



FIRE MARSHAL'S OFFICE



Outdoor Festival and Special Event Guidelines

This guide provides information regarding fire and life safety requirements for outdoor festivals and special events; and to establish the responsibilities of event promoters, sponsors, and vendors to ensure a safe event.



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PURPOSE

The purpose of these guidelines is to provide information regarding fire and life safety requirements for outdoor festivals and special events; and to establish the responsibilities for event promoters, sponsors and vendors to adhere to those requirements. The Arvada Fire Protection District (AFPD) Fire Marshal's Office (FMO) views the safety and success of outdoor festivals and special events as a team effort. The more awareness each member of the team has of the roles and responsibilities for fire and life safety the greater the efficiency and success of the festival or event.

If you have any questions or comments regarding the information contained within, or if you need assistance interpreting these requirements, please contact the FMO at (303) 424-3012.

ROLES AND RESPONSIBILITIES

Event Sponsor

The event sponsor assumes overall responsibility for the set-up and operation of the festival or special event and ensures compliance with all fire and life safety guidelines and requirements. The Event Sponsor shall:

- Secure the proper permits from the City of Arvada, City of Wheat Ridge, or Jefferson County
- Secure any additional permits or approvals from such agencies as Jefferson County Health Department or the State of Colorado
- Seek approval of the AFPD FMO either through the City of Arvada, City of Wheat Ridge, or Jefferson County Special Event Permit process or directly with the FMO
- Provide a site plan to the FMO showing:
 - The name of all streets and areas that will be used for the festival or event
 - The location of emergency apparatus access lanes (minimum of 24-0 feet unobstructed width)
 - The location of stages, non-food booth vendors, food vendors (including mobile food preparation vehicles) and display areas
 - Locations of emergency exits
 - Crowd manager qualifications
- The Event Sponsor shall distribute to each hot food vendor a copy of the Fire Safety Requirements for Hot Food Vendors (See pages 6-7)

Event Vendors

Event vendors are responsible for the safe operation of their booths, mobile food preparation vehicles, display, or attraction. Vendors shall coordinate the event setup and take down with the event sponsor to ensure compliance with all fire and life safety guidelines and requirements. The event vendors shall:

- Keep fire lanes and emergency vehicle access, fire department connections and building access clear and unobstructed
- Read, understand, and adhere to the Fire Safety Requirements for Hot Food Vendors



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- Be prepared at any time for a fire inspection
- Correct any identified violations of fire safety requirements prior to opening for business
- Maintain compliance with all fire and life safety guidelines and requirements throughout the duration of the festival or event

Fire Department Inspectors

The fire department inspectors are responsible for inspecting festivals and events in which a site inspection is deemed necessary prior to the opening of the event. The inspectors will issue correction notices when non-compliant conditions needing correction are found and will re-inspect to ensure compliance. The fire department inspections shall include, but not be limited to the following:

- Hot food vendor booths
- Mobile food preparation vehicles
- Fire department and emergency apparatus access
- Access to fire hydrants, fire department connections, and fire control rooms
- Event egress
- Generator placement
- Propane tank placement and security
- Pyrotechnics, fireworks display, and open flame effects
- Tents requiring a permit
- Any other potential fire or life safety hazard or unsafe condition

First Aid and Emergency Medical Services

While not required, it is recommended that large events provide some form of first aid coverage. A large event is considered to have a daily attendance in excess of 5,000 people. Notification and coordination with the AFD Emergency Medical Services (EMS) Division is required when first-aid or emergency medical service coverage is provided by a private entity.

ACCESS FOR EMERGENCY RESPONSE APPARATUS

During events it is especially important to maintain access for fire and emergency apparatus. This would include access for both fire engines/trucks and medical transport units. To ensure a safe event, all required emergency access shall be maintained open and unobstructed. The following access requirements shall be always maintained:

Access through the festival or event

- A clear unobstructed path shall be provided through the event for emergency access when the event is set-up on public or private streets.
- The minimum unobstructed width for fire apparatus access is 24 feet.
- The minimum unobstructed height for fire apparatus access is 13 feet 6 inches.
- Access widths less than the required minimum 24 feet require specific approval from the Fire Marshal on a case-to-case basis. At no times will less than 20 feet in width be allowed.



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- If an event creates a dead-end fire lane that exceeds 150 feet in length, then an approved means for turning around fire apparatus shall be provided.
- All existing fire lanes shall be maintained and unobstructed.

Access to buildings

- As required by the fire department, access to building openings and walkways shall be provided. The minimum width of access and walkways shall be determined on a case-by-case basis by the fire department.
- Access to buildings will vary depending upon the building and its location. Access to the following building features shall not be obstructed:
 - All exterior doors and openings
 - Fire control rooms
 - Parking structures
 - Fire department connections

Access to water supplies

- Access to fire hydrants shall be maintained clear and unobstructed
- Fire hydrants shall not be obscured from visibility
- A clear space of 3 feet measured from the top/center of the hydrant shall be maintained in all directions

EVENT ACCESS AND EGRESS

Fenced Events

These events typically take place in a park or other large open area. The designated area for the event is closed off by temporary fencing or barricades.

Number of Exits

The number of exits from a fenced-in area shall be adequate for the number of occupants within the fenced-in area. The number of exits from the area shall be in accordance with the following:

- Two (2) exits shall be provided in addition to the main entrance when the fenced in area accommodates less than 1,000 persons
- Three (3) exits shall be provided in addition when the fenced in area accommodates 1,000 to 3,000 persons
- Four (4) exits shall be provided in addition when the fenced in area accommodates more than 3,000 persons

Exit Spacing and Location

Exits shall be equally spaced along the perimeter of the fence. The exits shall be spaced so that no exit is greater than 200 feet of from any area within the fenced in area.

Exit Dimensions

Exit width shall be equal to a panel's width of the temporary fencing and shall provide an opening of no less than 48-inches wide and 84-inches high.



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Exit Staffing

Each exit shall have a member of the event staff or security assigned and posted to it. The event sponsor shall provide a gate assignment roster upon request.

Exit Identification

Each emergency exit shall be identified by use of approved exit signs that are placed on both sides of the exit on the interior side of the fence.

Blocked Streets

Festivals or special events that block off public streets or vehicle access shall be accomplished by use of temporary barricades or other traffic control measures that can be easily and quickly removed in case a need for emergency access arises. All requests to block streets must be submitted to AFD as part of the permit review process and approved beforehand.



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HOT FOOD VENDORS

Regulation of food vendors and booths primarily falls under the jurisdiction of the Jefferson County Health Department. However, fire safety of these booths falls under the jurisdiction of the fire department. The following fire safety requirements apply to individual vendor freestanding booths and mobile food preparations vehicles. Cooking within tents that contain seating is subject to additional requirements and restrictions noted under the section titled Tents and Canopies. All hot food vendors are subject to inspection prior to a festival or event. Failure to comply with the following requirements may result in closure of the individual food booth until reasonable compliance is achieved. *For requirements pertaining to Mobile Food Vehicles, refer to the Mobile Food Vehicle guide.*

Site Plan

A site plan is required as part of the outdoor festival or special event review. Each hot food vendor shall be indicated on the site plan to ensure that the proper separations between vendors and structures is met.

Location

Food booths and mobile food preparation vehicles that produce sparks or grease laden vapors shall have a clearance of 10 feet on three sides and shall not be located within 20 feet of structures, tents, canopies or carnival rides.

Portable Fire Extinguishers

A portable fire extinguisher shall be provided for each food booth and mobile food preparation vehicle. Fire extinguishers shall have a minimum UL rating of 2A10BC, which generally is accomplished by a 5-pound multi-purpose fire extinguisher. If cooking involves the production of grease laden vapors, a Class K wet chemical fire extinguisher shall also be provided. Fire extinguishers shall have a current service tag provided by a fire extinguisher service company or proof of purchase within the previous 12-months. Fire extinguishers shall be placed in an accessible and visible location near the cooking area.

Cooking Appliances

All cooking appliances shall be listed by either Underwriters Laboratories (UL) or the American Gas Association (AGA). Cooking appliance location must be approved by AFPD.

Fuel Tanks and Cylinders

Fuel tanks and cylinders containing propane or LPG shall be located away from public access and ideally should be separated from the open flame or heating device. Tanks and cylinders shall be secured in a manner that prevents falling and impact from vehicles or equipment. Hoses and piping between the fuel tank and the appliance shall be approved for such use and in good condition.



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Smoking

Smoking is not allowed at any time within a food booth or within 25 feet of any fuel source, tank or cylinder.

Generators

Generators shall be located a minimum of 20 feet from tents or canopies. They shall be isolated from contact with the public in an approved manner. Refueling of hot generators is not allowed.

A copy of this section/form shall be posted in the food booth and signed by the food booth operator. By signing this form, the food booth operator agrees to comply with these regulations. The signed copy of this section/form shall be available for inspection by the fire department upon request.

Questions or request for further information should be directed to the Fire Marshal's Office at (303) 424-3012.

Food Booth Operator Signature

Food Booth Name



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TENTS, TEMPORARY SPECIAL EVENT STRUCTURES, OR TEMPORARY MEMBRANE STRUCTURES

When a Permit is required

An additional permit and approvals are required if your festival or event includes use of tents, temporary special event structures, or temporary membrane structures that exceed 400 square-feet in area.

Exception: Tents that are open on all sides do not require a permit unless they exceed 700 square feet in area.

THE RENTAL COMPANY THAT IS PROVIDING THE TENT, TEMPORARY SPECIAL EVENT STRUCTURE, OR TEMPORARY MEMBRANE STRUCTURE IS RESPONSIBLE FOR OBTAINING THE PERMIT. Regardless, the event sponsor is ultimately responsible for securing all necessary permits.

Definition

A tent is defined as a structure, enclosure, or shelter, with or without sidewall or drops, constructed of fabric or other pliable materials supported by any manner except air or the contents that it protects.

How to Obtain a Permit

Within the City of Arvada, tent permits are issued through the City of Arvada Building Inspection Division (BID). Application for the permit can be obtained and submitted through the BID. The fire department will provide its approval through the BID permitting process. Within the City of Wheat Ridge and Jefferson County, tent permits are required to be obtained through the AFPD.

Information Required with the Permit Application

The following information shall be provided with the application for a tent permit:

- Flammability certification(s) for the fabric/membrane of the temporary structure.
- Site maps/diagrams including (minimum site plan size is 8½-x 11-inches):
 - Overall site plan showing entire site and general locations of all temporary structures
 - Detailed site plan to include the following:
 - Locations and dimensions of all temporary structures
 - Locations and dimensions of lot lines within 50 feet of all sides of the temporary structure
 - Uses within all temporary structures
 - Proposed locations of any furniture (tables, chairs, stages, etc.) or related items
 - Locations of all fire extinguishers
 - Locations and dimensions of all required aisles and exits
 - Locations and distances to all permanent structures within 50 feet of all sides of the temporary structures
 - Locations of all adjacent vegetation and/or other combustible materials
 - Locations of fire lanes/fire department access roads



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- Locations, sizes and types of any flammable/combustible liquid/gas tanks
- Locations and types of any/all heating equipment
- Locations and types of all electrical equipment
- Anchoring method to be used to secure the tent – water barrels are not an acceptable means of anchoring tents.
- Interior layout and seating plan

Access, Location and Parking

Tents, temporary special event structures, or temporary membrane structures shall not be located within 20 feet of property lines, buildings, other tents, parked vehicles, or other internal combustion engines. Support ropes and guy wires are considered to be part of the structure when determining required separations.

Anchorage

Tents or membrane structure shall be adequately roped, braced, and anchored to withstand the elements of weather and prevent against collapsing. Bracing and anchoring shall be accomplished in accordance with the tent manufacturer's instructions. Documentation of structural stability shall be furnished on request. If manufacturer's instructions for the specific tent being used are not available, AFD will establish adequate anchorage requirements based on AFD Official Fire Code Interpretation #19-03.

WATER BARRELS ARE NOT AN ACCEPTABLE MEANS OF ANCHORING TENTS.

Occupant Load

The following table shall be used to determine the occupant load. Maximum occupant load is calculated by dividing the square-foot area of the tent by the occupant load factor for the intended use of the tent.

Use/Occupancy of Temporary Structure	Occupant Load Factor (Floor area in sq. ft per occupant)
Assembly – Concentrated Use (Chairs only-not fixed)	7
Assembly – Unconcentrated Use (With tables and chairs)	15
Assembly – Standing space only	5
Retail / Mercantile	30

Signs identifying the maximum occupant load shall be posted in a conspicuous place, near the main exit. Signs shall be of an approved legible permanent design.



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Means of Egress (Exits)

Number of Exits

The minimum number of and width of exits shall be provided as indicated in the following table:

Capacity	Min. # of Exits	Min Width per Exit for Tents	Min Width per Exit for Membrane Structures
10 to 199	2	72	36
200 to 499	3	72	72
500 to 999	4	96	72

Location of Exits

Exits shall be spaced at equal intervals around the perimeter and located so no point within the tent is over 100 feet from an exit. This measurement is determined by the path of travel a person would be required to follow to reach the exit. Exiting from one tent into or through an adjacent tent is not an acceptable configuration.

Exit Identification and Illumination

An exit sign shall be provided for each exit when the occupant load exceeds 50. Exit signs shall be illuminated by either an approved self-luminous type or shall be internally or externally illuminated by fixtures supplied in an approved manner. Means of egress shall be illuminated in an approved manner, with light having not less than 1 foot-candle at the floor level while the structure is occupied.

Maintenance of Exit Openings

Openings in the structure shall remain open unless covered by a flame-resistant curtain. Curtains are to be free sliding on a metal support, and when open, shall not obstruct the exit width. Curtains shall be a color that contrasts with the tent.

The required clear width of all exits, aisles, and passageways to a public way shall be always maintained from any obstacles. Support ropes, guy wires and other support members shall not cross a means of egress at a height of less than 8 feet over the entire clear width of the exit.

Aisles

The minimum width of any public aisle is 44 inches. Aisles for employees only, may be 24 inches wide, but not less than the width required by the number of employees served. Aisles in seating areas shall progressively increase in width to provide, at all points, not less than 1 foot of width for each 50 persons served by such aisle at that point.

Seating

A seating plan and interior layout plan will be required for tents used for assembly purposes with seating. The interior layout plan shall indicate the number of seats per row, aisle widths and distance between rows.



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Flame Resistance and Sources of Ignition

Flame Resistance

A label shall be permanently affixed to the structure identifying the flame-retardant properties of the material.

The tent contractor/owner shall provide a certificate executed by an approved testing laboratory, certifying that all portions of the structure are composed of flame-resistant materials or are treated with a flame retardant meeting the requirements of NFPA 701, and that such flame resistance is effective for the period specified by the permit.

Combustible Materials

Any tarpaulins, floor coverings (including sawdust), bunting, combustible decorative materials and effects shall be composed of flame-resistant materials or treated with a flame retardant and meet the requirements of NFPA 701, and that such flame resistance shall be effective for the period specified by the permit.

Smoking

- No smoking signs shall be posted throughout the temporary structure.
- No smoking signs shall include the lettering of "NO SMOKING" in block letters at least 1-½-inches in height with a ¼-inch stroke on a contrasting background.

Open Flame and Sources of Ignition

Open flame sources including any/all cooking appliances, candles, "sterno" canisters, any/all heating appliances, flame effects and similar items may not be used or located inside or within 20 feet of the tent unless approved by the Fire Marshal.

Fireworks, pyrotechnics, and other similar effects are not allowed inside or within 100 feet of any temporary structure.

Heating and Cooking Equipment

The installation of approved heating and cooking equipment inside shall not be within 10 feet of exits or combustible materials and shall be vented to the outside by approved means. And, structures where cooking is performed shall be separated from other structures by a minimum of 20 feet.

LP-Gas

LP gas cylinders shall not be stored or used inside or within 10 to 25 feet of the temporary structure. Cylinders shall be secured and protected in a manner to prevent movement or damage.

Carbon Dioxide Cylinders

Carbon Dioxide cylinders shall be secured and protected in a manner to prevent movement or damage.



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Flammable and Combustible Liquids

Flammable and combustible liquids shall not be used within temporary structures and shall be stored a minimum of 50 feet from temporary structures.

Refueling of internal combustion engines such as generators shall not occur within 20 feet of the structure.

Generators

- Generators and other internal combustion engines shall be separated from the tent or temporary membrane structure by a minimum 20 feet separation.
- Generators shall be isolated from public access or contact by a fence, enclosure or other approved means.
- Refueling of hot generators or other equipment is not permitted.
- Electrical cords and connections shall be protected from mechanical damage and moisture.

Portable Fire Extinguishers

Fire extinguishers shall be provided in every tent, canopy, and temporary membrane structure as indicated in the following table:

FROM (Square feet)	TO (Square feet)	QUANTITY (each)
1	200	1
201	500	2
501	1000	3
1001	3000	4
3001	5000	5
5001	7000	6
7001	9000	7
9001	11000	8
For each additional 2000 square feet or fraction thereof add one additional 2A:10BC extinguisher.		

All fire extinguishers shall be mounted at approximately waist high. Final locations and heights are subject to change as determined necessary by the fire inspector.

Housekeeping

Weeds, combustible vegetation, and other combustible waste shall be removed from and kept free from inside and within 30 feet of the structure. Such waste shall be stored in approved containers until removed from the premises. If the structures are placed over grasses, the grasses shall be watered and live and cut to a length of no more than 4 inches in height.

Hay, straw, trash, and other combustible materials shall not be stored within 30 feet of the tent unless being used for the care and daily feeding of animals. Sawdust/shavings utilized for public performance or exhibits shall not be used within structures unless the sawdust/shavings are kept damp.



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ATTESTATION

I have read and understand the requirements of the Outdoor Festival and Special Event Guidelines. As the event sponsor, I will ensure compliance with all fire and life safety guidelines and requirements for setup and the operation of the event.

Signature: _____ Date: _____