

Huntington Beach Fire Department

Standards for Tents, Canopies and Temporary Membrane Structures

Tents, canopies and temporary membrane structures meeting the specifications indicated herein shall be in accordance with California Code of Regulations (CCR) Title 19. These provisions are regulated by the Huntington Beach Fire Code (HBFC). The Department of Planning and Building may have more stringent requirements than those contained herein.

The Huntington Beach Fire Department (HBFD) is the agency responsible for conducting compliance inspections prior to granting a Fire Department permit. It is the applicant's responsibility to follow the provisions contained herein prior to erecting tents, canopies and temporary membrane structures within the city of Huntington Beach.

DEFINITIONS

Canopy – A temporary structure, enclosure or shelter constructed of fabric or pliable materials supported in any manner other than by air or the contents it protects, which is open, without side walls, or drops on 75% or more of the perimeter.

Portable Shelter (herein referred to as a shelter) – Includes tents not exceeding 200 square feet, canopies not exceeding 400 square feet, and other enclosures or temporary membrane structures which are not subject to compliance with HBFC Chapter 24.

Temporary Structure – Any enclosure or shelter constructed of materials as described in the HBFC and erected for a period of less than 180 days.

Tent – Any temporary structure, enclosure or shelter constructed of fabric or pliable material supported in any manner other than by air or the contents it protects.

REQUIREMENTS *(Refer to HBFC Chapter 24 for additional information)*

1. PERMITS AND PLOT PLANS – APPLICATION AND APPROVAL

- 1.1 Applicants requesting to erect a tent, canopy or temporary membrane structure on **private property** shall contact the Department of Planning and Building at (714) 536-5271 for City approval prior to applying for a Fire Department permit (herein referred to as a permit).

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- 1.2 Prior to applying for a Fire Department permit, applicants requesting to erect a tent, canopy or temporary membrane structure on **City property** shall contact the Community Services Department at (714) 536-5486 for City approval (Specific Event Permit). This includes a review by the Specific Events Committee, which is comprised of representatives of various City departments, including the Fire Department. Through this process, the overall conditions of approval for an event are established. In order to apply for a Specific Event Permit, contact the Community Services Department.
- 1.3 Once the City grants approval, a permit shall be obtained and approved for tents, canopies and temporary membrane structures, when required. Tents exceeding 200 square feet and canopies exceeding 400 square feet require a Temporary Membrane Structures, Tents and Canopies permit. The Fire Department's phone number is (714) 536-5411.
- 1.4 At the time of application, submit for review a set of plot plans, including the perimeter and area of the tent or canopy, entrances and exits, fire extinguishing appliances, required signage (i.e., No Smoking, Fire Extinguishers, Exit, etc.) locations within the tent, and features within a 50 foot radius of the tent.
- 1.5 Once a permit is approved and received by the applicant, it shall be retained in a conspicuous location within the tent or canopy unless otherwise directed.

2. PERMITS – WHEN REQUIRED

- 2.1 Tents exceeding 200 square feet and canopies exceeding 400 square feet require a Temporary Membrane Structures, Tents and Canopies permit.
- 2.2 The maximum length of tent allowed, without side exits, is 200 linear feet and must be approved on a case-by-case basis. Exits should be spaced around the perimeter of the tent such that all points within the tent are 100 feet or less from an exit.
- 2.3 These standards shall apply to any temporary membrane structure, tent or canopy in accordance with *HBFC Chapter 24, Tents, Canopies and Other Membrane Structures*.
- 2.4 Temporary membrane structures, tents and canopies shall be used for a period of not more than 180 days within any 12-month period at a single facility if permitted by the Huntington Beach Planning Official or Community Services Director. A tent or temporary membrane structure having an area in excess of 200 square feet, or any attached canopies with an aggregate area in excess of 400 square feet, may be required to have an inspection for approval. Permits and approval shall be in accordance with requirements of the Fire Marshal.

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3.1 Fire apparatus access shall be provided as outlined in HBFC Section 503. Access roads shall have an unobstructed width of not less than 24 feet with vertical clearance of 13 feet, 6 inches.

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

EXCEPTION: Separation distance between temporary membrane structures, tents and canopies not used for cooking is not required when the aggregate floor area does not exceed 15,000 square feet. Also, the Fire Marshal may approve tents located in or on permanent buildings provided such use does not constitute an undue hazard.

4. MAXIMUM OCCUPANCY LOAD

Occupant load requirements shall be in accordance with the provisions of *HBFC Chapter 10, Means of Egress*. Occupancy Load signs shall be placed in temporary structures where the occupancy load is 50 or more persons. A separate permit for tents, canopies and temporary membrane structures used for public assembly shall also be attained prior to occupation.

5. SMOKING/OPEN FLAMES AND NO SMOKING SIGNS REQUIRED

5.1 Smoking shall **not** be permitted in any temporary membrane structure, tent, canopy, or in any adjacent areas where hay, straw or any other combustible materials are stored or used unless expressly approved by the Fire Marshal.

5.2 A sufficient amount of "No Smoking" signs shall be placed within the structures. Approved "**NO SMOKING**" signs shall be conspicuously posted, including a sign placed within all tents and beneath all canopies and temporary membrane structures. A sign shall also be affixed to the exterior of the tent adjacent to the entrance access areas approximately 6-7 feet above the ground.

6. MEANS OF EGRESS – EXITS *(Refer to HBFC Chapter 10 & 24 for additional information)*

6.1 Exits shall be spaced at approximately equal intervals around the perimeter of the temporary membrane structures, tents and canopies, and shall be located such that all points are 100 feet or less from an exit.

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6.2 Exits shall be provided in accordance with the following table:

**HBFC TABLE 2403.12.2
MINIMUM NUMBER OF EXITS AND EXIT WIDTHS FOR
TEMPORARY MEMBRANE STRUCTURES, TENTS AND CANOPIES**

Occupant Load	Minimum Number of Exits	Tent or Canopy Exit Opening Size	Air-supported Structure Exit Opening Size
10 to 199	2	72 in.	36 in.
200 to 499	3	72 in.	72 in.
500 to 999	4	96 in.	72 in.
1,000 to 1,999	5	120 in.	96 in.
2,000 to 2,999	6	120 in.	96 in.
Over 3,000	7	120 in.	96 in.

6.3 Exit openings from tents shall remain open unless covered by a flame-resistant curtain as follows:

- 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. Curtains shall be arranged that when open, no part of the curtains obstruct the exit.
- Curtains shall be of a color(s) that contrast with the color of the tent.

6.4 **Separation of Exits** – Where two (2) or more exits are required, at least two (2) of the exits shall be placed a distance apart equal to, but not less than $\frac{1}{2}$ of the length of the area served, measured in a straight line between the center of such exits. Additional exits shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

7. EXIT DOORS

Exit doors shall swing in the direction of exit travel. To avoid hazardous pressure loss from air-supported structures, such doors shall be automatic closing against operating pressures. Opening force at the door edge shall be in accordance with *CCR Title 19, Public Assembly Use*.

8. MAINTENANCE OF MEANS OF EGRESS

8.1 The required width of exits, aisles and passageways shall be maintained at all times to a public way.

8.2 Guy wires, guy ropes and other support members shall not cross a means of egress at a height of less than 8 feet.

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- 9.1 Exit signs shall be installed at required exit doorways and where otherwise necessary to clearly indicate the direction of egress when the exit serves an occupant load of **50 or more**.
- 9.2 Means of egress shall be illuminated with light having an intensity of not less than a 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.
- 9.3 Exit signs shall be of an approved self-luminous type, or shall be internally or externally illuminated by luminaires supplied in the following manner:
- Two (2) separate circuits, one of which shall be separate from all other circuits, for occupant loads of 300 or less.
 - Two (2) 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. In addition, the system shall be installed in accordance with the California Electrical Code.

10. AISLE SPACING AND SEATING ARRANGEMENTS (*Refer to HBFC Chapter 10 for additional information*)**11. STRUCTURAL STABILITY**

Temporary membrane structures, tents, canopies, and their appurtenances shall be adequately braced and anchored to prevent weather-related collapse. Documentation of structural stability shall be furnished to the Fire Code Official, upon request.

12. FLAME RETARDANT STANDARDS

- 12.1 The fabric of the tent shall be fire resistant and approved by the Office of the California State Fire Marshal.
- 12.2 Side walls, drops and tops of temporary membrane structures, tents and canopies shall be composed of flame-resistant material, or shall be treated with a flame retardant in an approved manner. All of the above components must bear the seal of the California State Fire Marshal indicating approved flame retardant certification. 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.
- 12.3 The grounds outside and adjacent to or within 30 feet of temporary membrane structures, tents and canopies shall be kept free and clear of combustible

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wastes, including dumpsters. Such wastes shall be stored in approved containers until removed from the premises.

- 12.4 Temporary membrane structures, tents and canopies shall have a permanently affixed label bearing the following information:
- Identification of temporary membrane structure, tent or canopy, size and fabric, or material type.
 - For flame-resistant materials, necessary information to determine compliance with this standard.
 - For flame-retardant treated materials, the date that the temporary structure, tent, canopy 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(s) of the person(s) and firm that applied the flame retardant.

13. FLAMMABLE OR COMBUSTIBLE LIQUIDS & LIQUEFIED PETROLEUM GASSES (LPG)

- 13.1 Flammable liquid fuel equipment **shall not** be used in temporary membrane structures, tents or canopies.
- EXCEPTION:** Liquid and gas-fueled vehicles and equipment used for display, competition or demonstration may be permitted when specifically approved by HBFD and compliant with *HBFC Chapter 24*. An additional permit for Liquid or Gas Fueled Vehicles or Equipment in Assembly Buildings shall also be obtained.
- 13.2 Flammable and combustible liquids shall be stored outside, in an approved manner, not less than 50 feet from temporary membrane structures, tents or canopies.
- 13.3 LP-Gas containers shall be located outside and in accordance with *HBFC Chapter 38, Liquefied Petroleum Gasses, Table 3804.3*. Safety release valves shall be pointed away from temporary membrane structures, tents or canopies.
- 13.4 Propane cylinders may not be located inside or too close to the fabric of the tent.
- 13.5 Refueling shall be performed in an approved location not less than 20 feet from temporary membrane structures, tents or canopies.

14. FIRE PROTECTION APPLIANCES INCLUDING PORTABLE FIRE EXTINGUISHERS

- 14.1 Minimum fire extinguisher coverage shall be provided in every temporary membrane structure, tent or canopy as follows:

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- **200 to 3,000 square feet of floor area:** one (1) or more 2A-10B:C fire extinguisher;
 - **Over 3,001 to 6,000 square feet of floor area:** two (2) or more 2A-10B:C fire extinguishers;
 - **Each additional 3,000 square feet of floor area or fraction thereof:** one (1) or more 2A-10B:C fire extinguishers.
- 14.2 At least one 40B:C type fire extinguisher shall be provided for each kitchen, mess hall, power generator or transformer, and at locations where flammable or combustible liquids are used, stored or dispensed.
- 14.3 Maximum travel distance to a fire extinguisher shall not be less than 75 feet from any point in the tent, canopy or temporary membrane structure, or less if required by the HBFC or Fire Marshal.

15. HEATING AND COOKING REQUIREMENTS

- 15.1 Cooking equipment is only permitted inside tents used exclusively for the cooking of food. No other uses such as public assembly, sales, displays, etc. are permitted.
- EXCEPTION:** The warming of food, cooking demonstrations, or similar activities where the equipment and operations involved do not present an ignition hazard, as approved by the Fire Marshal.
- 15.2 Cooking equipment used in cooking tents shall be vented to the outside air by approved means. Where vents or flues are used, all portions of the tent or canopy shall be no less than 12 inches from the fuel or vent. Solid fuel burning equipment shall be equipped with a spark arrestor having an opening not exceeding ¼ inch wire mesh.
- 15.3 Tents where cooking is performed shall be separated from other temporary membrane structures, other tents and canopies by a minimum of 20 feet.
- 15.4 Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet of a non-cooking temporary membrane structure, tent or canopy. All other cooking equipment shall be located a minimum of 10 feet from temporary membrane structures, tents and canopies.
- 15.5 Only comfort-type heating equipment is permitted. All fuel-fired comfort heating equipment shall be located on the exterior of the temporary membrane structure or tent with a minimum 10 feet away. Heated air shall be ducted from the equipment to the temporary membrane structure or tent. Separate fuel supplies that are in use for comfort-heating equipment shall be located a minimum of 20 feet from the temporary membrane structure or tent. Stored fuel shall be located a minimum of 50 feet from the tent.

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15.6 Heating and cooking equipment shall not be located within 10 feet of exits, exit pathways, tent or canopy fabric, or other combustible materials.

15.7 All cooking and heating equipment, tanks, piping, hoses, fittings, valves, tubing, and other related components shall be approved and in accordance with the California Mechanical Code.

16. HOUSEKEEPING

16.1 Combustible vegetation shall be removed from the area occupied by a temporary membrane structure, tent or canopy, and from areas within 30 feet of such a structure.

16.2 Hay, straw, trash bins, waste material, and similar combustible materials shall not be stored inside or within 30 feet of a temporary membrane structure, tent or canopy being used for cooking or public assembly.

EXCEPTION: Hay, straw and similar combustibles treated with a flame retardant in an approved manner.

17. PORTABLE SHELTERS

17.1 Generally, portable shelters do not require a Fire Department permit. However, each shelter or grouping of shelters must maintain a safe and reasonable minimum separation distance from buildings, fences, walls, property lines, and other shelters by not less than 44 inches when the area of the shelters exceeds the regulated tent size (200 square feet) and canopy size (400 square feet).

- In situations where clearances between shelters are less than 44 inches, the sum of the total area of shelters shall be considered as one contiguous shelter. Combined shelters without the required minimum separation distances are considered to be tents or canopies, subject to permits, and must meet permit conditions in compliance with this City Specification.

17.2 Where combined shelters are erected, the total shelter area may not exceed 5,000 square feet without including a minimum perimeter separation distance of at least 10 feet around the perimeter of the area served. Complex, combined shelter installations are subject to review and approval of the Fire Code Official on a case-by-case basis (See Exhibit 1).

17.3 Portable shelters are **not** required to bear the seal of the California State Fire Marshal indicating approved flame retardant certification. However, where regulated, combined portable shelters shall be of an approved construction type and approved by the Hbfd.

APPROVED: Original Signed DATE: October 8, 2010
Patrick McIntosh, Fire Chief

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EXHIBIT 1

**Maximum Area Density For
Combined Portable Shelter Groupings**

Example of a Combined Portable Shelter Grouping

