

Canopies are used at events to protect event staff and their materials from sun and rain, but improper setup and breakdown, as well as inclement weather can create safety hazards if the canopy is not properly reviewed and secured. Minimize risks from canopies by reviewing flammability risks beforehand, being mindful of their proximity to students and the public, and properly attaching weights to canopy legs during events.

Definitions

Canopy: A structure, enclosure or shelter constructed of fabric or pliable materials supported by any manner except by air or the contents it protects and is open without sidewalls or drops on 75 percent or more of the perimeter.

Tent: A structure, enclosure or shelter constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.

Canopy / Tent Requirements

- Location – Tents, canopies, or other temporary structures shall not be located within 20 feet of lot lines, buildings, other tents, canopies, parked vehicles, or internal combustion engines. Tents and canopies shall not be located within 30 feet of combustible vegetation.
- Labels – Tents, canopies, and temporary structures need to have a permanently affixed label bearing the identification of the size and the material type of the tent. All tent fabrics must be of an approved flame-retardant material and a certified label must be present at all times.
- Approvals - Tents and membrane structures having a cumulative area in excess of 200 square feet and canopies in excess of 400 square feet will need prior review and approval from the EHS Fire Safety Division
- Easy-Up Tents – Individual tents (10' x 10') do not require approval from the EHS Fire Safety Division if the minimum distance from any other tent is at least 10 feet. When tents are not at least ten feet apart they will be considered connected and their

cumulative area will require approval from the EHS Fire Safety Division.

- Do not use any flammable or combustible materials inside a tent, canopy, or temporary structure.

Canopy Weights

- To secure canopies and prevent them from blowing away in high winds and inclement weather, securely attach weights to each leg of the canopy. Plan ahead of time to ensure canopy weights are secured to reduce the risk of injury, including trips and falls.
- Apply at least 40+ pounds per leg for a 10' x 10' structure (E-Z UP sells weight bags that can hold up to 40 pounds of sand per bag) to secure a canopy properly. For canopies larger than a 10' x 10' structure, double the weights on each leg of the canopy. Use 50+ pounds for weighting umbrellas. Weights for signs or displays will vary depending on their size. During high winds, extra weight may be necessary for structures.
- The best weights are strapped to the bottom of each leg and then tethered with a rope or strap to the top corner of the canopy. This helps lower the center of gravity of the canopy to be better secured in strong winds.

Secure weights to canopies in a manner that:

- Prevents tripping hazards
- Makes tethered lines clearly visible
- Uses weights with soft edges to avoid causing cuts and scrapes
- Positions weights on the ground (NOT above people's heads)

Recommended canopy weights:

- Filled buckets, jugs, or other containers with a minimum of 40 pounds total, per leg, of sand, water, or cement that can be anchored or secured with straps, ropes, or bungee cords. These include canvas bags or plastic buckets, gallon jugs, or containers that have a handle through which straps or ropes can be secured.
- Sandbag weights that are specially made for securing canopies and weigh at least 40 pounds total. These sandbag weights should be vertically strapped to the legs of the canopy.

Canopy weights to avoid:

- Canopies or umbrellas tied to tables, coolers, or vehicles presents tripping hazards and often does not provide adequate weight.
- Sandbags that cannot be placed upright and securely tied.
- Concrete blocks. They are hard, easy to trip over, and cause foot injuries.
- Avoid stretched-out cords and lines. Event participants may get tangled in them, causing them to trip, fall, or pull over displays.

Safety practices when using canopy weights:

- If unable to lift the weight by yourself, ask for help. Use your legs to lift the weights and not your back.
- Use carts or wheeled platforms with appropriate weight capacities when transporting weight from the car to the set-up area.
- Be alert during set up and breakdown which are times when the canopies are vulnerable to wind.
- Ensure that your surroundings are clear of obstructions and pedestrians or patrons before set up or breakdown. Do not get distracted during set and breakdown process.
- Dispose of sand or water properly. Do not throw them out where it will create slip, trips or fall hazards.
- Wear closed-toe shoes when handling canopy weights.

References

UCI Environmental Health & Safety, [Special Events Program](#)

Contact **EH&S** at (949) 824-6200 or safety@uci.edu for questions.