



REGULATIONS FOR OUTDOOR GATHERINGS AND EVENTS

TENTS & MEMBRANE STRUCTURES

DATE: January 10, 2017

INFORMATION BULLETIN: F-16-002

APPROVED BY: J. McDowell

2016 California Fire Code (CFC)

For indoor/outdoor gatherings and events a fire permit, CFC Section 105, may be required. A fire special event application shall be completed and submitted with a site and/or floor plan. It must include, but is not limited to fire lanes, aisles, position of booths, rides, buildings, parking areas, cooking areas, generators, exits, exit ways, fire extinguishers, and seating arrangements. Tent use may require specific floor plans be submitted. All required distances shall be indicated on the site plan. Permits shall be obtained and all requirements completed prior to a fire inspection.

If the outdoor gathering or event includes a carnival and/or the use or display of fireworks or pyrotechnical special effects, a separate permit(s) is required.

- A. **Seat Stability CFC 1028.14** – Loose seats or folding chairs in quantities more than 200 shall be bonded together in groups of three or more when used for other than dining purposes.
- B. **Number of Exits 2012 NFPA 101-12.2.4.4** – All fenced outdoor assembly areas shall have not less than two widely separated means of egress from the enclosure. Areas where the occupant load is more than 6,000 but less than 9,000 shall be served by not less than three means of egress, and areas where the occupant load is greater than 9,000 shall be served by not less than four means of egress. The factor for determining occupant load shall be seven square feet per person.
- C. **Class K Portable Fire Extinguishers CFC 904.12.5.2 & 906** – Concession stands or vendors with cooking operations that include deep fat fryers shall provide a Class K wet chemical extinguisher. A minimum 2A:10BC fire extinguisher shall also be provided.
- D. **Wet Chemical Systems CFC 904.5** – Automatic fire extinguishing systems installed for the protection of commercial cooking equipment must have a current service tag verifying that service in accordance with manufacturer's recommendations has been performed within the past six months.
- E. **Stages - Portable Fire Extinguishers- CFC 906** - All stages shall have access to a minimum 2A10BC fire extinguisher within 75 feet of travel distance.
- F. **Portable Fire Extinguishers CFC 906** – Fire extinguishers with a minimum rating of 2A:10BC shall be located throughout the event. Maximum travel distance from any point within the event to a portable fire extinguisher shall not exceed 75 feet.

- G. **Dimensions CFC 503.2.1** – Fire apparatus access shall be provided and have an unobstructed width of not less than 20 feet exclusive of shoulders, except approved security gates in accordance with Section 503.6 and an unobstructed vertical clearance of not less than 13 feet 6 inches. Alternate means of access or reduced clearances may be approved by the fire marshal.
- H. **Generators, Portable Fire Extinguishers CFC 906** – Each generator or generator area shall be provided with at least one fire extinguisher with a rating of not less than 2A:10BC.
- I. **Extension Cords CFC 605.5** – Temporary power cords shall not be affixed to structures, extended through walls, or subject to environmental or physical damage. Cords must be secured to prevent a tripping hazard. Large diameter cords must be provided with cord bridges or ramps to facilitate the crossing of wheel chairs, strollers, and similar wheeled equipment.
- J. **Secured Gates and Barricades CFC 503.5.1** – When required, gates and barricades shall be secured in an approved manner. Roads, trails, and other access ways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not be trespassed on or used unless authorized by the fire code official.
- K. **Obstruction of Fire Apparatus Access Roads CFC 503.4** – Fire apparatus access roads shall not be obstructed in any manner, including parking of vehicles. Minimum road widths shall be maintained unless approved by the fire code official.
- L. **Obstruction CFC 507.5.4 , 509.2 and CA Vehicle Code 22514** – Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed within 15 feet of fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment and hydrants.
- M. **Means of Egress Continuity CFC 1003.6** – The path of egress travel along a means of egress shall not be interrupted by any building element other than a means of egress component as specified in chapter 1003. Obstructions shall not be placed in the required width of a means of egress except projections permitted by chapter 10. The required capacity of a means of egress system shall not be diminished along the path of egress travel.
- N. **Securing of compressed gas containers, cylinders or tanks CFC 5303.5.3** – All compressed gas containers, cylinders and tanks shall be secured to prevent falling caused by contact, vibration or seismic activity. Shall be secured to a fixed object with one or more restraints, secure on a cart or other mobile device designed for the movement of compressed gas containers, cylinders or tanks.

PARADE FLOATS NFPA 1 Section - 10.17

- A. **Fire Protection – NFPA 1 Section - 10.18.2** – Motorized parade floats and towing apparatus shall be provided with a minimum 2-A:10-B:C-rated portable fire extinguisher readily accessible to the operator.

TENTS AND MEMBRANE STRUCTURES

A permit is required for the use and/or display of tents and membrane structures in excess of 400 square feet. Exception: Tents open on all sides up to 700 square feet with all of the following.

- A. A minimum clearance of 12 feet to all structures and other tents.
- B. The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total.

Definitions

- A. **Membrane Structure CA Building Code (CBC), Chapter 31** – An air-inflated, air supported, cable, or frame-covered structure as defined by the CBC, and not otherwise defined as a tent.
- B. **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 it protects.

Requirements:

- A. **Locations – CFC 3103.8.2** - Tents shall not be located within 20 feet of lot lines, buildings, membrane structures, tents, parked vehicles, or internal combustion engines. For the purpose of determining required distances, support ropes and guywires shall be considered as part of the tent. (See Code Exceptions)
When tents are used for assembly purposes, vehicles necessary to the operation of the establishment shall be parked at least 20 feet from any tent. No other vehicle shall be parked less than 100 feet from any tent except vehicles parked on a public street shall park at least 20 feet from any tent.
- B. **Flame Propagation Performance Treatment – CFC 3104.2** – Before a permit is granted, the owner or agent shall file with the fire code official a certificate executed by an approved testing laboratory certifying that the tents and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings; bunting and combustible decorative materials and effects, including sawdust when used on floors or passageways, are composed of material meeting the flame propagation performance criteria of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation performance criteria of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.
- C. **Label – CFC 3104.3** – Membrane structures or tents shall have a permanently affixed label bearing the identification of size and fabric or material type.
- D. **Combustible materials – CFC 3104.5** – Hay, straw, shavings or similar combustible materials shall not be located within any tent 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 material shall not be permitted under stands or seats at any time.
- E. **Portable Fire Extinguishers – CFC 3104.12 & 906** - Portable fire extinguishers are required to be located such that travel from any point in the tent or temporary membrane structure to a fire extinguisher does not exceed 75 feet. Fire extinguishers are to have a minimum rating of 2A:10BC and be permanently mounted on a support member. (See CFC 3104.12 for exact regulations, Title 19, Division 1, Chapter 2, Article 2, Section 319)
- F. **Occupant Load Factors - CFC 3104.14** - The maximum occupant load of the tent or membrane structure is to be determined by the fire department in accordance with the occupant load limits for assembly occupancies.
- G. **Means and Maintenance of Egress CFC - 3103.12.1, 3103.12.8** - Exits shall be spaced at approximately equal intervals around the perimeter and shall be located such that all points are 100 feet or less from an exit. There shall be at least one exit and not less than the number of exits required by Table 3103.12.2. Exit openings from tents shall remain open unless covered by a flame-resistant curtain that is free sliding on a metal support located a minimum of 8 feet above the floor and arranged such that no part of the curtain obstructs the exit. Exit curtains shall be of a color that contrasts with the color of the tent. Exit doors shall swing in the direction of exit travel. Exit width and access shall be maintained to a public way. (CFC 3103.12.3)

- H. **Aisles and seating - CFC 1029.14, 1029.12-1029.12.1.2, 3103.12.5 and Title 19, Division 1, 3.06(a)** - Aisles shall not be less than 44 inches in width. Seating row widths shall not be less than 12 inches. Rows shall be increased by 0.3 inch for every additional seat beyond 14, but the width need not be more than 22 inches. When more than 200 loose seats or folding chairs are used they shall be bonded together in groups of three or more.
- I. **Exit signs & Emergency Illumination – CFC 3103.12.6, 3103.12.6.1** – 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. Means of egress illumination shall be provided. Power for these devices shall be provided from two separate circuits, one of which shall be separate from all other circuits for occupant loads of 300 or less.
- For occupancy loads in excess of 300, an emergency power source shall be provided by batteries, on-site generator, etc.
- J. **Smoking CFC 3104.6** - Smoking is prohibited in membrane structures and tents or in adjacent areas where hay, straw, sawdust, or other combustible materials are stored or used. “NO SMOKING” signs shall be conspicuously posted.
- K. **Open or Exposed Flame CFC 3104.7**– Open Flame or other devices emitting flame, fire or heat or any flammable or combustible liquid, gas, charcoal or other cooking device or any other unapproved devices shall not be permitted inside or located within 20 feet of the tent or membrane structures while open to the public unless approved by the fire code official.
- L. **Heating and Cooking Equipment – CFC 3104.15-3104.15.7** - Cooking and heating equipment shall be vented to the outside air by approved means. Vents and flues shall be a minimum of 12 inches from sides and tops of tents and temporary membrane structures. Cooking and heating equipment shall not be located within 10 feet of an exit or combustible material. Tents where cooking is performed shall be separated from membrane structures, other tents by a minimum of 20 feet. Outdoor cooking that produces sparks or grease-laden vapors shall be at least 20 feet from tents and membrane structures. The warming of previously prepared food is not considered to be cooking and is exempt from these requirements.
- M. **LP Gas – CFC 3104.16 -3104.16.3** - LP-gas containers shall be located on the outside, a minimum of 10 feet for containers 500 gallons or less and 25 feet for containers more than 500 gallons from tents and temporary membrane structures. Containers shall be protected to prevent tampering, damage, or tipping over. If the area or locations does not permit the required distance please check with the Fire Inspector for an approved location.
- N. **Flammable & Combustible Liquids – CFC 3104.17 – 3104.17.2** - Flammable-liquid-fueled equipment shall not be used in tents and temporary membrane structures. Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from a tent or membrane structure.
- O. **Separation of Generators CFC 3104.19** - Generators and other internal combustion power sources shall be separated from tents and temporary membrane structures by a minimum of 20 feet and be isolated from contact with the public by fencing, enclosure or other approved means.
- P. **Refueling, Flammable & Combustible Liquids – CFC 3104.17.3** – Refueling shall be performed in an approved location not less than 20 feet from tents or membrane structures.
- Q. **Fuel Storage - CFC 2404.18.5.1, 3104.17.3** - Fuel for vehicles or equipment shall be stored in approved containers in an approved location outside of the structure in accordance with 3104.17.2

- R. **Vegetation Removal – CFC 3104.21** - Combustible vegetation shall be removed from the area occupied by a tent or membrane structure and from areas within 30 feet of such structures.
- S. **Combustible Waste Material – CFC 3104.22** – The floor surface inside tents or membrane structures and the grounds outside and within a 30-foot perimeter shall be kept free of combustible waste and other combustible materials that could create a fire hazard.
- T. **Obstructions – CFC 3104.23** – Exits, aisles and passageways shall not be blocked or have their minimum clear width obstructed in any manner by ticket offices, turnstiles, concessions, chairs, equipment, animal chutes, poles or guy ropes, or anything whatsoever, nor shall they be blocked by persons for whom no seats are available.

Table 3103.12.2 - Minimum Number of Means of Egress and Means of Egress Widths From Temporary Membrane Structures and Tents

Occupant Load	Minimum Number of Means of Egress	Minimum Width of Each Means of Egress (inches)	
		1 inch = 25.4 for mm	
		Tent	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

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 (5.08). Such widths of means of egress shall be divided approximately equally among the separate means of egress.

Any questions regarding these minimum City of Riverside Fire Department regulations should be directed to the Fire Prevention Bureau by phone at 951-826-5737 or by letter to:

City of Riverside Fire Department
 3900 Main Street 3rd Floor
 Riverside, CA 92522

www.RiversideCa.gov/fire

We thank you for your cooperation and wish you success with your event!