

North Carolina Fire Prevention Code Requirements For
Tents, Canopies and Membrane Structures
January 20, 2010

For an event using tents, canopies and membrane structures the NC Fire Prevention Code (NCSFC) requires the project to be evaluated for fire and life safety and a permit to be obtained. For all State-owned property State Construction Office (SCO) is responsible for the evaluation and granting of a permit. Upon obtaining satisfactory evidence that the proposed structure will be in accordance with minimum Code requirements, SCO issues a permit in the form of a signed approval letter (or an E-mail). SCO's approval merely acknowledges Code compliance and does not constitute an agreement for use of the space. That is obtained from the Department of Administration or the owning agency/university.

The following apply when planning to erect tents, canopies or membrane structures:

1. Any tent or membrane structure over 200 square feet (SF), canopy in excess of 400 SF (with sides) or canopy in excess of 700 SF (without sides) requires a permit and approval from the fire code official.
2. All such structures are to be certified as either being composed of flame resistant material or treated with a flame retardant to meet flame propagation performance criteria of NFPA 701.
3. In addition, any such structure which can be occupied by 50 or more persons is to have detailed site and floor plans. Site plan to indicate structure location, 20 FT fire lanes and 20 FT separation distance from other structures, lot lines, building lines, parked vehicles, internal combustion engines etc. Floor plan to indicate the seating arrangement, means of egress and any cooking, cooling, heating or electrical equipment.
4. If the occupancy of an air-supported structure exceeds 200 persons, auxiliary emergency power is required. NOTE: The occupancy is to be calculated using the North Carolina State Building Code (NCSBC) Table 1004.1.1 with 5 SF per person for standing areas, 7 SF per person for seating areas and 15 SF per person for areas with tables and chairs.
5. The plans are to indicate if the structures will or will not have flaps or sides. This affects the placement of exits signs, fire extinguishers and other life safety equipment.
6. Smoking is not allowed with these structures.
7. Open flames or other devices emitting flame, fire, heat or any flammable or combustible liquids, gas, charcoal or other cooking devices or any unapproved equipment are not allowed inside or within 20 feet of such structures while open to the public.
8. Restroom accommodations are to be provided for the public and accessibility features provided for persons with a disability.
9. Refer to NC State Fire Code Chapter 24 for additional code requirements and guidance.

The owner must direct the event organizer to submit plans for the event to SCO at the address below. This must be done as soon as the event is scheduled to allow time for review and for the vendor to respond to any resulting questions and/or a possible site visit by one of our staff to better assess the plan. If the owner or vendor does not submit their plans to SCO soon enough to allow a reasonable time for evaluation and approval, the event cannot be approved and must be either rescheduled or cancelled.

If a situation arises where it is necessary for SCO to ask the local building official to review the event plans and/or inspect the structure on our behalf (e.g., due to a time or location issue), the cost for such local government inspection permit will be borne by the owner or event organizer, as applicable.

If there are any questions, please contact us at 919-807-4100 and ask to speak to a State Construction Office Code Consultant. Our mailing address is State Construction Office, 1307 Mail Service Center, Raleigh, NC 27699-1307, Courier Number 56-02-01. Plans can be delivered to New Education Building, 301 North Wilmington Street, Suite 450, Raleigh, North Carolina 27601 or faxed to 919-807-4110.