STANDARD DETAILS & SPECIFICATIONS	Spec No T-1
SUBJECT: Tents, Canopies, and Temporary Membrane Structures	Review Date 10/13/26 Revision Date 10/13/26 Eff. Date 10/13/26 Approved By JD Page 1 of 9

SCOPE

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 tents, air-supported, air-inflated, or tensioned membrane structures shall not be erected for a period of more than 180 days within any 12-month period on a single premise.

AUTHORITY

2025 California Fire Code (CFC), California Code of Regulations, Title 24, Part 9, Chapter 31 California Code of Regulations (CCR), Title 19.

DEFINITIONS

Air-Inflated/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 structures are of two basic types:

- **Single Skin**: Single outer skin with air pressure against the skin.
- **Double Skin**: Attached liner that is separated from the outer skin and provides air space.

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 (**CFC §202].**

Temporary Special Event Structure: Any temporary ground-supported structure, platform, stage, stage scaffolding or rigging, canopy, tower supporting audio or visual effects equipment or similar structures not regulated within the scope of the *California Building Code.*

Tent: A structure, enclosure, umbrella structure or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported in any manner except by air or the contents it protects **[CFC §202].**

REQUIREMENTS

I. Permit

A. An operational permit is required to operate an air-supported temporary membrane structure, a temporary special event structure, or a tent having an area in excess of 400 square feet (37 m2) **[CFC §105.5.51]**

Exceptions:

1. Tents used exclusively for recreational camping purposes.

2. Tents, curtains and extensions attached thereto, when used for funeral services.

3. Tents open on all sides, which comply with all of the following:

   a. Individual tents having a maximum size of 700 square feet (65 m2).

   b. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m2) total.

   c. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

II. Access, Location, and Parking

A. 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. **[CFC §3103.7]**

B. 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. **[CFC §3103.7.2]**

Exceptions:

1. 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;
2. 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;

a. Fire apparatus access roads are provided in accordance with Section 503 of the California Fire Code;

3. The fire code official may approve tents located in, or on, permanent buildings provided that such use does not constitute an undue hazard.

III. Anchorage and Structural Stability

A. Membrane structures and tents and their appurtenances shall be designed and installed to withstand the elements of weather and prevent against collapsing **[CFC §3103.8].**

B. Documentation of structural stability shall be furnished to the fire code official upon request **[CFC §3103.8]**

C. Water-filled vessels shall not be used to anchor a tent or membrane structure unless approved and in accordance with the tent or membrane structure manufacturer's load specifications. **[CFC §3103.8.1.1]**

IV. Flame Resistance and Flame-Retardant Treatment Standards

A. Provide proof of flame resistance with application. All tent fabrics and all interior decorative fabrics or materials shall be flame resistant in accordance with appropriate standards set forth in California Code of Regulations. (Title 19, Division 1, Chapter 8. CCR Title 19, Div 1, 335 a&b).

B. 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 permanently-affixed a durable label bearing the following information **[CFC §3104.3, Title 19, Div. 1, §335 (a) and (b)]**:

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.

    a. In lieu of the permanent label, the registration information may be applied directly to the fabric by print, stamp, or stencil.

C. 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:

1. A statement that the materials used in the manufacture of the item meet the flame resistance requirements of CPAI-84.

2. 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.

3. A number enabling the manufacturer to identify from his records the suppliers and suppliers' 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.

4. The following warning label or its equivalent must be permanently affixed to the tent at one conspicuous location and must be black letters on white background:

    WARNING
    KEEP ALL FLAMES
    AND HEAT SOURCES
    AWAY FROM THIS
    TENT FABRIC

    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.

V. Maximum Occupant Load

A. The occupant load allowed in an Assembly structure shall be determined in accordance with Chapter 10 of the **[CFC §3108.11]**

VI. Exits

A. 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 **[CFC §3103.11.1]**

B. Exits size and number shall be provided in accordance with [CFC Table **§3103.11.2]**

C. Exit openings from tents shall remain open unless covered by a flame-resistant curtain as follows **[CFC §310311.3]**:

1. 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;

2. Curtains shall be of a color, or colors, that contrast with the color of the tent.

VII. Doors

A. 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) **[CFC §3103.11.4]**

VIII. Maintenance of Means of Egress

A. The required width of exits, aisles and passageways to a public way shall be maintained at all times **[CFC §3103.11.5]**

B. Guy wires, guy ropes, and other support membranes shall not cross a means of egress at a height of less than eight (8) feet **[CFC §3103.11.8]**

C. The surface means of egress shall be maintained in an approved manner **[CFC §3103.11.8]**

D. 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, guy wires, or anything whatsoever; nor shall they be blocked by persons for whom no seats are available **[CFC §3108.19]**

IX. Exit Illumination and Signage

A. Means of egress shall be illuminated with light having an intensity of not less than one (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 **[CFC §3103.11.7]**

B. 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 **[CFC §3103.11.6]**

C. 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:

1. For occupant loads of 300 or less, two separate circuits, one of which shall be separate from all other circuits, shall be provided;

2. 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 **[CFC §3103.11.6.1]**

X. Seating Arrangements and Aisle Spacing

A. Seating arrangements and aisle spacing shall be in accordance with Chapter 10 of the CFC and meet the approval of the fire code official **[CFC §3103.11.5.1]**

B. Aisle width for areas with no fixed seating shall be as follows **[CFC §3103.11.5]**:

1. 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.

2. 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.

C. When there are 200 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 **[CFC §1018.1 and CCR Title 19 Div. 1, 3.06 (a)]**.

XI. Smoking and Open or Exposed Flames

A. Smoking shall not per 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 **[CFC §3103.7.4.5]**

B. 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 10 feet of the tent or membrane structure while open to the public unless approved by the fire code official **[CFC §3108.4]**

XII. Flammable or Combustible Liquids and Liquefied Petroleum Gas (LP gas)

A. Flammable-liquid-fuel equipment shall not be used in temporary membrane structures or tents **[CFC §3108.13.1]**

B. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from temporary membrane structures and tents **[CFC §3108.13.2]**

C. Refueling shall be performed in an approved location not less than 20 feet from temporary membrane structures and tents **[CFC §3108.13.3]**

D. LP-gas shall be located outside in accordance with table 6104.3. Safety release valves shall be pointed away from temporary membrane structures and tents **[CFC §4101.6.2]**

E. 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 **[CFC §4101.6.3]**

F. Portable LP-gas containers shall be securely fastened to prevent unauthorized movement **[CFC §4101.6.3]**

XIII. Generators

A. 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 **[CFC §3108.15]**

NOTE: Generators located in the unincorporated area of Santa Clara County, with fuel tanks of 10 gallons or more, will require a separate permit from Santa

Clara County Department of Environmental Health. For more information visit: Temporary Hazardous Materials Storage Permit

XIV. General Fire Safety

A. There shall be a minimum clearance of at least 3 feet between the fabric envelope and all contents located inside tents and membrane structures **[CFC §3108.8]**

B. Hay, straw, shavings or similar combustible materials shall not be located within any tent or membrane structure containing an assembly occupancy except the materials necessary for the daily feeding and care of animals. Sawdust and shavings utilized for public performance or exhibits shall not be prohibited provided that the sawdust and shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time **[CFC §3108.2]**

C. 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 **[CFC §3108.18]**

D. 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 **[T19 Div. 1, §321]**.

XV. Heating and Cooking Equipment

A. Temporary heating and cooking operations shall comply with Special Event Standard SI-2 and 2025 CFC chapter 41 **[§3108.12]**

B. Permanent heating and cooking equipment shall conform to **[CFC §3108.12.1-31012.3.]**

XVI. Portable Fire Extinguishers and Other Fire Protection Equipment

A. Minimum fire extinguisher coverage shall be provided in every tent and temporary membrane structure as follows **[T19 Div. 1 §317]**:

1. 500 – 1000 square feet of floor area: one 2-A extinguisher plus one in each auxiliary adjacent tent;

2. Each additional 2,000 square feet of floor area or fraction thereof: one 2-A extinguisher.

B. At least one 20 20 B-C, extinguisher shall be provided for each generator or transformer **[T19 Div. 1 §319 (c)]**.

C. 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, store, or dispensed **[T19 Div. 1 §319 (c)]**.

D. At least one Class K, extinguisher shall be provided for the protection of cooking appliances that use vegetable or animal oils and fats. **[T19 Div. 1 §566 (b)].**

E. 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 gallons. 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 **[T19 Div. 1 §319 (d)]**.

F. Other fire protection equipment shall be maintained at the site as required by the fire code official **[CFC §3108.10]**

XVII. Standby Personnel and Crowd Managers

A. The owners or operator 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. EXCEPTION: The enforcing authority may waive or modify the provisions of this section if, in his opinion, public safety will not be jeopardized. (CCR Title 19 Div 1, 320)