# Boulder Fire-Rescue

**Community Risk Reduction Division**
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## Tent Information

### Definitions

There has been much confusion when it comes to the identification between a tent, canopy and a membrane structure. In my experiences with the Special Events that take place here in the City of Boulder, tents have always been used and very rarely, if at all, have I seen a canopy or membrane structure being utilized. Here are the definitions for a tent, canopy and membrane structure.

**Tent:** A tent is 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 that it protects. Tents can be temporary or permanent structures.
**Canopy:** A canopy can be either an architectural projection from a building, or it can be an independent structure. An example of an "architectural projection" is typically found covering an entrance walkway in front of a hotel, apartment building or possibly a restaurant. An example of an "independent structure" is a canopy that has been built over fuel pumps at a gas station.
**Membrane Structure:** A membrane structure is an air inflated, air supported, cable or frame-covered structure. These are large in size and designed to assemble large groups of people.
**Non-Commercial Tent:** A non-commercial tent is a structure, enclosure or shelter without walls, that has been purchased individually by its owner from a local retail store. These non-commercial tents are also referred to as "pop ups" or "pop up canopies".

### Permit Requirements

A tent or multiple tents requiring a permit from the City and approval from the fire department, the following criteria shall be followed:

- Tents and membrane structures with a wall(s) having an area in excess of 400 square feet.
- A tent open on all sides having an area in excess of 700 square feet.
- A tent open on all sides having an area in excess of 700 square feet, not having a minimum of 12 feet clearance from a structure.
- Multiple tents open on all sides, placed side by side without a fire break of 12 feet and an aggregate (combined) area exceeding 700 square feet total.
    - **Exceptions:** Non-commercial, non-cooking tents in a group may exceed 700 square feet if they are:
        - Individually owned.
        - Properly secured to the ground (water weight or staking).
        - Not physically connected to any surrounding tents.
    - Non-commercial tents shall not be located within 20 feet of a tent where cooking is performed.

### Cooking Tents

- Tents and membrane structures used for cooking having an area in excess of 400 square feet shall require a permit from the City.
- Tents and membrane structures used for cooking with a wall(s) having an area in excess of 400 square feet, shall be separated from other tents by a minimum of 20 feet.
- Tents and membrane structures used for cooking having an area in excess of 400 square feet, shall not have the cooking and heating equipment within 10 feet of exits or combustible materials.
- All cooking tents utilizing portable LP-gas containers shall have a minimum separation between the container and structure not less than 10 feet.

- Cooking appliances shall maintain a minimum of 3 feet of vertical and horizontal clearance from combustible material to include the tent at all times.
- All cooking tents shall have a minimum of a **40-B** or a **1.5 gallon Class K** fire extinguisher available and visible. This fire extinguisher shall be operable and serviced.

**Flame Propagation**

Any tent or tents involved with a permit requirement, shall have a permanently affixed label and or certificate from an approved testing laboratory certifying that the tents and membrane structures, to include sidewalls, drops, tarps and canvas are all meeting the flame propagation performance criteria of NFPA 701.

## Tent Checklist

This checklist follows the 2012 International Fire Code in which the City of Boulder has adopted and refers to the most common codes utilized when tents are being used during Special Events. Since the fire code language can be a bit overwhelming, I have written these codes in layperson terminology. It is important to refer to the 2012 International Fire Code for the legal definitions.

| Assembly and Non-Cooking Tents | | | | |
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| ✓ | N/A | Code | Title | Description |
| | | 3103.2 | Approval Required | All tents having a wall(s) and exceeding an area of 400 square feet, shall require a permit. A fire department inspection is required. |
| | | 3103.2 (2.1) | Approval Required | A tent open on all sides and exceeding an area of 700 square feet, shall require a permit. A fire department inspection is required. |
| | | 3103.2 (2.2) | Approval Required | Multiple tents open on all sides, placed side by side without a fire break of 12 feet and a combined area exceeding 700 square feet total, shall require a permit. A fire department inspection is required. |
| | | 3103.2 (2.3) | Approval Required | A tent open on all sides having an area in excess of 700 square feet, not having a minimum of 12 feet clearance from a structure, shall require a permit. A fire department inspection is required. |
| | | 3103.4 | Permits | A permit for your tent(s) requires a permit and a fire inspection. |
| | | 3103.9 | Anchorage Required | Tents shall be adequately roped, braced and anchored to withstand weather conditions and prevent collapse. |
| | | 3103.12.2 | Number of Exits | A tent with walls in place and having an occupant load of 10-199 people, shall have a minimum of 2 exits with each exit having a minimum width of 72 inches. |
| | | 3103.12.2 | Number of Exits | A tent with walls in place and having an occupant load of 200-499 people, shall have a minimum of 3 exits with each exit having a minimum width of 72 inches. |
| | | 3103.12.5 | Aisle Widths | Aisle width without fixed seating and serving employees only, shall be a minimum of 24 inches. |
| | | 3103.12.5 | Aisle Widths | Aisle width without fixed seating and serving the public, shall be a minimum of 44 inches. |
| | | 3103.12.6 | Exit Signs | All exits shall be clearly marked with exit signs when serving an occupant load of 50 or more people. These signs shall be secured in place at all times. |
| | | 3103.12.6.1 | Exit Sign Illumination | All exit signs shall be internally illuminated or externally illuminated at all times when serving an occupant load of 300 or more people. |
| | | 3103.12.7 | Egress Illumination | Egress ways shall be illuminated at all times when serving an occupant load of 300 or more people. |
| | | 3103.12.8 | Clear Egress Ways | The required width of exits and aisle ways shall be maintained at all times. |
| | | 3104.2 | Flame Treatment | A certificate showing that all materials used for the tent, are meeting the flame criteria of NFPA 701, shall be available. |
| | | 3104.5 | Combustible Materials | Hay, straw or similar combustible materials shall not allowed in a tent containing assembly (gathering of persons) occupancies. |
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| Assembly and Non-Cooking Tents (continued) | | | | |
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| ✓ | N/A | Code | Title | Description |
| | | 3104.5 | Combustible Materials | Exception to hay and straw usage within a tent is for daily feeding and care of animals. |
| | | 3104.7 | Open Flame | Open flame or other devices emitting flame, fire or heat or any flammable or combustible liquids shall not be permitted inside or located within 20 feet of the tent unless approved by the fire code official. |
| | | 3104.12 | Fire Extinguisher | A minimum of a **2-A:5-BC** fire extinguisher shall be hung and easily visible and obtainable. |
| | | 3104.15.3 | Cooking/Heating Equip. | Cooking and heating equipment shall not be located within 10 feet from the exits or combustible materials. |
| | | 3104.19 | Separation of Generators | Generators and other power sources shall be a minimum of 20 feet from any tent and isolated from the public. |

| Tents Used for Cooking | | | | |
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| ✓ | N/A | Code | Title | Description |
| | | 3103.2 | Approval Required | Any tents and membrane structure used for cooking having an area in excess of 400 square feet shall require a permit from the City. A fire department inspection is required. |
| | | 3103.2 | Approval Required | A food vendor letter from the fire department shall be on site prior to beginning cooking operations. |
| | | 3103.2 | Approval Required | Multiple tents open on all sides, placed side by side without a fire break of 12 feet and a combined area exceeding 700 square feet total, shall require a permit. A fire department inspection is required. |
| | | 3103.4 | Permits | A permit for your tent(s) requires a permit and a fire inspection. |
| | | 3103.9 | Anchorage Required | Tents shall be adequately roped, braced and anchored to withstand weather conditions and prevent collapse. |
| | | 3103.12.8 | Clear Egress Ways | The required width of exits and aisle ways shall be maintained at all times. |
| | | 3104.2 | Flame Treatment | A certificate showing that all materials used for the tent, are meeting the flame criteria of NFPA 701, shall be available. |
| | | 3104.5 | Combustible Materials | Hay, straw or similar combustible materials shall not allowed in a tent containing assembly (gathering of persons) occupancies. |
| | | 3104.12 | Fire Extinguisher | A minimum of a **40-B** or a **Class K** fire extinguisher shall be available and easily visible. The extinguisher shall be operable. |
| | | 3104.15.3 | Cooking Equip. Location | Cooking appliances shall maintain a minimum of 3 feet vertical and horizontal clearance from combustible materials to include the tent at all times. |
| | | 3104.16.2.1 | Portable LP-Gas Containers | All portable LP-Gas containers shall have a minimum separation Between the container and structure not less than 10 feet. |
| | | 3104.16.3 | Protection and Security | All LP-Gas containers shall be adequately protected to prevent tampering, damage by vehicles or other hazards. |
| | | 3104.16.3 | Protection and Security | All portable LP-Gas containers shall be secured in an upright position to prevent tipping over. |
| | | 3104.21 | Combustible Vegetation | Combustible vegetation that would create a fire hazard, shall be removed from within and 30 feet from the tent. |