



Heating Tents Safely (For tents over 400 sf.)

REV 01/12/21

Heating of Tents and Membrane Structures

The International Fire Code as adopted by Washington State has numerous requirements for heating and heat producing appliances inside of tents, canopies, or other temporary membrane structures. Heating devices inside these structures can introduce significant fire, burn injury, and carbon monoxide poisoning hazards.

This document is intended to provide guidance to businesses who have erected tents for public use.

Acceptable Installations

1. **Ducted Tent Heaters** – Electric, propane, or natural gas direct or indirect ducted tent heaters specifically designed for heating tents and other enclosed spaces are allowed where installed in accordance with the manufacturer's instructions. Heaters must have an Underwriters Laboratories (UL) or other Nationally Recognized Testing Laboratories (NRTL) listing.



Ducted Tent Heater Examples

2. **Portable Electric Space Heaters** – Portable electric space heaters are allowed inside tents. Portable heaters must have UL or other NRTL listing, over-temperature protection and must have clearances as required by the manufacturer, but in no case less than 3 feet from any persons or combustible material including the tent or sidewall fabric. Heaters setting on the ground must have a tip-over switch, suspended heaters must be securely installed. The power supply shall utilize a single listed outdoor extension cord rated for the amperage and include GFCI protection or be provided with temporary power supply approved by the Building Official.



Portable or Suspended Electric Heater Examples

3. **Catalytic Propane Heaters** – Propane or natural gas fueled catalytic heaters which heat by chemical reaction and have no combustion are allowed inside tents. Catalytic heaters must have UL or other NRTL listing, tip-over switch, and maintain clearances as required by the manufacturer, but in no case less than 3 feet from any persons or combustible material including the tent or sidewall fabric. The propane source cylinder is NOT allowed within the tent.



Catalytic Heater Examples

4. **Heating and HVAC Systems installed under an approved Building Permit** – HVAC systems that are reviewed, inspected, and approved by the Building Department under the appropriate permit are allowed.
5. **Patio Type Propane Heaters Permitted with Conditions** - The Camas-Washougal Fire Marshal's Office has temporarily modified Section 3104.7 of the International Fire Code (IFC) to allow for the user of patio type heaters when each of the following requirements has been met:
- Heaters shall have clearance to combustibles per their listing. Typically between 24-36 inches
 - The floor area shall be non-combustible
 - There shall be no flammable decorations within the tent
 - There shall be only two side panels of a tent. The other two sides must remain open for ventilation purposes. A tent may have three side panels when there exists adequate ventilation from another opening to create cross ventilation. This follows the governor's requirement for outdoor seating as well.
 - A carbon monoxide detector shall be installed
 - A fire extinguisher shall be placed at each exit
 - Heating devices shall be approved by a nationally accepted certifying agency such as Underwriters Laboratories.
 - Owner of the establishment to provide the Fire Marshal with a certificate by an approved testing laboratory stating that the tent material meets the flame propagation of NFPA 701. Typically, there will be a label on the tent signifying this.
 - As usual, there is no smoking within the tent.

NOTE: This temporary modification to Section 3104.7 will expire on April 1, 2021. The Camas-Washougal Fire Marshal's Office reserves the right to modify or revoke this exception at any time.



Patio Type Propane Heaters



Informational Bulletin

From the Office of the Fire Marshal

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Prohibited Heaters

Only the above listed approved heater types are allowed. For information purposes, the following are examples of common heating devices that are not allowed within a tent or temporary membrane structure:



Salamander-Type Heaters using propane, natural gas, kerosene, or other flammable/combustible fuels



Infrared Propane Heaters