



Columbia Fire Department

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Special Events Guidelines

To: All Vendors, Merchants, Citizens and Visitors to the City of Columbia

From: George Adams, Fire Marshal

The following information is a comprehensive guide to Fire Prevention, prior to and during all Special Events within the City limits of Columbia. It is our mission to ensure Fire and Life Safety measures are taken to protect the patrons and vendors, and that it is strictly adhered to, by doing so will assure that all endeavors are successful.

Should there be questions regarding any of the sections listed below or you require further information on a particular topic, please feel free to contact me.

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1. On duty personnel

IFC 403.1: Fire watch personnel

When, in the opinion of the fire code official, it is essential for public safety in a place of assembly or any other place 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 provide one or more fire watch personnel, 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, this person shall be a Deputy Fire Marshal.

2. Public safety plan.

Where the fire code official determines that an indoor or outdoor gathering of persons has an adverse impact on public safety through diminished access to buildings, structures, fire hydrants and fire apparatus access roads or where such gatherings adversely affect public safety services of any kind, the fire code official shall have the authority to order the development of, or prescribe a plan for, the provision of an approved level of public safety.

The public safety plan shall address such items as emergency vehicle ingress and egress, fire protection, emergency medical services, public assembly areas and the directing of attendees and vehicles (including the parking of vehicles), vendor and food concession distribution, and the need for the presence of law enforcement, and fire and emergency medical services personnel at the event.

404.3.1 Fire evacuation plans.

Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.
2. Procedures for employees who must remain to operate critical equipment before evacuating.
3. Procedures for accounting for employees and occupants after evacuation has been completed.
4. Identification and assignment of personnel responsible for rescue or emergency medical aid.
5. The preferred and any alternative means of notifying occupants of a fire or emergency.
6. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.



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7. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
8. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.

404.3.2 Fire safety plans.

Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy and procedures for notifying, relocating, or evacuating occupants.
3. Site plans indicating the following:
 - 3.1. The occupancy assembly point.
 - 3.2. The locations of fire hydrants.
 - 3.3. The normal routes of fire department vehicle access.
4. Floor plans identifying the locations of the following:
 - 4.1. Exits.
 - 4.2. Primary evacuation routes.
 - 4.3. Secondary evacuation routes.
 - 4.4. Accessible egress routes.
 - 4.5. Areas of refuge.
 - 4.6. Manual fire alarm boxes.
 - 4.7. Portable fire extinguishers.
 - 4.8. Occupant-use hose stations.
 - 4.9. Fire alarm annunciators and controls.
5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

3. Fire Department Access

503.2.1 IFC: Dimensions.

Fire lanes and fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.4 IFC: Obstruction of fire apparatus access roads.

Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles, equipment, vendors or public. The minimum widths and clearances shall be maintained at all times and shall be the responsibility of the owner or representative to keep the fire lanes free and unobstructed at all times.

4. Electrical

605.5 IFC: Extension cords.

Extension cords and flexible cords shall not be a substitute for **permanent** wiring. Extension cords and flexible cords shall not be affixed to structures, extended through walls, ceilings or floors, or under doors or floor coverings, nor shall such cords be subject to environmental damage or physical impact. Extension cords shall be used only with portable appliances.

Extension cords and electrical wiring shall be properly secured to the ground to prevent trip hazards.



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605.5.1 IFC: Power supply.

Extension cords (UL/FM listed) shall be plugged directly into an approved receptacle, power tap or multiplug adapter and, except for approved multiplug extension cords, shall serve only one portable appliance.

605.5.2 IFC: Ampacity.

The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

605.5.3 IFC: Maintenance.

Extension cords shall be maintained in good condition without splices, deterioration or damage.

605.5.4 Grounding.

Extension cords shall be grounded when serving grounded portable appliances

605.6 Unapproved conditions.

Open junction boxes and open-wiring splices shall be prohibited. Approved covers shall be provided for all switch and electrical outlet boxes.

5. TEMPORARY AND PERMANENT TENTS, CANOPIES AND MEMBRANE STRUCTURES

2404.1 IFC: General.

All tents, canopies and membrane structures, both temporary and permanent, shall be in accordance with this section. Permanent tents, canopies and membrane structures shall also comply with the *International Building Code*.

2404.2 IFC: Flame propagation performance treatment.

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; canopies 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, shall be 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.

*** Tents that are marked with a seal from the California State Fire Marshal or any other entity shall be prohibited.**

2403.2 IFC: Approval required.

Tents and membrane structures having an area in excess of 200 square feet (19 m²) and canopies in **excess of 400 square feet** (37 m²) **shall not** be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Fabric canopies open on all sides which comply with all of the following:
 - 2.1. Individual canopies having a maximum size of 700 square feet (65 m²).
 - 2.2. The aggregate area of multiple canopies placed side by side without a fire break clearance of 12 feet (3658 mm), not exceeding 700 square feet (65 m²) total.
 - 2.3. A minimum clearance of 12 feet (3658 mm) to all structures and other tents.



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Anchoring and Securing Tents and Membrane Structures:

2403.9 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. A minimum weight of **50 pounds** shall be applied to each corner for small event tents (10 x10). Larger tents shall be secured and staked as approved by the Fire Marshal.

2404.4 IFC: Certification.

An affidavit or affirmation shall be submitted to the fire code official and a copy retained on the premises 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, canopy 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.

Fire Precautions for Tents and Membrane Structures:

2404.5 IFC: Combustible materials.

Hay, straw, shavings or similar combustible materials shall not be located within any tent, canopy or membrane structure containing 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.

2404.6 IFC: Smoking.

Smoking shall not be permitted in tents, canopies or membrane structures. Approved "No Smoking" signs shall be conspicuously posted.

2404.7 IFC: 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. (This means charcoal or catalytic heaters)

2404.8 IFC: Fireworks.

Fireworks **shall not** be used within 100 feet (30 480 mm) of tents, canopies or membrane structures.

2404.9 IFC: Spot lighting.

Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with approved noncombustible insulation not less than 9.25 inches (235 mm) thick.

2404.11 IFC: Clearance.

There shall be a minimum clearance of at least 3 feet (914 mm) between the fabric envelope and all contents located inside the tent or membrane structure.



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2404.12 IFC: Portable fire extinguishers.

Portable fire extinguishers **shall** be provided, a minimum of a **2A10BC** in size.

2404.13 IFC: Fire protection equipment.

Fire hose lines, water supplies and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as required by the fire code official. (Large Scale events)

Number of Persons allowed in Assembly Tent/Membrane Structure

2404.14 IFC: Occupant load factors.

The occupant load allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10 of the IFC and the Fire Marshal.

Heating and Cooking inside Tents

2404.15 IFC: Heating and cooking equipment.

Heating and cooking equipment shall be installed in accordance with the Mechanical Code, and sections listed below.

2404.15.1 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.

2404.15.2 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.

2404.15.3 Location.

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

2404.15.4 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 by the Fire Marshal.

2404.15.5 Cooking tents.

Tents where cooking **only** is performed shall be **separated** from other tents, canopies or membrane structures by a minimum of **20 feet** (6096 mm). All tents shall meet the requirements of NFPA 701 as listed above

All cooking areas shall be segregated by at least a 4ft barrier to prevent traffic flow and accidental injuries.

2404.15.6 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.

2404.16.2 IFC: Location of LP Gas containers.



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

2404.16.2.1 Containers 500 gallons or less.

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

2404.16.2.2 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).

2404.16.3 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.

2404.17.1 Use.

Flammable-liquid-fueled equipment **shall not be used in tents**, canopies or membrane structures. (Because of harmful fumes and the potential of fuel spills)

2404.18 IFC: Display of motor vehicles inside tents.

Liquid- and gas-fueled vehicles and equipment used for display within tents, canopies or membrane structures shall be in accordance with the following sections;

2404.18.1 Batteries.

Batteries shall be disconnected in an appropriate manner.

2404.18.2 Fuel systems.

Vehicles or equipment shall not be fueled or defueled within the tent, canopy or membrane structure.

2404.18.2.1 Quantity limit.

Fuel in the fuel tank shall not exceed **one-quarter of the tank capacity or 5 gallons** (19 L), whichever is less.

2404.18.2.2 Inspection.

Fuel systems shall be inspected for leaks.

2404.18.2.3 Closure.

Fuel tank openings shall be locked and sealed to prevent the escape of vapors.

2404.18.3 Location.

The location of vehicles or equipment shall not obstruct means of egress.

2404.18.4 Places of assembly. (Convention Centers and Exhibit)

When a compressed natural gas (CNG) or liquefied petroleum gas (LP-gas) powered vehicle is parked inside a place of assembly, all the following conditions shall be met:

1. The quarter-turn shutoff valve or other shutoff valve on the outlet of the CNG or LP-gas container shall be closed and the engine shall be operated until it stops. Valves shall remain closed while the vehicle is indoors.



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2. The hot lead of the battery shall be disconnected.
3. Dual-fuel vehicles equipped to operate on gasoline and CNG or LP-gas shall comply with the above sections.

2404.18.5 Competitions and demonstrations.

Liquid- and gas-fueled vehicles and equipment used for competition or demonstration within a tent, canopy or membrane structure shall comply with the following sections;

2404.18.5.1 Fuel storage.

Fuel for vehicles or equipment shall be stored in approved containers in an approved location outside of the structure, not less than 50 feet from tents or membrane structures.

2404.18.5.2 Fueling.

Refueling shall be performed outside of the structure in an approved location by the Fire Marshal, at least 20feet away.

2404.18.5.3 Spills.

Fuel spills shall be reported and cleaned up immediately.

2404.19 Separation of generators.

2404.19 Separation of generators

All extension cords shall be approved for exterior use and shall not pose a tripping hazard.

Generators must be located so that exhaust does not enter buildings, mobile trailers or tents.

Generators and other internal combustion power sources shall be separated from tents or membrane structures and shall be placed only in locations approved for festival use. In addition, generators shall be isolated from contact with the public by fencing, enclosure or other approved means.

One 2A:20BC portable fire extinguisher shall be located near the generator.

Smoking and open flames shall be prohibited within 25 feet.

The Fire Marshal assigned must remain on site during duration of the event

Refueling of generators shall be prohibited during event hours.

2404.20 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 (Deputy Fire Marshal), 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.

2404.21 IFC: 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.

2404.22 IFC: Waste material.



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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.

6. Fire Extinguishers

Any vendor or concession that utilizes cooking or heating devices shall have a minimum of: One **2A10BC** portable fire extinguisher **AND** One **Class K** type portable fire extinguisher

The extinguishers must be "in date" with a current inspection tag, (not in need of servicing), visible, accessible and mounted (not sitting on the ground).

7. LP Gas Cylinders

All compressed gas cylinders, hoses and any other devices shall meet the requirements of NFPA 58. All cylinders shall be properly secured to prevent them from falling or knocked over.

8. Open Burning

All open burning is prohibited in the City of Columbia. Recreational burning is allowed with the express permission of the Fire Marshal.

9. Indoor Displays

314.4 Vehicles.

Liquid- or gas-fueled vehicles, boats or other motorcraft **shall not** be located indoors except as follows:

1. Batteries are disconnected.
2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least).
3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.

10. Fireworks

3308.1 IFC: General.

The use and display of fireworks, including proximate audience displays and pyrotechnic special effects in motion picture, television, theatrical, and group entertainment productions, shall be prohibited unless handled by an approved, competent, South Carolina Licensed pyrotechnical operator.

Prior approval is required from the Columbia Fire Prevention Division and SC State Fire Marshals office.

Special Event Checklist:



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|------------------------------------------------------------------------|-----|----|-----|
| 1. All permits have been applied for and approved. | Yes | No | N/A |
| 2. Fire evacuation plan has been submitted and approved | Yes | No | N/A |
| 3. Fire Extinguishers have been checked and serviced | Yes | No | N/A |
| 4. All appliances are UL listed and in good working condition | Yes | No | N/A |
| 5. Prior arrangements have been made for the use of power on site..Yes | No | No | N/A |