

Environmental Health and Safety

TENT, CANOPY, AND TEMPORARY MEMBRANE STRUCTURE GUIDELINES

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Tent, Canopy, and Temporary Membrane Structure Guidelines

TABLE of CONTENTS

- I. Purpose
- II. Definitions
- III. Permit Information
- IV. Membrane Structure Requirements
- V. Requirements

Appendix

- A. Exit Sign
- B. No Smoking Sign



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Tent, Canopy, and Temporary Membrane Structure Guidelines

I. Purpose

This document will serve as a guide to all departments who may use or rent a tent, canopy tent, or temporary membrane structure on UNC Campus. Each department is responsible for ensuring compliance with the following guidelines.

II. Definitions

<u>Tent:</u> A structure, enclosure, or shelter, with sidewalls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.

<u>Canopy Tent</u>: A structure, without sidewalls or drops, constructed of fabric or pliable materials supported by any manner except by air or the contents that it protects.

Membrane Structure: An air-inflated, air-supported, cable or frame-covered structure.

Temporary Structure: Includes a tent, canopy tent, and temporary membrane structure.

III. Permit Information

Tent and temporary membrane structures having an area above 400 square feet shall obtain a permit from the Greeley Fire Department.

A Canopy Tent having an area above 700 square feet shall obtain a permit from the Greeley Fire Department.

A permit may be obtained from the Greeley Fire Department which is located at:

Greeley Fire Department Fire Prevention Bureau City Hall Annex Building 1100 10th Street, Suite 100 Greeley, Colorado 80631 (970) 350-9510 There will be a \$30 fee per permit from the Greeley Fire Department.

Contracted tent and canopy companies can provide services to obtain the permit and provide permit-required materials.

An inspection may be conducted by the Greeley Fire Department once the structure is set up.

IV. Membrane Structure Requirements

The following are specific requirements for temporary membrane structures. Membrane structures must also follow all requirements in Section V.

- 1. An air-supported structure used as a place of assembly shall be furnished with no less than two blowers, each of which has adequate capacity to maintain full inflation pressure with normal leakage. The design of the blower shall be to provide integral limiting pressure at the design pressure specified by the manufacturer.
- 2. Places of public assembly for more than 200 persons shall be furnished with either a fully automatic auxiliary engine-generator set capable of powering one blower continuously for 4 hours, or a supplementary blower powered by an internal combustion engine which shall be automatic in operation.
- 3. Temporary membrane structures that are erected on buildings, balconies, decks, or other structures shall be regulated as permanent membrane structures and comply with International Building Code Section 3102.
- 4. Bouncy Houses must be deflated if the wind is 35 MPH or greater (or the manufacturer has a stricter requirement).

V. Requirements

The following are requirements for all tent, canopy, and temporary membrane structures.

- 1. **Aisle:** When seating, tables, or other obstructions exist, exit aisles shall have a minimum width of not less than 44 inches and shall be provided.
- 2. **Anchorage:** Temporary structures shall be adequately roped, braced, and anchored to withstand the elements of weather and prevent collapsing.
- 3. **Clear Area:** Permitted temporary structures shall have a separation of 20 feet from all structures and other tents.

Temporary structures shall not be located within 20 feet of lot lines, buildings, parked vehicles, or internal combustion engines.

- 4. **Combustible Materials:** Hay, straw, shavings, or similar combustible materials shall not be located within any temporary structure. Combustible materials shall not be permitted under stands or seats at any time.
- 5. **Combustible vegetation:** Combustible vegetation that could create a fire hazard shall be removed from a temporary structure, and areas within 30 feet of a temporary structure.
- 6. **Compressed Gas Cylinders:** Compressed Gas Cylinders must be upright and secured at all times to prevent tipping.
- 7. Doors: Exit doors shall swing in the direction of exit travel.
- 8. Electrical cords: Electrical cords must be in good condition and must be the grounded type. Electrical cords shall be properly covered at exits and in aisles to eliminate a safety (trip) hazard.
- 9. **Exit Signs:** "Exit" signs (Appendix A) shall be installed at required exit doorways and where necessary to indicate clearly the direction of egress.
- 10. **Fire Extinguisher:** A fire extinguisher is required for permitted temporary structures. One fire extinguisher is required up to 500 square feet. Add a fire extinguisher for each additional 500 square feet. All extinguishers shall have a current inspection tag. During the scheduling process, the requestor shall ask Conference and Events Department to include the appropriate number of fire extinguishers needed.
- 11. Fire Lane: Temporary structure cannot be placed on fire lanes.
- 12. Fireworks: Fireworks shall not be used within 100 feet of a temporary structure.
- 13. **Flammable and combustible liquid:** Flammable and combustible liquids shall be stored outside in an approved manner greater than 50 feet from temporary structures.
- 14. **Generators:** Generators and other internal combustion power sources shall be separated from temporary structures by a minimum of 20 feet and shall be isolated from contact with the public by fencing or enclosure.
- 15. **Hard Surface:** When on asphalt or concrete, temporary structures must be secured by non-puncturing methods. Stakes cannot be drilled into the asphalt or concrete.
- 16. **Label:** Structures shall have a permanently affixed label bearing the identification of size and fabric or material type.

- 17. **LP-Gas Containers:** Portable Liquefied Petroleum gas containers with a capacity of 500 gallons or less shall have a minimum separation between containers and temporary structures not less than 10 feet.
- 18. **Minimum number of exits:** The minimum number of exits shall be as listed on the chart below. The maximum travel distance to an exit shall be 100 feet when inside the temporary structure.

Occupancy Load	Minimum number of exits	Minimum Width of each Tent Exit (inches)	Minimum Width of each Membrane Structure Exit (inches)
10 to 199	2	72	36
200 to 499	3	72	72
500 to 999	4	96	72
1,000 to 1,999	5	120	96
2,000 to 2,999	6	120	96
Over 3,000	7 or more	120	96

No guy wires, guy ropes, or other support members shall cross any exit at a height less than 8 feet.

- 19. **Open or Exposed Flames (Cooking Grills):** Open flames or other emitting flames, fire or heat, or any flammable or combustible liquids, gas, charcoal, or other cooking devices shall not be permitted inside or located within 20 feet of any temporary structure.
- 20. **Parking:** There shall be no parking within 20 feet of a temporary structure.
- 21. **Safety Film:** Motion pictures shall not be displayed in tents or membrane structures unless the motion picture film is a safety film.
- 22. **Smoking:** Smoking shall not be permitted within 25 feet of a temporary structure or combustible materials. "No Smoking" signs (Appendix B) shall be conspicuously posted.
- 23. **Structure Materials:** Sidewalls, drops, and tops of all tents, canopy tents, and membrane structures, used inside or outside a building, shall be treated with a flame retardant material.
- 24. **Temporary lights:** Lights strung up around the perimeter of a temporary structure shall have a protective cage around the light bulb to prevent charring or smoldering.
- 25. **Utility locates:** Utility locates are required 72 hours in advance before stakes can be penetrated into the ground.
- 26. **Vehicles:** Any vehicle within a temporary structure shall have less than 5 gallons of fuel and the battery cables shall be disconnected. The location of the vehicle shall not obstruct the means of egress.



