



## COMMUNITY SAFETY DIVISION

G.O. – 1.6

### Special Events, Tents and Membrane Structures

Approved by: Division Chief/Fire Marshal Merlin Green

January 16, 2012

**Purpose:** This policy is intended to help groups or businesses that use tents or temporary membrane structures during special events to have a document that will assist them in understanding the fire codes that relate to these types of events. This policy is general in nature and may not be all inclusive of all codes that may apply for each event. The Loveland Fire Rescue Authority Inspector will make the final decision at each event on any matters not clearly defined in this policy.

#### Definitions:

**Tent:** A temporary structure, enclosure or shelter, with or without side-walls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents it protects.

**Temporary Membrane Structure:** An air-inflated, air-supported, cable or frame-covered structure which is erected for less than 180 days and not otherwise defined as a tent, canopy or awning.

**Small Events:** Less than 5 tents or temporary membrane structures in any combination of small or large sizes.

**Large Events:** 5 or more tents or temporary membrane structures in any combination of small or large sizes. Large events will require a site plan that shows the location of each tent and distances from other tents, structures, and lot lines, public right of ways, parking areas and cooking equipment. This must be submitted with the application. All tents and temporary membrane structures will fall under the requirements as listed below, either small or large tents.

**Tent or Membrane Structure Size:** Tents and temporary membrane structures having an area in excess of **700 sq. ft.** are required to obtain a permit and meet the 2009 International Fire Code and other safety requirements per Loveland Fire Rescue Authority. (Referred to as a large tent or membrane structure.)

Tents and temporary membrane structures having an area of **700 sq. ft. or less do not require a separate permit**, but will need to meet the safety requirements listed by Loveland Fire Rescue Authority. (Referred to as a small tent or membrane structure.)

**Special Event Permits:** Events that have multiple tents and temporary membrane structures may request a special event permit instead of obtaining separate permits for each tent or temporary membrane structure. This permit still requires a detailed site plan, but also requires one contact for the whole event. This contact will distribute this policy to all parties involved and make certain all requirements are met before our inspection. The contact person shall accompany the inspector during the final inspection. The event coordinator will help assure that any problems found during the inspection will be corrected. (Please contact our office for more details.)

**BASIC TENT OR TEMPORARY MEMBRANE STRUCTURE SAFETY REQUIREMENTS**

The following are safety-related issues that will need to be addressed for all tents or temporary membrane structures in conjunction with special events whether a permit is required or not.

- ☐ 1. Tents and temporary membrane structures shall be adequately roped, braced and anchored to withstand the elements of weather against collapsing.
- ☐ 2. Small tents and temporary membrane structures are not required by International Fire Code to be flame resistant and certified. The Loveland Fire Rescue Authority does strongly recommend utilizing tents and membrane structures with this rating for your own personal safety.
- ☐ 3. Any tent or temporary membrane structure used for, or with any type of cooking or re-warming operation shall be required to have on site a minimum of one 2A 10BC rated fire extinguisher with a current inspection tag.
- ☐ 4. No cooking with a device that utilizes an open flame is allowed under any tent or temporary membrane structure, or types of cooking that produce grease laden vapors. Examples would include hot griddles, barbecue grills, kettle popcorn poppers, or any other device with an open flame. *See attached drawing for details.*

**LARGE TENT OR TEMPORARY MEMBRANE STRUCTURES REQUIREMENTS**

The following are Safety and Fire Code issues that will need to be addressed by the persons obtaining a permit. A member of the Loveland Fire Rescue Authority shall inspect the tent or temporary membrane structure prior to the issuance of a permit. Tents and temporary membrane structures shall not be occupied until this inspection has taken place.

- ☐ 1. Tents or temporary membrane structures shall not be located within 20 feet of lot lines, buildings, other tents or temporary membrane structures, parked vehicles, or internal combustion engines unless otherwise approved by Loveland Fire Rescue Authority.
- ☐ 2. Tents and temporary membrane structures shall be adequately roped, braced and anchored to withstand the elements of weather against collapsing.
- ☐ 3. The sidewalls, drops, and tops of tents and temporary membrane structures shall be composed of flame resistant material, or shall be treated with flame retardant in an approved manner. Floor coverings, bunting, combustible decorative materials and effects, including sawdust when used on floors or passage ways, shall be composed of flame-resistant material or shall be treated with a flame retardant in an approved manner.
- ☐ 4. No cooking with open flame is allowed under any tent or temporary membrane structure. Examples would include hot griddles, barbecue grills, kettle popcorn poppers, or any other device with an open flame. Outdoor cooking that produces grease-laden vapors should not be placed within 20 feet of any tent or temporary membrane structure. Example: deep-fat frying is required to be at least 20 feet from the tent, temporary membrane structure, or other combustible material. A barrier must be in place to keep the public at least 48 inches from the deep-fat fryer, or as otherwise approved by the Fire Inspector.  
(*See attached diagram for set-up details.*)

- ☐ 5. Large tents and temporary membrane structures may be used for re-warming of foods in roasters or other warming devices, i.e. microwave ovens.
- ☐ 6. Any LP gas containers utilized for cooking around or near tents and temporary membrane structures shall be located a minimum of 5 feet from the cooking appliance unless designed to be self-contained at the appliance.
- No propane tanks larger than 40 pound size will be permitted.
  - Propane tanks must be secured to prevent damage or from being knocked over.
  - No more than two (2) propane tanks (40 pound maximum size) per vendor will be allowed in the vendor area.  
i.e. 1 grill per booth = 2 propane tanks total (per booth)  
2 grills per booth = 2 propane tanks total (per booth)
- ☐ 7. Fireworks, open flames, and devices capable of igniting combustible materials shall not be used in or adjacent to a tent or temporary membrane structure unless otherwise approved.
- ☐ 8. Weeds and flammable vegetation shall be removed from the area occupied by a tent or temporary membrane structure from areas adjacent to or within 30 feet of structures.
- ☐ 9. Hay, straw, trash, or other flammable materials shall be stored not less than 30 feet outside of tents or membrane structures.

<b>Certification of Flame Resistant / Retardant Materials</b>
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Tents and temporary membrane structures required to be flame resistant shall have a permanently affixed label bearing the following information or meet the required guidelines:

- Identification of tent or temporary membrane structure, size, and fabric type.
  - For flame resistant materials, the necessary information to determine compliance with 2009 International Fire Code and NFPA 701, as applicable.
  - For flame retardant treated materials, the date that the tent, temporary membrane structure, and other combustible materials were last treated with an approved flame retardant.
  - The trade name and type of flame retardant utilized in the flame retardant treatment.
  - The name of the person and firm that applied the flame retardant.
- ☐ • Smoking shall not be permitted in tents and temporary membrane structures, or in adjacent areas where hay straw, sawdust, or any other combustible materials are stored or used, unless approved by the Fire Inspector. "NO SMOKING" signs shall be conspicuously posted within these structures.

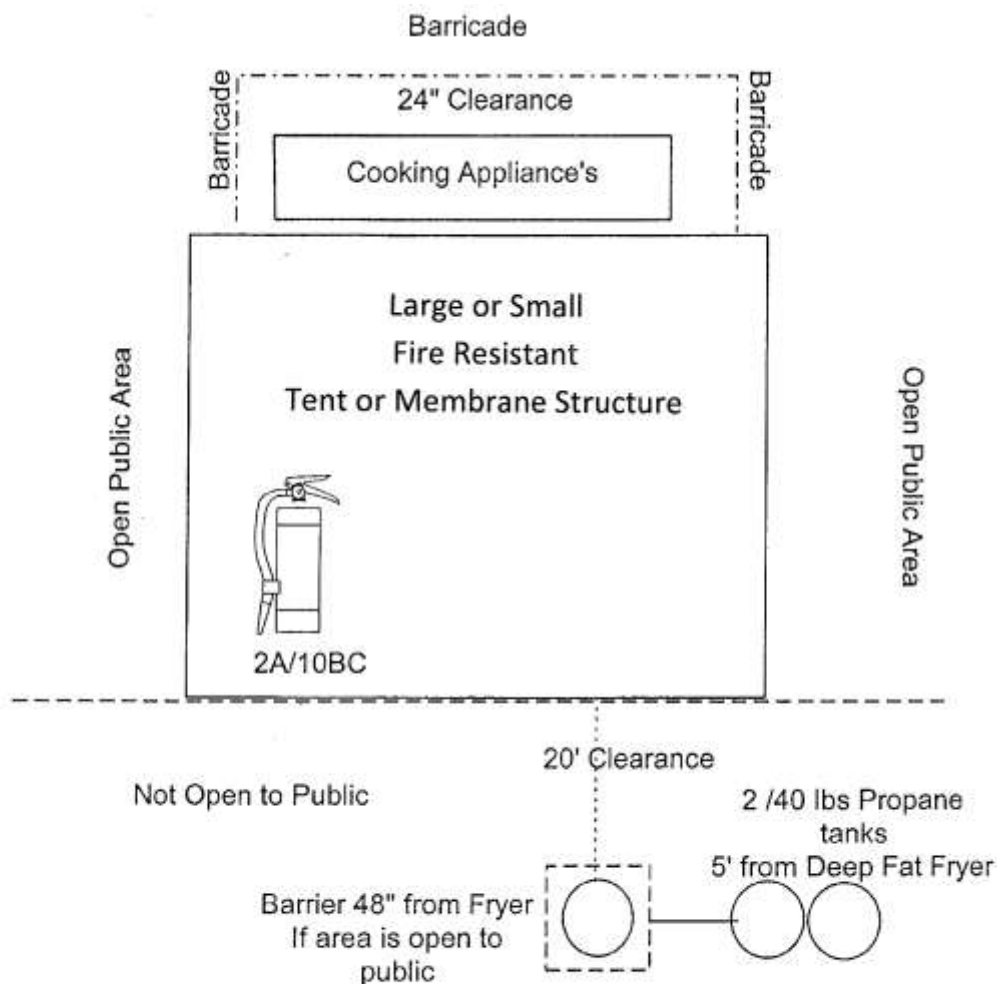
<b>Fire Extinguisher Requirements for Large Tents</b>
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- ☐ • Fire extinguishers shall be provided in every tent and temporary membrane structure that requires a permit. Minimum fire extinguisher coverage shall be provided in every tent and membrane structure as follows:
- A. 700-1000 sq. ft. of floor area.....two 2A-10BC
  - B. For larger tents contact our office for help in determining fire extinguisher needs.

Fire extinguishers shall be provided for each kitchen, mess hall, power generator, or transformer location where flammable or combustible liquids are used.

#### Exiting Requirements for Oversized Tents

- ❑ • Exits shall be spaced at approximately equal intervals around the perimeter of the tent or temporary membrane structure, and shall be located so that no point is more than 100 feet from an exit. ***Loveland Fire Rescue Authority will calculate the exiting requirements based on the floor plan submitted with the permit application.***
- ❑ • Aisles within the tent or temporary membrane structure shall have a minimum width of 44 inches. If seating areas are to be provided within these tents or temporary membrane structures, the arrangement of the aisles shall be approved by the Loveland Fire Rescue Authority.



Note: Diagram is not to scale and not all inclusive.