Minnesota Department of Public Safety State Fire Marshal Division

Temporary Use of Tents for Medical Testing

Current situation (March 2020)

The current COVID-19 situation has revealed a need for mobile medical testing sites. The goal is to provide an environment for testing but minimize exposure to health care workers and permanent health care facilities.

Some of these sites may use tents or similar structures that may need to be heated. Due to the hazards of open-flame heating, the Minnesota State Fire Code (MSFC) has limitations on heaters in tents and membrane structures.

Tents to be fire retardant

MSFC 3104 requires that tents and membrane structures be flame retardant. "Flame retardant" does not mean the material will not burn. Flame retardant materials are resistant to ignition from a relatively small open flame (like a match or small burner). Flame retardant treatments are not intended to protect against ignition from large open-flame devices (like a furnace or open-flame heater).

Open flames not allowed

Here are some of the restrictions:

- Portable outdoor gas-fired appliances are prohibited inside tents and membrane structures — MSFC 603.4.2.1.1 (see photo at right for example).
- Open-flame devices and similar arrangements are not allowed inside of or within 20 feet of tents and membrane structures when they are open to the public — MSFC 3104.7.
- Heating equipment needs to be at least 10 feet from exits or combustible materials (even when not open to the public) — MSFC 3104.15.3.

Preferred heating methods

- Indirect heat a heater located outside and a safe distance from the tent where warm air is blown into the tent.
- Electric heat must be listed by a nationally recognized testing laboratory.

If open-flame heaters are being used, they should be:

- 20 feet from the tent (if open to the public) MSFC 3104.7.
- 10 feet from exits from the tent MSFC 3104.15.3.
- If LP gas is the fuel source for the heaters, the following separation distances are required:
 - o Containers of 500 gallons or less 10 feet from the tent.
 - Containers of more than 500 gallons 25 feet from the tent.





