GUIDELINE A.03 – Tents and Temporary Membrane Structures

A.03.1 PURPOSE

Guidelines for tents and temporary membrane structures are established in order to insure compliance with applicable codes and regulations. Life Safety Services is responsible for enforcing the requirements from the California Fire Code (CFC) and Title 19 of the California Code of Regulations (CCR).

A.03.2 SCOPE

Tents and temporary membrane structures having an aggregate area in excess of 400 square feet shall be in accordance with the CFC.

This guideline does not apply to the following:

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

A.03.3 DEFINITIONS

TENT

A temporary structure, enclosure or shelter, constructed of fabric or similar 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 as defined by the California Building Code (CBC), which is erected for less than 180 days and not otherwise defined as a tent.

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A.03.4 PERMITS REQUIRED

A permit is required for all tents and temporary membrane structures having an area in excess of 400 square feet.

Permanent membrane structures (greater than 180 days) shall be permitted through the City of Newport Beach Community Development Department/Building Division.

A.03.5 PROCEDURE

- 1. Temporary membrane structures and tents shall be used for a period of not more than 180 days within a 12-month period on single premises.
- A scaled plot plan of the installation location with detail of seating, tables, stages, etc. shall be submitted to the Life Safety Services Division 10 days prior to installation. Plans will be reviewed for compliance with the CFC Chapter 24, and National Fire Protection Agency (NFPA) 102.
- 3. Smoking, open flame devices, fires, toxic, explosive or flammable gases shall not be permitted within or adjacent to any tent or membrane structure unless otherwise approved and a separate permit issued.
- 4. Temporary membrane structures, tents, and their appurtenances shall be adequately braced and anchored to prevent weather related collapse.
- 5. Temporary membrane structures and tents shall not be located within 20 feet of property lines, buildings, other temporary membranes structures, tents, parked vehicles, or internal combustion engines.

Exceptions:

- 1. Separation distance between membrane structures and tents <u>not</u> <u>used for cooking</u> is not required when the aggregate floor area does not exceed 15,000 square feet.
- 2. Membrane structures and tents need not be separated from buildings when all of the following conditions are met:
 - 2.1. The aggregate floor area of the membrane structure tent shall not exceed 10,000 square feet.

- 2.2. The aggregate floor area of the building and membrane Structure or tent shall not exceed the allowable floor area including increases as indicated in the California Building Code.
- 2.3. Required means of egress provisions are provided for both the building and the membrane structure or tent including travel distances.
- 2.4. Fire apparatus access roads are provided in accordance with Section 503.

Verification of meeting the above exceptions is the responsibility of the applicant and will be required prior to approving permit.

- 6. Fire apparatus access shall be provided in accordance with Section 503 of the CFC.
- 7. All sidewalls, drops, and tops of temporary membrane structures and tents shall be comprised of fire resistant material or fabric approved by the State Fire Marshal. Floor coverings, bunting, combustible decorative materials and effects shall be composed of flame-resistant material or shall be treated with a flame retardant in an approved manner.
- 8. Temporary membrane structures and tents shall have a permanently affixed label bearing the following information:
 - Identification of temporary membrane structures or tents size and fabric or material type.
 - For flame-resistant materials compliance with the California Code of Regulations, Title 19, Chapter 2, Article 4.
 - For flame-retardant treated materials, the date that the temporary membrane structure or tent and other combustible materials were last treated with an approved flame retardant.
 - The trade name and type of flame retardant utilized in the flameretardant treatment.
 - The name of the person and firm that applied the flame-retardant.

- 9. Fire protection equipment shall be provided as determined by the Life Safety Services Division. The minimum acceptable size fire extinguisher is a type 2A-10BC.
- 10. Smoking is not permitted in tents or membrane structures. "No smoking" signs shall be conspicuously posted in the tent or membrane structure.
- 11. Exits signs shall be spaced at approximately equal intervals around the perimeter of the temporary membrane structure or tent and shall be located such that all points are 100 feet or less from an exit. See Table 2403.12.2 for the required minimum number of exits.
- 12. Exit openings from tents shall remain open unless covered by a flame-resistant curtain, provided:
 - Curtains shall be free sliding on a metal support and shall not obstruct exits.
 - Curtains shall be of colors contrasting with colors of the tent.
- 13. 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.
- 14. Exit signs in temporary membrane structures or tents shall be of an approved self-luminous type or shall be internally or externally illuminated by fixtures 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.
 - 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 on-site generator set, and the system shall be installed in accordance with the Electrical Code. The emergency system provided shall have a minimum duration of 90 minutes when operated at a full design demand.
- 15. Table and chair spacing in temporary membrane structures or tents shall be provided as follows:
 - Eight feet table edge to table edge shall be provided when an aisle serves seats on both sides.

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- Six feet table edge to table edge shall be provided when an aisle serves seats on one side only.
- 16. Bonding of chairs in groups of three or more is required when loose seats, folding chairs, or similar seating is not fixed to the floor, the occupant load is 200 or more, and tables are not provided.
- 17. The width of aisles in occupancies without fixed seats shall be provided as follows:
 - The minimum clear aisle width shall be 36 inches where seats, tables, counters, furnishings, displays, and similar fixtures or equipment are placed on one side of the aisle only.
 - The minimum clear aisle width shall be 44 inches when such fixtures or equipment are placed on both sides of the aisle.
- 18. Row spacing with rows having 14 or less: seats shall have a clear space of not less than 12 inches measured horizontally between the back or backrest of each seat and the front of the seat immediately behind it.

Row spacing with rows of seating served by aisles at both ends, shall be no more than 100 seats per row and the minimum clear width of 12 inches shall be increased by 0.3 inch for every additional seat beyond 14, not to exceed 22 inches.

Row spacing with rows of seating served by aisles at one end only, the minimum clear width of 12 inches shall be increased by 0.6 inch for every additional seat beyond seven, not to exceed 22 inches. In addition, travel distance shall not exceed 30 feet from the point where the occupant is seated to the point where the occupant has a choice of two directions of travel to an exit.

- 19. Housekeeping shall be maintained 30 feet from temporary membrane structures or tents. This includes combustible vegetation; storage of hay, straw, and similar combustible materials except if treated with a flame retardant in an approved manner; and combustible waste.
- 20. Means of Egress shall be provided in accordance with the following table:

CFC TABLE 2403.12.2
MINIMUM NUMBER OF EXITS AND EXIT WIDTHS FORTEMPORARY
MEMBRANE STRUCTURES, TENTS AND CANOPIES*

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Occupant	Minimum	Tent or Canopy	Air-supported
Load	Number of	Exit Opening	Structure Exit
	Exits	Size	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.
1000 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.

^{*} The total width of means of egress in inches shall not be less than the total occupant load served by a means of egress multiplied by 0.2. Such widths of means of egress shall be divided approximately equally among the separate means of egress.

COOKING and HEATING.

- 1. Heating and cooking equipment, tanks, piping, hoses, fittings, valves, tubing and other related components shall be installed as specified in the California Mechanical Code and shall be approved by Life Safety Services.
- 2. Cooking and heating equipment shall not be located within 10 feet of exits or combustible materials.
- 3. 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.
- 4. Tents with sidewalls or drops where cooking is performed shall be separated from other tents or membrane structures by a minimum of 20 feet.
- 5. Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet of a tent or membrane structure.
- 6. Electrical heating and cooking equipment shall comply with the California electrical code.

Liquid Propane Gas (LPG).

1. LP-gas containers shall be located outside with a safety release valves pointing away from the tent or membrane structure. Distance from the portable LP-gas container to a tent or membrane structure shall be:

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- a. Portable LP-gas containers with a capacity of 500 gallons or less shall have a minimum separation between the container and the structure of not less than 10 feet.
- b. Portable LP-gas containers with a capacity of more than 500 gallons shall have a minimum separation between the container and structure of not less than 25 feet.
- 2. Portable LP-gas containers, piping, valves and fittings which are located outside and are being used to fuel equipment inside a tent 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.

- 1. Flammable-liquid-fueled equipment shall not be used in tents or membrane structures.
- 2. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from tents or membrane structures.

Generators.

1. Generators shall be separated from tents and membrane structures by a minimum of 20 feet.