Use of Heaters in Temporary Tents & Awnings

The use of tents and membrane structures have become prevalent within the State Blueprint for a Safer Economy for outdoor dining, beverage service, and events when such businesses are required to operate outdoors. CAL FIRE - Office of the State Fire Marshal (OSFM) encourages expedited approval of designated facilities and operations but reminds everyone that the California Code of Regulations Title 19 and Title 24 continue to remain in effect.

Given the critical nature of the COVID-19 pandemic outbreak, OSFM is providing expedited certification of tents, permitting tent and/or fabric manufacturers to field label tents after contacting the Office of the State Fire Marshal, and permitting tents to be field treated by a State Fire Marshal certified flame-retardant General Applicator.

The OSFM provides statewide fire prevention regulations for the use of tents, awnings, or other fabric enclosures. Below are some important elements of the statues and regulations.

Approval of Temporary Tents, and Membrane Structures:
Based on the size of tent, a permit from the local fire department, or OSFM on state property, may likely be required. In addition to these regulations, all state and local public health directives shall also be followed.

Tent and Membrane Structure Materials
California regulations require that all tents manufactured, sold, rented, or used be made from nonflammable material or material treated with a flame-retardant chemical approved by OSFM. Title 19 CCR §1171

Each section of the top and sidewalls of large tents (ten or more occupants) shall have the State Fire Marshal seal of registration label. Small tents (nine or less occupants) may have a registration label meeting the provisions of CPAI-84; otherwise the State Fire Marshal seal of registration label is required. Title 19 CCR §335

Fuel-Fired Heating Appliances
Any heaters with open flame, open flame elements, or exposed heating elements are prohibited from being used inside a tent structure. Title 19 CCR §317. Per manufacture recommendations, these types of appliances should only be used in open outdoor space areas with plenty of air flow.
Examples of fuel fired appliances include:

Liquefied petroleum gas shall not be stored or used in connection with any tent unless the storage containers, equipment, fittings, appliances, placement, use, and operation comply with Title 19 CCR §325.

Forced air heaters may be used to heat tents and membrane structures as these units are positioned on the outside of a tent with heat pumped in through a duct under the sidewall of the tent. Examples are provided below:

Electric heating appliances

Portable electric heating appliances shall be listed for its specific use and labeled by an approved testing laboratory. All appliances shall be used per the appliance’s listing for its approved location and use type. Portable electric heating appliances must also be equipped with a tip-switch cutoff and have concealed heating elements. Heating appliances shall be used in accordance with Title 19 CCR §3.17 and California Electric Code (CEC) Chapter 424.

Code References for Location and Use of Tents, Canopies, and Membrane Structures:
The State Fire Marshal shall prepare and adopt rules and regulations establishing minimum requirements for the prevention of fire and panic in connection with the use of tents, awnings, or other fabric enclosures. Health and Safety Code Section 13116
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Outdoor spaces created on public property must have a permit issued for Temporary Membrane Structures and Tents. The fire code official shall issue a permit and inspect tents, canopies and membrane structures covering an aggregate area of 400 square feet or more. 2019 CFC §105.6.47

A building permit from the Building Department is required for membrane structures for use exceeding 180 days. 2019 CFC §105.3.1

NFPA 701 may be applied when recognized by the authority having jurisdiction. Title 19 CCR §1.09

Tents, canopies, and membrane structures shall not be installed within 20 feet of buildings unless approved by the fire code official. 2019 CFC §3103.8.2

Tents, canopies, and membrane structures shall be installed a minimum of 20 feet from parked vehicles or internal combustion engines. Title 19 CCR §312

There shall be a clearance of not less than 3 feet between the fabric sides of a tent, canopy or membrane structure and all contents located inside the tent, canopy, or membrane structure. 2019 CFC §3107.8

Extension cords serving a tent, canopy or membrane structure must be protected by a Ground Fault Circuit Interrupter (GFCI) and must be protected from damage. CEC Table 400.4

Tents 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. 2019 CFC §3103.9

Means of egress shall always be maintained. Title 19 CCR §3.11

Flammable vegetation, materials and combustible waste is not permitted within 50 feet of the tent or membrane structure. Title 19 CCR §326

Smoking shall not be permitted in tents. Approved “No Smoking” signs shall be conspicuously posted. Title 19 CCR §316

Portable fire extinguishers shall be provided. Title 19 CCR §319

Generators and other internal combustion power sources shall be separated from tents, canopies, 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. All generators must be bonded and grounded. 2019 CFC §3107.16

Liquids having a flash point below 200°F shall not be stored in any tent nor less than 50 feet from any tent. Title 19 CCR §324

For more information please visit our website http://osfm.fire.ca.gov

For assistance in obtaining an approved OSFM Certificate of Registration for tents and flame retardant material assistance, please contact Deputy Patricia Setter, OSFM Flame Retardant Program Coordinator at (916) 597-5703 or email: patricia.setter@fire.ca.gov.