shall be conspicuously posted.
2. Open flame or other devices emitting flame, fire, spark or heat or any flammable liquids, gas, charcoal or other cooking device or any other unapproved devices shall not be used in, or located within 20 feet of the tent or membrane structure while open to the public unless approved by the fire code official.

R. Anchorage and Structural Stability

1. Membrane structures and tents and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing.
2. Documentation of structural stability shall be furnished to the fire code and building official.

S. Generators

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.

T. Portable Fire Extinguishers and Other Fire Protection Equipment

- 1) Minimum fire extinguisher coverage shall be provided in every tent and temporary membrane structure as follows:
 - a) 200 to 500 square feet of floor area: one 2-A extinguisher plus one in each auxiliary adjacent tent;
 - b) Each additional 2,000 square feet of floor area or fraction thereof: one 2-A extinguisher.
- 2) At least one 10 B-C extinguisher shall be provided for each generator or transformer.
- 3) At least one 10 B-C extinguisher shall be provided in the kitchen, dining areas and at locations where flammable or combustible liquids or flammable gases are used, stored or dispensed.
- 4) Tents having a capacity of 1,000 or more persons shall be protected along the long sides with fire hose lines of at least 1½-inch inside diameter and of sufficient length to reach either end of the tent. The water supply shall either be from the public water mains or from tanks having a capacity of not less than 500 gallon. There shall be at least 65 pounds of flowing pressure at the nozzle of the hose line when a 1/2 –inch tip is used.



U. Standby Personnel and Crowd Managers

- 1) Trained crowd managers shall be provided where more than 250 people congregate or in tents And membrane structures when required by the fire code official. The minimum number of crowd managers shall be established at a ratio of one crowd manager to every 250 persons. Where approved by the fire code official, the ratio of crowd managers may be reduced where the facility is equipped throughout with an approved automatic sprinkler system or based on the nature of the event.
- 2) When, in the opinion of the fire code official, it is essential for public safety in a tent or membrane structure, because of the number of persons, or the nature of the event 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 event is being conducted.

V. Fire Watch

- 1) 1. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.(California Fire Code Section 202), Additional daily/shift paperwork is required. See Monterey Fire watch Procedures.

W. Housekeeping

- 1) Weeds and other combustible vegetation shall be removed from within 30' of the tent area.
- 2) Hay, straw, trash, and other combustible materials shall not be stored within 30' of the
- 3) tent. The floor surface inside, including the grounds adjacent to or within 30' outside, shall be kept free of combustible waste.
- 4) Trash receptacles shall be constructed of non-combustible material.

X. Inspections

A member of the Monterey Fire Protection Bureau or the Building Department will conduct an inspection for the approval of the permit application prior to the area being accessible to the public. You are strongly encouraged to schedule well in advance for any required inspections. Required inspection scheduling that provides at least 24 hours and will be accommodated subject to personnel availability. The installer/contractor and user shall be on site during the inspection.

Upon the inspector's arrival, the structure shall be completely erected and compliant with all applicable code requirements. A copy of this document, site plan, and permit shall be available for the inspector.

Please call or email: 831-646-3908 or FirePrevention@Monterey.org



Y. Submittal documents:

Site plan, Fire and Life Safety plan, Tent Floor Diagram

Site Plan shall include the following:

- 1) An accurate scale or dimensioned site diagram indicating distances from any tents or temporary structures, location of planned event in proximity to permanent buildings, access drives, emergency access roads, parking areas, other tents or canopies, cooking and heating appliances and equipment, propane tanks, flammable liquids, pyrotechnic activities, stage locations, food or beverage service, and property lines, and roadways.
- 2) Locations of management team, crowd managers, and first aid stations and/or roaming EMT.
- 3) A statement which identifies the intended use of all structures and the dates for which the permit is required.
- 4) Flame retardant certificate(s) for tent/canopy material. (CCR Title 19, Chapter 2, Article of The regulations of the State Fire Marshal for large and small tents, awnings and other fabric enclosures shall also apply.
- 5) Dimensions for all tents, canopies and membrane structures.

Site plans and uniformed identification for tents and temporary membrane structures for emergency and medical responders for evacuation plans

- 1) Accurate site plans and tent names
 - 2) Emergency egress or escape routes and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.
 - 3) Procedures for employees who must remain to operate critical equipment before evacuating.
 - 4) Procedures for assisted rescue for persons unable to use the general means of egress unassisted.
 - 5) Procedures for accounting for employees and occupants after evacuation has been completed.
 - 6) Identification and assignment of personnel responsible for rescue or emergency medical aid.
 - 7) The preferred and any alternative means of notifying occupants of a fire or emergency.
 - 8) The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
 - 9) Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
 - 10) A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.
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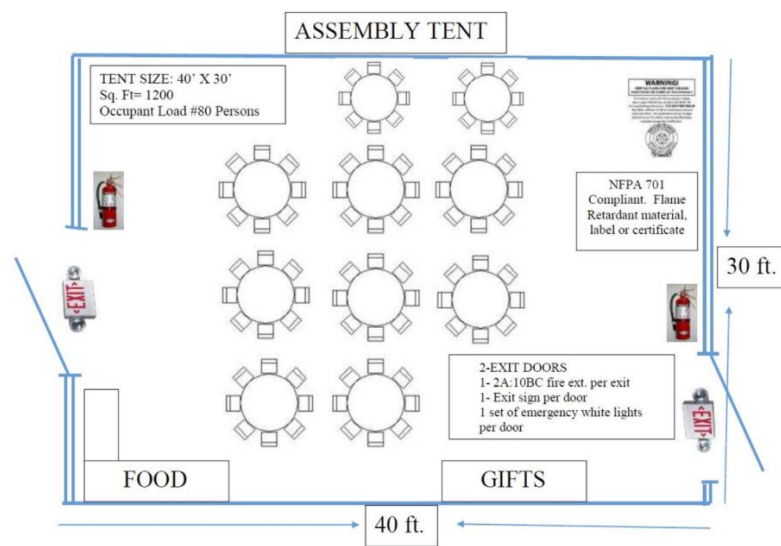
Fire and Life Safety Plan

- 1) The procedure for reporting a fire or other emergency.
- 2) The life safety strategy and procedures for notifying, relocating or evacuating occupants/ event attendees, including occupants who need assistance.
- 3) Site plans indicating the following:
- 4) The occupancy assembly point.
- 5) The locations of fire hydrants.
- 6) The normal routes of fire department vehicle access.

Example of a site plan below.



Generic site plan of tent. (all details and requirements will vary with application)





Tent Floor Diagram (floor plans)

All Tent Floor Diagrams or Event Structures Diagrams should be submitted to scale at a minimum of 1/8 to 1" and shall include:

- 1) Exits.
- 2) Primary evacuation routes.
- 3) Secondary evacuation routes. (required)
- 4) Accessible egress routes.
- 5) Areas of refuge.
- 6) Exterior areas for assisted rescue.
- 7) Manual fire alarm boxes.
- 8) Portable fire extinguishers.
- 9) Occupant-use hose stations.
- 10) Fire alarm annunciators and controls.
- 11) A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
- 12) Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
- 13) Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

Z. General Fire and Life Safety

1. There shall be a minimum clearance of at least 3 feet between the fabric envelope and all contents located inside tents and membrane structures.
2. Combustible vegetation, hay, straw, trash and similar combustible material shall be removed from the area occupied by a temporary membrane structure or tent and from areas within 50 feet of tents and membrane structures to which the public is admitted.
3. Floor coverings, bunting, combustible decorative materials and effects, including sawdust when used on floors or passageways, shall be composed of flame-resistant material meeting performance criteria of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation criteria of NFPA 701.
4. Hay, straw, shavings or similar combustible materials shall not be located within, or used on the floor of, any tent or membrane structure unless it is made flame resistant in an approved manner, or when approved by the fire code official, kept adequately damp when the tent is occupied.
5. The floor surface inside tents or membrane structures and the grounds outside and within a 30-foot perimeter shall be kept free and clear of combustible waste and other combustible materials that could create a fire hazard. Such wastes shall be stored in approved containers until removed from the premises at least once a day during the period the structure is occupied.
6. Any condition that presents a fire hazard, would contribute to the rapid spread of fire, interfere with the rapid exit of persons from tents, or interfere with or delay the extinguishment of a fire, shall be immediately corrected as ordered by the fire code official.



Tents and Temporary Structures for Public Use Fact Sheet

Use this initial reminder of considerations before you apply for a permit



Risk Management

Have the contract liability clauses and insurance requirements been reviewed?
Has responsibility, sponsorship, and supervision of the event been designated?

Contracting with Vendors

Have all contracts, purchase orders, and agreements been reviewed and signed for all vendors (facilities, sound and lighting equipment, performers, rentals, port-a-potties, etc.)?



Safety Management

Event Site Plan- Provide detailed scale drawing of tent size, location, interior layout of tables and chairs, size of exits and distances from structures and traffic? Emergency / Evacuation Plan?

Exits

Exits are clearly posted and adequate lighting is in place to maintain a visible path. Do gates and barriers obstruct exits from tent?

Fire Safety

Emergency Vehicle Access? Tents are separated from vehicle traffic (physical barriers when required), Fire Extinguisher, No Smoking Signs, Occupant Load Signs posted?



California State Fire Marshal

Certification labels and stamps on tents?
Flame Retardant or Resistant Certificate (Tag or Paperwork)?

Structural Stability

You may be required to have a structural calculation report provided by a licensed structural engineer.

Cooking

Will tents where cooking is performed be separated by at least 20 feet from other non- Cooking tents?



Comfort Heating

appliances? Propane appliances and open flames are not allowed inside or located within 10 feet of exits, aisles, passageways, or combustibles.

Propane (LPG) -Fueled Heaters and Fuel

Propane Tanks are Not Allowed Inside Tents. This means “mushroom” heaters are allowed 10 feet away from tents, but are prohibited inside tents. “Salamander” style heaters which blow air in under a tent from the outside are permitted and are commonly available from tent rental companies. The fuel tank must be a minimum 10 feet away from the tent and exits and you must have 3A 40BC fire extinguishers.



Temporary Power - Generators?

Extension cords? Electrical outlet overloading? Surge protectors?
Weather protection for electricity?



Lighting and Electrical Heaters - Electric heaters are not allowed to be powered by extension

cords and must be plugged directly into an approved receptacle or outlet. Extension cords if used for lighting can only be used on a temporary basis and must not be installed for permanent use (longer than 90 days). They must not be connected into each other and should never be attached to permanent fixtures or pass through holes in walls. Any significant electrical outlet must remain covered. This applies to junction boxes, circuit breaker panels, and any type of outlet box. Electrical cords must be protected from wear and damage and to avoid trip hazards.

Other requirements may apply. Tents and temporary membrane structures shall comply with all applicable laws and regulation.

PREPARED AND APPROVED BY MONTEREY FIRE PREVENTION BUREAU

FIREPREVENTION@MONTEREY.ORG 831-646-3908