GILBERT
ARIZONA

GILBERT FIRE GFD DEPARTMENT

SUPPLEMENTAL RULES & REGULATIONS

Number:	12-3301.1		
Subject:	Tents and Membrane Structures		
Code:	2012 International Fire Code	Code Section:	3301.1
Effective Date:	12/7/2013	Revision Date:	02.19.2014
Issued By:	Dan DuBois		

SCOPE:

GENERAL:
Tents and membrane structures shall comply with the requirements of this regulation and Chapter 31 of the 2012 International Fire Code. All tents or membrane structures greater than 400 square feet that have one or more side walls is required to have a Fire Department Permit and inspection. Tents or membrane structures less than 700 square feet and open on all sides is not required to have a Fire Department Permit.

Definitions

- AIR-SUPPORTED STRUCTURE - A structure wherein the shape of the structure is attained by air pressure and occupants of the structure are within the elevated pressure area.
- MEMBRANE STRUCTURE - An air-inflated, air-supported, cable or frame-covered structure as defined by the International Building Code and not otherwise defined as a tent.
- TENT - A structure, enclosure or shelter constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.

Permits

- All tents or membrane structures greater than 400 square feet that have one or more side walls is required to have a Fire Department Permit and inspection. Tents or membrane structures less than 700 square feet and open on all sides is not required to have a Fire Department Permit.
- The company or individual erecting the membrane structure, or tent is responsible for obtaining the permit and arranging the inspection.
- Temporary tents, air-supported, air-inflated or tensioned membrane structures shall not be erected for a period of more than 120 days within a 12-month period on a single premise.
- A detailed site and floor plan for tents, canopies or membrane structures shall be provided with each permit application. The floor plan shall indicate details of the means

of egress, seating capacity, arrangement of the seating, occupant load and location and type of heating, cooking and electrical equipment.

- Tents and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects shall be composed of flame resistant material meeting N.F.P.A. 701 flame propagation performance criteria. Certification of flame resistance shall be provided with each permit application.

Access

- Fire apparatus access roads shall be provided and not obstructed or barricaded at any time.
- Fire hydrants shall be maintained with a 3 foot clearance and no parking within 15 feet.

Flame Propagation performance Treatments

- Membrane structures or tents shall have a permanently affixed label bearing the identification of size and fabric or material type.
- An affidavit or affirmation shall be retained on the premises and on which the tent or air-supported structure is located. The affidavit shall attest to the following information relative to the flame propagation performance criteria of the fabric:
    1. Names and address of the owners of the tent or air-supported structure
    2. Date the fabric was last treated with flame-retardant solution.
    3. Trade name or kind of chemical used in treatment.
    4. Name of person or firm treating the material.
    5. Name of testing agency and test standard by which the fabric was tested.

Location

- Tents or membrane structures shall not be located within 20 feet of property lines, parked vehicles or internal combustion engines.
- Tents or membrane structures having an area of 15,000 square feet or more shall not be located less than 50 feet from any other tent.
- Tents or membrane structures where cooking is performed shall be separated from other tents by a minimum of 20 feet.
- Tents or membrane structures and their appurtenances shall be adequately braced and anchored to withstand the elements of weather and prevent against collapsing. Documentation of structural stability shall be provided to the Fire Inspector upon request.

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Exits

- The required width of exits, aisles and passageways shall be maintained clear of obstructions at all times. Guy wires, guy ropes and other support members shall not cross a means of egress at a height of less than 8 feet.
- Exits shall be spaced at approximately equal intervals around the perimeter of the tent, canopy or membrane structure, and shall be located such that all points are 100 feet or less from an exit.
- Tents or membrane structures or a usable portion thereof shall have at least one exit and not less than the number of exits required by the 2012 International Fire Code.
- Exit openings from tents shall remain open unless covered by a flame-resistant curtain. The curtain shall comply with the following requirements:
    1. Curtains shall be free sliding on a metal support. The support shall be a minimum of 80 inches above the floor level at the exit. The curtains shall be so arranged that, when open, no part of the curtain obstructs the exit.
    2. Curtains shall be a color that contrasts with the color of the tent.
- Exit signs shall be installed at required exit doorways and where otherwise necessary to indicate clearly the direction of egress when the exit serves an occupant load of 50 or more.
- Exit signs shall be internally or externally illuminated at all times by an approved source.
- Means of egress shall be illuminated while the structure is occupied.
- A maximum occupant load sign shall be posted in a conspicuous place, near the main exit or exit access.

Sources of Ignition

- Smoking shall not be permitted in tents, canopies or membrane structures. Approved "No Smoking" signs shall be conspicuously posted.
- Open flame cooking devices shall not be permitted inside or within 20 feet of tents or membrane structures that are open to the public.
- Cooking tents not open to the public are allowed but shall be separated from other tents or membrane structures by a minimum of 20 feet and not be located within 10 feet of exits or combustible material.
- The use of candles shall be prohibited in all tents or membrane structures.
- Combustible waste shall be stored in approved containers and removed from the premises daily.
- Combustible materials shall be removed from the area occupied by a tent or membrane structure, within 30 feet of such structures.
- Hay and straw used for decoration shall be treated with a flame resistant material meeting N.F.P.A. 701 flame propagation performance criteria. Certification of flame resistance shall be provided to the Fire Department upon request.

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- Hay and straw used for feeding shall be stored and maintained in an approved manor.
- Recreational fires shall not be conducted within 25 feet of a tent or membrane structure and shall be constantly attended.

Electrical

- Generators and other internal combustion power sources shall be separated from tents, canopies or membrane structures by a minimum of 20 feet and shall be isolated from contact with the public by fencing, enclosure, or other approved means.
- Spot or effect lighting shall only be electric.
- Extension cords shall be maintained in good condition without splices, deterioration or damage.
- Multi-plug adapters, such as cube adapters, un-fused plug strips or any other device shall be prohibited.

Flammable Liquids and Gas

- Flammable-liquid-fueled equipment shall not be used in tents or membrane structures.
- Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from tents or membrane structures.
- Liquid- and gas-fueled vehicles and equipment used for display within tents or membrane structures shall have the batteries disconnected in an appropriate manner and fuel in the fuel tank shall not exceed one-quarter of the tank capacity or 5 gallons, whichever is less.
- LP-gas containers shall be located outside. Safety release valves shall be pointed away from the tent or membrane structure.
- Portable LP-gas containers with a capacity of 500 gallons or less shall have a minimum separation between the container and structure not less than 10 feet.
- Portable LP-gas containers with a capacity of more than 500 gallons shall have a minimum separation between the container and structures not less than 25 feet.
- Portable LP-gas containers shall be securely fastened in place to prevent unauthorized movement.

Fire Extinguishers

- A portable fire extinguisher with a minimum 2A rating shall be provided for every 3,000 square feet or within 75 feet of travel.
- A class K fire extinguisher shall be provided within 30 foot of cooking equipment that produces grease laden vapors.
- Portable fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use.

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Standby/Security Personnel

- When, in the opinion of the Fire Marshal, it is essential for public safety in a tent or membrane structure the owner, agent or lessee shall employ one or more qualified persons, as required and approved, to remain on duty during the times specified on the permit.

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