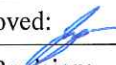




Red, White & Blue Fire District Community Risk Management Policy 432

Approved: 	Date: 2/13/13
Last Revision:	February 2013
Next Revision:	February 2015

Special Event Tent and Canopy Weight Policy

Background:

Summit County has unpredictable weather and often strong, gusty, and erratic winds. While participants use canopies to shield themselves from the rain and sun, our region's winds can turn your tent or canopy into a deadly missile with one unexpected gust.

Strong gusts can develop without warning at any time before, during or after an event has closed. Events in Summit County WILL have wind. Participants may experience calm conditions during morning set-up; however, conditions can change dramatically by late afternoon and break-down.

Set-up and break-down periods are when tents and canopies are most vulnerable to the wind. Structures must be completely secured as soon as they are set up. At the end of the event, structures must be broken down immediately following removal of weights.

The event organizer is responsible for ensuring all temporary structures meet the requirements of this policy. Failure of the event organizer to comply with this policy will result in legal action, fines, and/or removal of the structure from the event site.

Requirements:

- I. A tent or canopy up to 20'X20' can be weighted down utilizing 40 pound weights on each leg of the tent:
 - i. The weight must be suspended from the top corner of the tent and secured to each leg of the tent.
 - ii. The weight must be self-contained and permanently sealed. It must be capable of being suspended. (Please see Exhibit A for allowable weights.)
 - i. EXCEPTION: Approved sandbags or weight plates, which are designed by the manufacturer, are allowed.
 - iii. Items not allowed include but are not limited to: containers of water, (open or sealed) other than 55 gallon drums as listed in Section II, bags of sand (not designed by the tent/canopy manufacturer), bricks, cinder-blocks, rocks, gym type weights, or stakes, etc.
 - iv. Tents and canopies shall not be tethered to a fence, light post, bench, trashcan, or other fixed object. The tent or canopy shall be self weighted and shall not rely on outside objects for securement.

- II. A tent or canopy up to and including 40' X 40' can be weighted down with a closed 55 gallon water barrel, filled with water. A water barrel shall be attached to each leg of the tent.
- i. The water barrels shall be attached to the tent utilizing a ratchet type strap that is rated for the tension placed on it.
 - ii. The strap must run from the top of the tent to through the water barrel.
 - iii. The straps shall be in good repair with no physical damage.
- III. A tent or canopy over 40' X 40' shall be engineered to withstand winds of 90 miles per hour (mph) under a 3 second gust and a snow load of 90 pounds per square foot.
- IV. Non-standard structures (domes, odd shaped tents, custom designs) or any structure that requires custom anchoring (e.g. staking or snow and ice anchors) shall require an engineered submittal.
- i. The engineer shall specify the correct attachment points and angles for tie-downs.
 - ii. The engineer shall specify if the tent, canopy, or structure meets the 90 mph wind load under a 3 second gust. If the structure does not meet the 90 mph wind load, they must specify the maximum wind load.
 - iii. The engineer shall specify that the tent meets or exceeds the snow load requirement of 90 pounds per square foot. If the structure does not meet the snow load requirement, then the engineer shall specify the maximum snow load.
 - iv. The engineer shall specify the type, size, and depth of the anchor.
- V. All trussed structures shall be engineered to meet the wind load requirements of a 90 mph wind under a 3 second gust.
- i. The submittal shall include an illustration of how to properly tether the structure. In detail, it shall specify:
 - i. Anchor point to the structure.
 - ii. Angle of tether strap at anchor point and ballast point.
 - iii. Type of material required for the tether. Required tensile strength shall be specified.
- VI. Tents, canopies, and structures that do not meet the required wind and snow loads shall implement a weather management plan. A tent, canopy or trussed structure that is erected during snow months (November through May) shall be designed to maintain a snow load of 90 pounds per square foot. If the tent, canopy, or structure cannot be designed to meet the snow load, then a weather management plan shall be required. Weather management plans shall be submitted to the Fire District for approval.

Exhibit A

Quick Reference Guide

Tent or Canopy Size:	Ballast Type:	Engineering Required:
Up to and including 20' X 20'	Minimum 40 pounds of weight per leg	No
Up to and including 40' X 40'	Minimum of one 55-gallons drum filled with water per leg.	No
Larger than 40' X 40'	As specified by a State Certified Engineer	Yes
Non-standard tents as defined under Item IV of this guideline.	As specified by a State Certified Engineer	Yes
Trussed Temporary Structures	As specified by a State Certified Engineer	Yes

Up to and including a 20' X 20' Tent or Canopy

What is allowed:

- Sealed tube type weights that are constructed of PVC. Weights shall have an eye type hook on one end for attachment to the top structure of the tent.
- Steel rods or bars. Weights shall have an eye type hook on one end for attachment to the top structure of the tent.
- Weight plates that are designed by the manufacturer. Weight plates shall be capable of latching or locking on to the leg of the structure.
- Sandbags that are designed by the tent manufacturer. Sandbags shall be capable of attaching to the leg of the structure. The manufacturer shall specify ballast material.
- A minimum of 40 pounds shall be attached to each leg of the structure.

What is **NOT** allowed:

- Bricks
- Cinder Blocks
- Water Jugs
- Buckets of any kind
- Gym Style Weights
- Rocks
- Bags of sand or sand tubes that are not designed by the structure manufacturer.

Alternative materials and methods may be approved on a case-by-case basis. A separate submittal shall be provided to the Fire District at least one (1) month prior to the event.

Failure of the event organizer to comply with this policy will result in legal action, fines, and/or removal of the structure from the event site.

