



Informational Bulletin
From the Office of the Fire Marshal

Heating Tents Safely (For tents over 400 sf.)

December 2020

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.

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



Patio-Type Propane Heaters



Infrared Propane Heaters