	<b>TENTS AND/OR TEMPORARY MEMBRANE STRUCTURES</b>		<b>2016revB</b>
	<b>AUTHORED BY:</b> Engineer Tyler Drage	<b>FESSAM #</b> 5A.2	<b>EFFECTIVE DATE:</b> 2/16/2016
<b>APPROVED BY:</b> Fire Chief Mark Miller <i>Mark Miller</i>		<b>REVISION DATE:</b> 4/29/2018	

**Procedure:**

A valid LFRA permit must be obtained by the tent installation contractor/vendor under the circumstances listed below. Unless otherwise approved by LFRA, completed permit applications including payment of required fees shall be submitted to LFRA at least 48 hours prior to the requested date of inspection.

**Tent or Membrane Structure Size:**

A Tent and/or Temporary Membrane Structure Permit from LFRA is required for tents and/or temporary membrane structures having a total area **greater than 700 square feet, with or without side panels**. The installation contractor/vendor shall obtain a permit from LFRA prior to installation of the tent and/or temporary membrane structure and must receive an inspection from LFRA personnel prior to use of the structure to verify compliance with all safety requirements.

A Tent and/or Temporary Membrane Structure Permit from LFRA is not required for:

1. Individuals or organizations wishing to host a special event, as defined above. These individuals or groups must apply for a Special Event permit from LFRA.
2. Tents and/or temporary membrane structures having an area of **700 square feet or less** do not require a permit from LFRA, but must comply with all safety requirements listed below.

**Permit Application Requirements:**

The installation contractor/vendor shall submit the following information to the LFRA Community Safety Division at least 48 hours prior to the requested date of inspection:

1. Site plan showing general location where tent and/or membrane structure is to be erected. Adjacent structures and rights-of-way must be indicated on the site plan. A screen shot from a web-based application is acceptable. Site plans do not need to be drawn to scale, but should show approximate locations and dimensions.

2. General description of the intended use for the tent and/or temporary membrane structure.  
Example: Tables and chairs, stage with dance floor and tables and chairs, display of motor vehicles for sale, cooking/food preparation, etc.
3. Certificate of flame resistance provided by manufacturer of tent or membrane structure.
4. Completed Application for Special Permit form and submittal of required fee.

### **Safety Requirements for all Tents and/or Temporary Membrane Structures:**

The 2012 International Fire Code (IFC) includes the following safety-related issues that shall be addressed for all tents and/or temporary membrane structures.

#### ***Requirements for tents with or without an LFRA-required permit:***

1. Tents and temporary membrane structures shall be adequately roped, braced and anchored to withstand the elements of weather against collapsing, per manufacturer's design specifications.
2. Tents and temporary membrane structures (including tops, sidewalls and drops) shall be certified as flame resistant by the manufacturer. This certificate must be provided by the installation contractor with the completed permit application materials.
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 2-A:10-B:C rated fire extinguisher with a current annual inspection tag.
4. Open flames are not permitted under or within any tent and/or temporary membrane structure. Any cooking that produces grease laden vapors is prohibited under any tent or temporary membrane structure. Examples would include hot griddles, barbecue grills, kettle popcorn poppers or any device with an open flame. ***See attached drawing for details.***  
***\*Exemption to this requirement - any tent designed specifically for the purpose of cooking.***
  - ✓ Outdoor cooking that produces grease-laden vapors should not be placed within 20 feet of any tent or temporary membrane structure.
  - ✓ A barrier must be in place to keep the public at least 48 inches from the cooking device, or as otherwise approved by the LFRA Fire Inspector.
5. All means of egress requirements shall be maintained from all tents and/or temporary membrane structures at all times when the structures are in use.

***Additional requirements for tents that require an LFRA permit:***

In addition to the safety requirements listed above, the following fire code requirements shall be addressed for all tents and/or temporary membrane structures that require a permit from LFRA. The tent and/or temporary membrane structure requiring a permit shall not be occupied until final inspection by LFRA personnel.

1. Tents and/or temporary membrane structures shall not be located within 20 feet of lot lines, buildings, parked vehicles, internal combustion engines or other tents or temporary membrane structures unless otherwise approved by LFRA.
2. Floor coverings, bunting, combustible decorative materials and effects, including sawdust when used on floors or passageways, shall be composed of flame-resistant material or shall be treated with a flame retardant in an approved manner. The installation contractor shall provide proof of compliance with this requirement at the time of application for permit.
3. Large tents and/or temporary membrane structures may be used for re-warming of foods in roasters or other warming devices (e.g., microwave ovens).
4. Any LP gas containers utilized for cooking around or near tents and/or temporary membrane structures shall be located a minimum of five (5) feet from the cooking appliance unless designed to be self-contained at the appliance.
  - No propane tanks larger than 40 pounds are 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.
    - ✓ 1 grill per booth = 2 propane tanks total (per booth)
    - ✓ 2 grills per booth = 2 propane tanks total (per booth)
5. 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 by LFRA.
6. Weeds and other combustible vegetation shall be removed from the area occupied by a tent or temporary membrane structure and from areas adjacent to or within 30 feet of such structures.
7. Hay, straw, trash or other combustible materials shall be stored at least 30 feet away from tents or membrane structures.

8. Smoking shall be prohibited within all tents and/or temporary membrane structures or in any adjacent areas where hay, straw, sawdust or any other combustible materials are stored and/or used, unless specifically approved by the LFRA Fire Inspector. Appropriate “No Smoking” signs shall be prominently displayed so that they are visible throughout all areas of the structure.

### **Certification of Flame Resistance and/or Flame Retardant Materials:**

Tents and/or temporary membrane structures that are required to be flame resistant shall have a permanently affixed label bearing the following information or meeting 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 2012 International Fire Code and NFPA 701, as applicable.
- For flame retardant treated materials, the date that the tent, temporary membrane structure, and/or 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.

### **Fire Extinguisher Requirements:**

Fire extinguishers shall be provided in every tent and/or temporary membrane structure that requires a permit from LFRA. Minimum fire extinguisher coverage shall be provided in every tent and membrane structure as follows:

- a. 400 – 700 square feet of floor area: at least one 2-A:10-B:C extinguisher
- b. 701 – 1,000 square feet of floor area: at least two 2-A:10-B:C extinguishers
- c. For tents larger than 1,000 square feet, contact the LFRA Community Safety Division at 970-962-2497 for assistance 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.

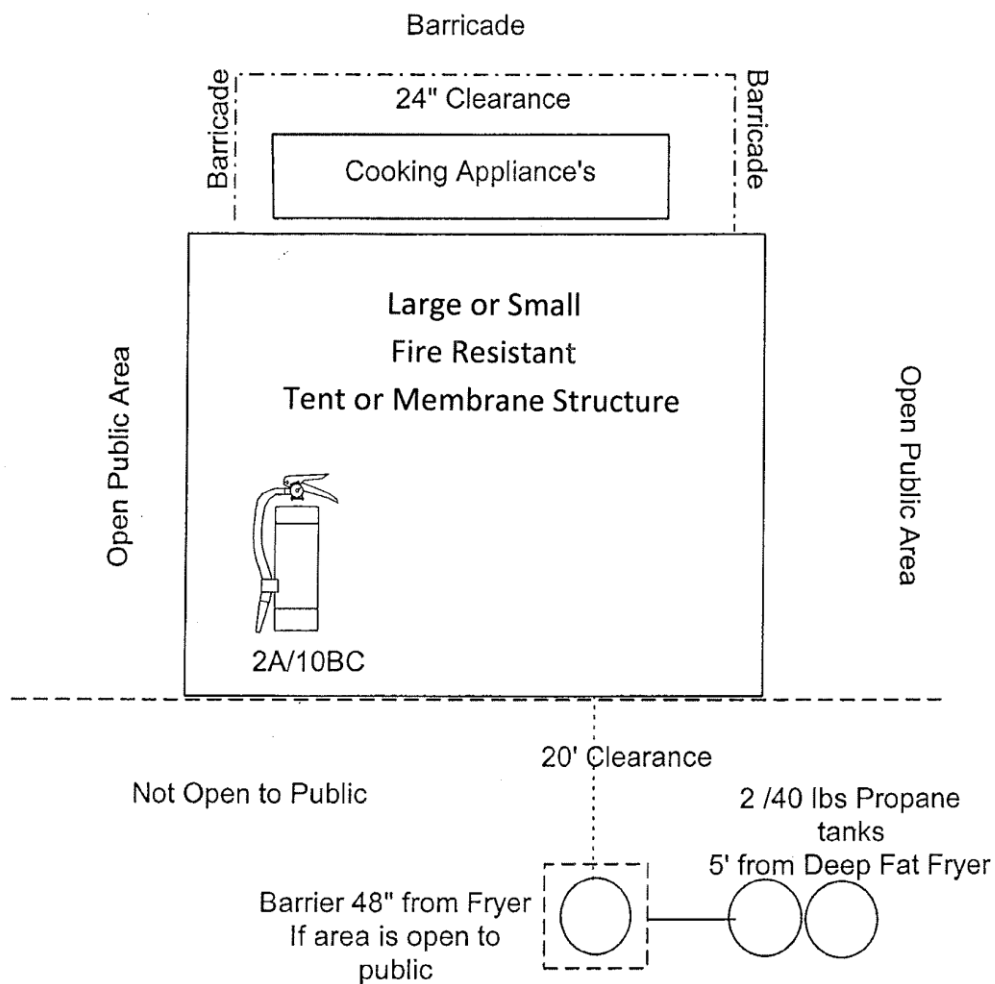
Fire extinguishers shall be properly mounted, clearly visible and readily accessible at all times.

All fire extinguishers must be inspected and/or serviced annually by a licensed fire extinguisher service professional and must be clearly tagged to indicate the date of last service.

### **Maintenance of Means of Egress:**

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 within the structure is more than 100 feet along a common path of egress travel from an exit. Aisles within the tent and/or temporary membrane structure shall have a minimum width of 44 inches.

**Example of Acceptable Site Plan:**



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

**LOVELAND FIRE RESCUE AUTHORITY**  
**Tent and/or Canopy Permit Inspection Checklist**  
 2012 International Fire Code

TENT VENDOR/ INSTALLATION CONTRACTOR NAME

PHONE #

--	--

The following checklist applies only to inspecting a tent, canopy and/or membrane structure that is erected in conjunction with a tent/canopy permit issued by LFRA. All checklist items shall be completed by the TENT VENDOR prior to requesting an inspection by LFRA. The TENT VENDOR shall maintain copies of all information on-site and available for inspection.

<b>Any deficiency must be corrected prior to issuance of any permit. Failure to correct deficiency prior to inspection shall result in a re-inspection and payment of applicable re-inspection fees.</b>		
<b>Deviation from any requirement below must receive approval from the Fire Code Official.</b>		
Vendor Initials & Date	LFRA Initials & Date	<b>GENERAL SITE PLAN MATERIALS: PROVIDED FOR LFRA REVIEW PRIOR TO PERMIT ISSUANCE</b>
		General site plan, showing proposed location of tent/canopy in relation to adjacent buildings, rights-of-way, lot lines, etc. (3103.6) The site plan will be sent to LFRA when requesting a permit.
		Description of proposed interior layout of tent/canopy (3103.6)
		Certificate of flame resistance (3104.2)
		LFRA Permit for installation of tent and/or canopy
<b>STRUCTURAL INFORMATION</b>		
		Tent structure must be adequately braced and/or anchored to withstand weather and prevent collapsing (3103.9)
		Tent structures shall not be located within 20 feet of parked vehicles, engines, lot lines or other structures (3103.8.2)
		Generators must be at least 20 feet from tent structure, with appropriate fuel storage away from tent structure (3104.19)
<b>MEANS OF EGRESS AND SIGNAGE</b>		
		Means of egress shall be maintained at all times (3103.12.8)
		Exits shall be clearly marked, if necessary (3103.12.6)
		“No Smoking” signs prominently displayed throughout structure (3104.6)
<b>FIRE EXTINGUISHERS AND FIRE SAFETY</b>		
		Fire extinguishers shall be properly mounted and readily accessible (3104.12)
		Every fire extinguisher must be inspected and serviced annually by a licensed contractor
		Every tent shall be provided with a minimum of two 2-A:10-B:C extinguishers
		Combustible vegetation within 30 feet of tent shall be mowed and/or removed (3104.21)
		No combustible materials/vegetation within structure (3104.5)
<b>COOKING AND OPEN FLAMES</b>		
		No open flame, fire or heat sources permitted under tent structure or within 20 feet of tent (3104.7)
		No cooking devices located within tent structure
		LPG cylinders used for cooking near tents must be at least 5 feet from cooking appliances and must be secured to prevent tipping over (3104.16)
		No more than two 40-pound LPG cylinders per vendor allowed
<b>Items noted as deficient must be corrected before permit is signed by LFRA. A re-inspection fee must be paid by the installation contractor if the deficiency cannot be corrected immediately and a repeat inspection is needed.</b>		

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Definitions:

The following definitions have been copied from the 2012 IFC to assist with establishing common understanding of terms used within this policy:

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

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

**Special Event:** Any organized assembly or activity that could reasonably be expected to consist of 100 persons or more, or involves the use of three (3) or more tents or membrane structures of any size. A special event is typically under the direction or control of a single person or organization. A special event may take place on any public or private property and may involve the use of multiple tents and/or temporary membrane structures. Examples may include carnivals, fairs, craft shows, concerts, etc.

## Revision History

- Updated from previous G.O. – 1.6 (4/29/2015)
- Revised from previous Special Event, Tent, Canopy guideline (1/20/2016)
- Changed format to remove purpose section and move definitions to end of document (3/3/2016) #189

## References:

- 2012 International Fire Code, Chapter 31
- Colorado Springs Fire Department: Temporary Tents, Membrane Structures and Air Supported Structures policy and associated documents
- Austin (TX) Fire Department: Tent, Temporary Air Supported & Air Inflated Membrane Structures policy and associated documents