

VILLAGE OF HOLLY

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JEFF WREN FIRE CODE OFFICIAL

FIRE CODE OPERATIONAL PERMIT **FOR TENTS, CANOPIES AND OTHER MEMBRANE** **STRUCTURES PER THE 2006 INTERNATIONAL FIRE CODE**

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.

Canopy: A structure, enclosure or shelter constructed of fabric or pliable materials supported by any manner, except by air or the contents it protects, and is open without sidewalls or drops on 75 percent or more of the perimeter.

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 or canopy.

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.

TENTS AND MEMBRANE STRUCTURES HAVING AN AREA IN EXCESS OF 200 SQUARE FEET AND CANOPIES IN EXCESS OF 400 SQUARE FEET SHALL NOT BE ERECTED, OPERATED OR MAINTAINED FOR ANY PURPOSE WITHOUT FIRST OBTAINING A PERMIT AND APPROVAL FROM THE FIRE CODE OFFICIAL

Exceptions: Tents used exclusively for recreational camping purposes
Fabric canopies open on all sides which comply with all of the following, 1. Individual canopies having a maximum size of 700 square feet. 2. The aggregate area of multiple canopies placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total. 3. A minimum clearance of 12 feet to all structures and other tents.

A CONSTRUCTION PERMIT IS REQUIRED TO ERECT AN AIR-SUPPORTED TEMPORARY MEMBRANE STRUCTURE OR TENT HAVING AN AREA IN EXCESS OF 200 SQUARE FEET, OR A CANOPY IN EXCESS OF 400 SQUARE FEET

Exceptions: Tents used exclusively for recreational camping purposes.
Funeral tents and curtains or extensions attached thereto, when used for funeral services.
Fabric canopies and awnings open on all sides which comply with all of the following, 1. Individual canopies shall have a maximum size of 700 square feet. 2. The aggregate area of multiple canopies placed side by side without a fire break clearance of not less than 12 feet shall not exceed 700 square feet total. 3. A minimum clearance of 12 feet to structures and other tents shall be maintained.

ALL TENTS, CANOPIES AND OTHER MEMBRANE STRUCTURES SHALL COMPLY WITH ALL OF THE FOLLOWING UNLESS ONE OF THE ABOVE EXCEPTIONS APPLIES

Use Period: Temporary tents, air-supported, air-inflated or tensioned membrane structures and canopies shall not be erected for a period of more than 180 days within a 12-month period on a single premises.

Construction Documents: A detailed site and floor plan for tents, canopies or membrane structures with an occupant load of 50 or more shall be provided with each application for approval. The tent, canopy or membrane structure floor plan shall indicate details of the means of egress facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment.

Inspections: The entire tent, air-supported, air-inflated or tensioned membrane structure system shall be inspected at regular intervals, but not less than two times per permit use period, by the permittee, owner or agent to determine that the installation is maintained in accordance with this chapter.

Exception: Permit use periods of less than 30 days.

Location: Tents, canopies or membrane structures shall not be located within 20 feet of lot lines, buildings, other tents, canopies or membrane structures, parked vehicles or internal combustion engines. For the purpose of determining required distances, support ropes and guy wires shall be considered as part of the temporary membrane structure.

Exceptions: Separation distance between membrane structures, tents and canopies not used for cooking, is not required when the aggregate floor area does not exceed 15,000 square feet (1394 m²). Membrane structures, tents or canopies need not be separated from buildings when all of the following conditions are met: 1. The aggregate floor area of the membrane structure, tent or canopy shall not exceed 10,000 square feet (929 m²). 2. The aggregate floor area of the building and membrane structure, tent or canopy shall not exceed the allowable floor area including increases as indicated in the *International Building Code*. 3. Required means of egress provisions are provided for both the building and the membrane structure, tent or canopy, including travel distances. 4. Fire apparatus access roads are provided in accordance with Section 503.

Anchorage Required: Tents, canopies or membrane structures and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing. Documentation of structural stability shall be furnished to the fire code official on request.

Temporary Air-supported and Air-inflated membrane structures shall be in accordance with the following: During high winds exceeding 50 miles per hour (22 m/s) or in snow conditions, the use of doors in air-supported structures shall be controlled to avoid excessive air loss. Doors shall not be left open. Air-supported and air-inflated structures shall have the design and construction of the fabric envelope and the method of anchoring in accordance with Architectural Fabric Structures Institute ASI 77. An air-supported structure used as a place of assembly shall be furnished with not less than two blowers, each of which has adequate capacity to maintain full inflation pressure with normal leakage. The design of the blower shall be so as to provide integral limiting pressure at the design pressure specified by the manufacturer. Places of public assembly for more than 200 persons shall be furnished with either a fully automatic auxiliary engine-generator set capable of powering one blower continuously for 4 hours, or a supplementary blower powered by an internal combustion engine which shall be automatic in operation.

Seating Arrangements: All seating arrangements shall comply with all ADA requirements.

Means of Egress: Means of egress for temporary tents, canopies and membrane structures shall be in accordance with the following: 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 (30 480 mm) or less from an exit. Tents, canopies or membrane structures or a usable portion thereof shall have at least one exit and not less than the number of exits required by Table 2403.12.2. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by a means of egress multiplied by 0.2 inches (5 mm) per person.

**TABLE 2403.12.2
MINIMUM NUMBER OF MEANS OF EGRESS AND MEANS OF
EGRESS WIDTHS FROM TEMPORARY MEMBRANE
STRUCTURES, TENTS AND CANOPIES**

Occupant Load	Min. # of Means of Egress	Minimum width of means of egress	
		Tent or Canopy	Membrane Structure
10 to 199	2	72	36
200 to 499	3	72	72
500 to 999	4	96	72
1,000 to 1,999	5	120	96
2,000 to 2,999	6	120	96
Over 3,000	7	120	96

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 (2032 mm) 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 of a color, or colors, that contrasts with the color of the tent. Exit doors shall swing in the direction of exit travel. To avoid hazardous air and pressure loss in air-supported membrane structures, such doors shall be automatic closing against operating pressures. Opening force at the door edge shall not exceed 15 pounds (66 N). The width of aisles without fixed seating shall be in accordance with the following: 1. In areas serving employees only, the minimum aisle width shall be 24 inches (610 mm) but not less than the width required by the number of employees served. 2. In public areas, smooth-surfaced, unobstructed aisles having a minimum width of not less than 44 inches (1118 mm) shall be provided from seating areas, and aisles shall be progressively increased in width to provide, at all points, not less than 1 foot (305 mm) of aisle width for each 50 persons served by such aisle at that point. The arrangement of aisles shall be subject to approval by the fire code official and shall be maintained clear at all times during occupancy.

Exit Signs: Exits shall be clearly marked. 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 Sign Illumination: Exit signs shall be of an approved self-illuminous type or shall be internally or externally illuminated by luminaires supplied in the following manner: Two separate circuits, one of which shall be separate from all other circuits, for occupant loads of 300 or less; or 2. Two separate sources of power, one of which shall be an approved emergency system, shall be provided when the occupant load exceeds 300. Emergency systems shall be supplied from storage batteries or from the on-site generator set, and the system shall be installed in accordance with the ICC *Electrical Code*.

Means of Egress Illumination: Means of egress shall be illuminated with light having an intensity of not less than 1 foot-candle at floor level while the structure is occupied. Fixtures required for means of egress illumination shall be supplied from a separate circuit or source of power.

Maintenance of Means of Egress: The required width of exits, aisles and passageways shall be maintained at all times to a public way. Guy wires, guy ropes and other support members shall not cross a means of egress at a height of less than 8 feet. The surface of means of egress shall be maintained in an approved manner.

Label: Membrane structures, tents or canopies shall have a permanently affixed label bearing the identification of size and fabric or material type.

Combustible Materials: Hay, straw, shavings or similar combustible materials shall not be located within any tent, canopy or membrane structure containing an assembly occupancy, except the materials necessary for the daily feeding and care of animals. Sawdust and shavings utilized for a public performance or exhibit shall not be prohibited provided the sawdust and shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time. The areas within and adjacent to the tent or air-supported structure shall be maintained clear of all combustible materials or vegetation that could create a fire hazard within 20 feet (6096 mm) of the structure. Combustible trash shall be removed at least once a day from the structure during the period the structure is occupied by the public.

Smoking: Smoking shall not be permitted in tents, canopies or membrane structures. Approved "No Smoking" signs shall be conspicuously posted in accordance with Section 310.

Open or Exposed Flame: Open flame or other devices emitting flame, fire or heat or any flammable or combustible liquids, gas, charcoal or other cooking device or any other unapproved devices shall not be permitted inside or located within 20 feet (6096 mm) of the tent, canopy or membrane structures while open to the public unless approved by the fire code official.

Clearance: There shall be a minimum clearance of at least 3 feet between the fabric envelope and all contents located inside the tent or membrane structure.

Portable Fire Extinguishers: Portable fire extinguishers shall be provided.

Heating and cooking equipment: Heating and cooking equipment shall be in accordance with the following:

Installation. Heating or cooking equipment, tanks, piping, hoses, fittings, valves, tubing and other related components shall be installed as specified in the *International Mechanical Code* and the *International Fuel Gas Code*, and shall be approved by the fire code official.

Venting. Gas, liquid and solid fuel-burning equipment designed to be vented shall be vented to the outside air as specified in the *International Fuel Gas Code* and the *International Mechanical Code*. Such vents shall be equipped with approved spark arresters when required. Where vents or flues are used, all portions of the tent, canopy or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

Location. Cooking and heating equipment shall not be located within 10 feet (3048 mm) of exits or combustible materials.

Operations. Operations such as warming of foods, cooking demonstrations and similar operations that use solid flammables, butane or other similar devices which do not pose an ignition hazard, shall be approved.

Cooking tents. Tents where cooking is performed shall be separated from other tents, canopies or membrane structures by a minimum of 20 feet (6096 mm).

Outdoor cooking. Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet (6096 mm) of a tent, canopy or membrane structure.

Electrical heating and cooking equipment. Electrical cooking and heating equipment shall comply with the *ICC Electrical Code*.

LP-gas: The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with the following:

General. LP-gas equipment such as tanks, piping, hoses, fittings, valves, tubing and other related components shall be approved and in accordance with Chapter 38 and with the *International Fuel Gas Code*.

Location of containers. LP-gas containers shall be located outside. Safety release valves shall be pointed away from the tent, canopy or membrane structure.

Containers 500 gallons or less. Portable LP-gas containers with a capacity of 500 gallons (1893L) or less shall have a minimum separation between the container and structure not less than 10 feet (3048 mm).

Containers more than 500 gallons. Portable LP-gas containers with a capacity of more than 500 gallons (1893 L) shall have a minimum separation between the container and structures not less than 25 feet (7620 mm).

Protection and security. Portable LP-gas containers, piping, valves and fittings which are located outside and are being used to fuel equipment inside a tent, canopy or membrane structure shall be adequately protected to prevent tampering, damage by vehicles or other hazards and shall be located in an approved location. Portable LP-gas containers shall be securely fastened in place to prevent unauthorized movement.

Flammable and combustible liquids: The storage of flammable and combustible liquids and the use of flammable liquid-fueled equipment shall be in accordance with the following:

Flammable-liquid-fueled equipment shall not be used in tents, canopies or membrane structures.

Flammable and combustible liquid storage. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet (15 240 mm) from tents, canopies or membrane structures. Storage shall be in accordance with Chapter 34.

Refueling. Refueling shall be performed in an approved location not less than 20 feet (6096 mm) from tents, canopies or membrane structures.

Separation of Generators: 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.

Standby personnel: When, in the opinion of the fire code official, it is essential for public safety in a tent, canopy or membrane structure used as a place of assembly or any other use where people congregate, because of the number of persons, or the nature of the performance, exhibition, display, contest or activity, the owner, agent or lessee shall employ one or more qualified persons, as required and approved, to remain on duty during the times such places are open to the public, or when such activity is being conducted. Before each performance or the start of such activity, standby personnel shall keep diligent watch for fires during the time such place is open to the public or such activity is being conducted and take prompt measures for extinguishment of fires that occur and assist in the evacuation of the public from the structure. There shall be trained crowd managers or crowd manager supervisors at a ratio of one crowd manager/supervisor for every 250 occupants, as approved.

Vegetation removal: Combustible vegetation shall be removed from the area occupied by a tent, canopy or membrane structure, and from areas within 30 feet (9144 mm) of such structures.

Waste material: The floor surface inside tents, canopies or membrane structures and the grounds outside and within a 30-foot (9144 mm) perimeter shall be kept clear of combustible waste. Such waste shall be stored in approved containers until removed from the premises.

**PLEASE FILL OUT THE FOLLOWING APPLICATION
COMPLETELY**

