

Frankenmuth, MI 48734-1398

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Applicable Standards of the State Fire Prevention Code:

The City of Frankenmuth is committed to help provide a safe environment for the public who occupy tents and canopies as well as those individuals involved with the erection and operation of these structures. Tents are regulated in the State of Michigan under the Michigan Building Code, which refers to the International Fire Code (MBC3103.1), and any other referenced codes. This handout summarizes the most common fire code issues encountered by our staff. Additional fire code requirements may also apply.

Definitions:

Authority Having Jurisdiction (AHJ)

An organization office or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure. Fire Chief or other designated City Code official.

Relocatable Power Tap

A device for indoor use consisting of an attachment plug on one end of a flexible cord and two or more receptacles on the opposite end, and has overcurrent protection.

Checklist:

- ✓ **Flame Resistance:** Tents must be fire retardant (NFPA 701) designated by the flame resistance label on the tent fabric or the alternative would be a certificate from the manufacturer.
- ✓ **Tent Location:** Tents shall not be located within 10 feet of other structures, parked cars or property lines. There shall be a minimum of 10 feet between stake lines. Tents, each not exceeding 1200 feet in ground area and located in open spaces, shall not be required to be separated from each other, provided that safety precautions meet the approval of the AHJ.
- ✓ **Smoking**: There shall be "No Smoking" inside the tents and visible signs must be posted. Those hosting the event should enforce this policy.
- ✓ Fire Extinguishers: A minimum of one 2A-10BC extinguisher should be available in each tent, with a minimum travel distance of 75 feet. If appliances with grease-laden vapors are present, a Class K extinguisher is required with a maximum travel distance of 30 feet. There shall be a minimum of one Class K extinguisher, but additional Class K extinguishers may be required, dependent on the hazard created by the cooking appliances on site. All fire extinguishers need to be conspicuously located and readily accessible and installed securely on a hanger or bracket. All extinguishers must be tagged, confirming that it was serviced and inspected by a certified technician within the past year.
- ✓ Heating Devices: Unvented portable fuel-fired heating appliances are prohibited. Electric heaters
 are allowed if listed, approved by the AHJ, and appropriately connected to electricity with proper
 size electric cable.

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- ✓ **Cooking:** All cooking equipment, which produces grease-laden vapors, shall be equipped with an UL 300 extinguishing system and exhaust system if located in a tent where the public is permitted. Equipment producing grease-laden vapors is not required to have an extinguishing / exhaust system if the tent accommodating this equipment is a designated cooking tent with no public access and separated from other tents, structures and vehicles by a minimum of 20 feet. Any deviation from this distance must be approved by the AHJ. Electric roasters and similar listed devices, approved by the AHJ, that do not produce grease-laden vapors may be used in a tent where the public is permitted.
- ✓ **Solid Fuel Cooking:** Solid fuel cooking appliances and gas charcoal grills shall not be used within 10 feet of a building, tent, or property line and shall be protected from contact by the public with fencing, enclosures, or other approved means. A heavy metal container or cart (minimum 16 gauge) with a cover, shall be provided for the removal of ash.
- ✓ **Means of Egress:** If a tent has the ability to be enclosed by removable sides, appropriate exiting must be designated and occupancy loads must be enforced. Occupant load in any building is calculated by dividing the useable floor area by the approved use, indicated in Table 1.

Table 1:

	Ft ² per Person*
Concentrated use, without fixed sitting (chairs only)	7 net
Less concentrate use, without fixed sitting (chairs and tables)	15 net
Standing Space	5 net

^{*} Floor area of room intended for occupancy

The calculated occupancy load must be enforced by event staff so that this number is not exceeded.

The number of required exits is as follows:

- (1) Under 500 occupant load requires a minimum of two exits
- (2) Occupant load more than 500 but not more than 1000 not less than 3
- (3) Occupant load more than 1000 not less than 4

Where two exits or exit access doors are required, they shall be located at a distance from one another not less than one-half the length of the maximum overall diagonal dimension of the building or area to be served, measured in a straight line between the nearest edge of the exit doors or exit access doors.

All exits are required to have illuminated exit signs, visible from any direction. The main entrance / exit door, if clearly identifiable as such, would not require an exit sign.

✓ Electrical: All electrical appliances, fixtures, equipment and wiring shall be installed and maintained in accordance with NFPA 70, National Electric Code. All Multiplug adapters, such as multiplug extension cords, cube adapters, strip plugs, and other devices, shall be listed and used in accordance with their listing. Relocatable power taps shall be of the polarized or grounded type with overcurrent protection and shall be listed. The relocatable power taps shall be directly connected to a permanently-installed receptacle. Relocatable power tap cords shall not extend

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through walls, ceilings, or floors; under doors or floor coverings; or be subject to environmental or physical damage. Extension cords shall be plugged directly into an approved receptacle, power tap, or multiplug adapter and shall, except for approved multiplug extension cords, serve only one portable appliance. The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord. Where flexible cords or cables are used, they shall be listed for extra hard usage. Where flexible cords or cables are used and are not subject to physical damage, they shall be permitted to be listed for hard usage. Where used outdoors, flexible cords and cables shall also be listed for wet locations and shall be sunlight resistant. Flexible cords or cables accessible to the public shall be arranged to minimize the tripping hazard and shall be permitted to be covered with nonconductive matting, provided that the matting does not constitute a greater tripping hazard than the uncovered cables. It shall be permitted to bury cables. Cord connectors shall not be laid on the ground unless listed for wet locations. Connectors and cable connections shall not be placed in audience traffic paths or within areas accessible to the public unless guarded. Electrical wiring for lighting, where installed inside of tents and concessions, shall be securely installed and, where subject to physical damage, shall be provided with mechanical protection. All lamps for general illumination shall be protected for accidental breakage by a suitable fixture or lamp-holder with a guard.

- ✓ LP Storage: No storage or handling of flammable liquids or gases shall be permitted at any location where it would jeopardize egress from the structure. Containers for liquefied petroleum gases shall be installed not less than 60 inches from any tent and shall be in accordance with the provisions of NFPA 58, Liquefied Petroleum Gas Code. Tanks shall be secured in the upright position and protected from vehicular traffic.
- ✓ **Combustible Materials:** No hay, straw, shavings or similar combustible materials that have not been treated to make them flame retardant to a degree acceptable to the AHJ shall be permitted within any structure used as an assembly occupancy.
- ✓ **Generators:** Generators and other internal combustion power sources shall be separated from temporary membrane structures and tents by a minimum of 5 ft and shall be protected from contact by fencing, enclosures, or other approved means.

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