



SYRACUSE FIRE DEPARTMENT

CITY OF SYRACUSE, MAYOR BEN WALSH

TENT, CANOPY & TEMPORARY MEMBRANE STRUCTURES PLAN REVIEW AND PERMIT REQUIREMENTS

Purpose

The intent of this guideline is to provide the minimum standards needed to obtain a permit to erect temporary Membrane structures, tents or canopies.

Scope

This guideline shall apply to tents and temporary membrane structures having an area in excess 400 square feet and canopies in excess of 400 square feet. The requirements are from the 2020 Fire Code New York State (FCNYS) Chapter 31.

FCNYS 3103.2 Approval required. Tents and membrane structures having an area in excess of 400 square feet shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

An installation permit is **NOT** required for **tents open on all sides** that comply with **all of the following**:

1. Individual tents having a maximum size of 700 square feet.
2. The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total.
3. A minimum clearance of 12 feet to all structures and other tents.

Temporary tents, air-supported, air-inflated or tensioned membrane structures and canopies shall not be erected for a period of more than 180 days within a 12-month period on a single premise.

Definitions

Awning - An architectural projection that provides weather protection, identity or decoration and is wholly supported by the building to which it is attached. This document does not address the installation or use of any awnings. Awnings are regulated by the Building Code of New York State.

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

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Canopy - A temporary 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 side walls or drops on 75 percent or more of the perimeter.

Membrane Structure - an air-inflated, air-supported, cable, or frame-covered structure as defined by the Building Code of New York State, which is erected for fewer than 180 days and not otherwise defined as a tent, canopy or awning.

Temporary Use - A period of not more than 180 days within a 12-month period on a single premise

Plan Submittal Guidelines

In order for a permit to be issued, construction plans must be submitted to the Fire Prevention Bureau and subsequently reviewed and approved. The applicant must submit for approval a detailed drawing of the structure, its layout, location, separations from other structures, purpose (e.g., retail use, public assembly), and the permit application.

The following information is required to obtain a permit for a tent, canopy or temporary membrane structure:

1. A statement which identifies the intended use of all structures and the dates for which the permit is required. Dates shall include the specific dates of installation, use and removal.
2. Flame retardant certificate(s) for tent/canopy material per FCNYS § 3104.2 must be accompanied with documentation certifying treatment of tents, canopies, membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects, including sawdust when used on floors or passageways, shall meet the flame propagation performance of NFPA 701 or shall be treated with an approved flame retardant, per FCNYS §3104.2.

(See Exhibit A)



Certificate of Flame Resistance



REGISTERED FABRIC
OR
CONCERN NUMBER

ISSUED BY

*Date treated or
manufactured*

This is to certify that the materials described on the reverse side hereof have been flame-retardant treated (or are inherently nonflammable).

FOR _____ ADDRESS _____
CITY _____ STATE _____

Certification is hereby made that: (Check "a" or "b")

(a) The articles described on the reverse side of this Certificate have been treated with a flame-retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in conformance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal.

Name of chemical used _____ Chem. Reg. No. _____
Method of application _____

(b) The articles described on the reverse side hereof are made from a flame-resistant fabric or material registered and approved by the State Fire Marshal for such use.

Trade name of flame-resistant fabric or material used _____ Reg. No. _____

The Flame Retardant Process Used _____ Be Removed By Washing
(will or will not)

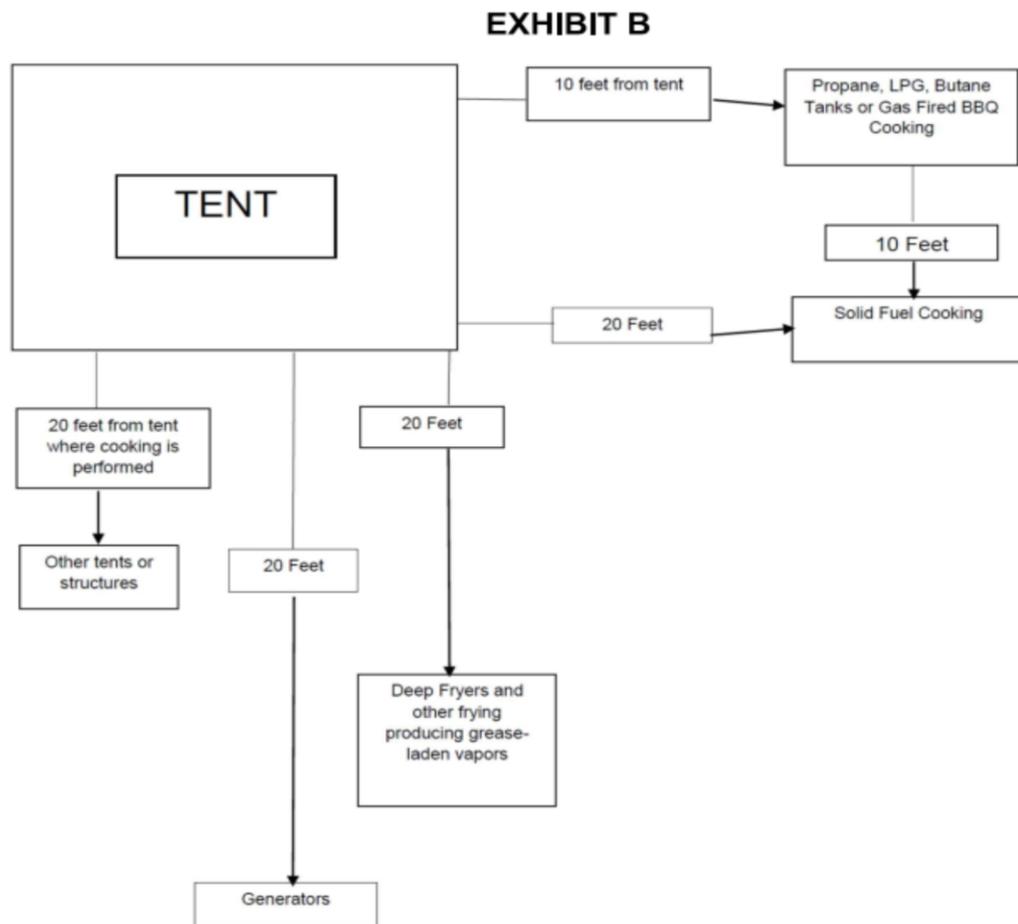
Name of Applicator or Production Superintendent
By _____
Name Title

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THIS REPRODUCIBLE ARTWORK IS FOR THE EXCLUSIVE USE OF STATE FIRE MARSHAL LICENSED CONCERNS AND INDIVIDUALS FOR THE PRODUCTION OF REQUIRED FORMS.

3. An accurate scale or dimensioned site diagram shall be provided and attached to the Permit Application indicating distances from tents or temporary membrane structures to permanent buildings, access drives, vehicles and parking areas, other tents or canopies, cooking and heating appliances and equipment, property lines and roadways. (See Exhibit B).
4. An unobstructed fire break passageway or fire road not less than 12' wide and free from guy ropes or other obstructions shall be maintained on all sides of all tents, canopies and membrane structures unless otherwise approved by the Fire Marshal, per FCNYS §3103.8.6.

5. Tent/structure interior layout drawing. The interior drawing shall be drawn to scale and dimensioned. The interior layout drawing shall indicate the locations of the exits, fire extinguishers, no smoking signs, seating arrangement, table arrangement, location and height of platforms/stages, aisle widths and guywire placements in relationship to exit pathways.



6. Proposed seating arrangements per FCNYS § 3103.11 and FCNYS Chapter 10 Locations and dimensions of tables and types of all other interior obstacles:
 - a. Exit locations; dimensions required for exits as required per FCNYS §3103.12.
 - b. Locations of all aisles and emergency exit pathways to be maintained per FCNYS §3103.12.5.1.
 - c. Locations of **NO SMOKING** signs per FCNYS §3104.6.



- d. Locations and type of means of egress illumination, including proposed power source(s) per FCNYS §3103.12.6.
- e. Locations and types of EXIT signs, including the means of illumination per FCNYS §3103.12.6.
- f. Location of portable fire extinguishers per FCNYS §3104.12 and FCNYS §906.
- g. Location and width of all-weather fire access roadways per FCNYS§3103.8.1.
- h. Locations of any additional emergency equipment such as hose lines or water supplies per FCNYS §3104.13.
- i. Location and type(s) of proposed heating and/or cooking equipment or open flame devices to be used in conjunction with the event per FCNYS §3104.15.
- j. The proposed maximum occupant load per FCNYS §3104.14 and FCNYS Chapter 10.
 - Maximum occupant load shall be posted when the occupant load exceeds 50 persons.

Anchorage

Tents, canopies or membrane structures and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing. Documentation of structural stability shall be furnished to the code enforcement official on request.

Code Requirements

Exit covers. Openings in the structure shall remain open unless covered by a flame-resistant curtain. Curtains are to be free sliding on a metal support, and when open, shall not obstruct the exit width. Curtains shall be a color that contrasts with the tent.

Aisles. The minimum width of any public aisle is 44 inches. Aisles for employees only, may be 24 inches wide, but not less than the width required by the number of employees served. Aisles in seating areas shall progressively increase in width to provide, at all points, not less than 1 foot of width for each 50 persons served by such aisle at that point.

Exit signs and illumination. An exit sign shall be provided for each exit when the occupant load exceeds 50. Exit signs shall be illuminated by either an approved self-luminous type or shall be



internally or externally illuminated by fixtures supplied in an approved manner. Means of egress shall be illuminated in an approved manner, with light having not less than 1 foot-candle at the floor level while the structure is occupied.

Maintenance of exits. The required clear width of all exits, aisles, and passageways to a public way shall be maintained from any obstacles at all times. Support ropes, guy wires and other support members shall not cross a means of egress at a height of less than 8 feet over the entire clear width of the exit.

Table 3103.12 2.
EXITS FROM TENTS CANOPIES AND TEMPORARY MEMBRANE STRUCTURES ¹

Occupant Load	Minimum number of means of egress	Minimum width of each means of egress (inches)	
		Tent	Membrane Structure
10 to 199	2	72	36
200 to 499	3	72	72
500 to 999	4	96	72
1000 to 1999	5	120	96
2000 to 2999	6	120	96
Over 3000	7	120	96

¹ When the occupant load exceeds 3000, the total width of means of egress (in inches) shall not be less than the total occupant load multiplied by 0.2 inches per person.

Fire Extinguishers

Portable Fire Extinguishers. Fire extinguishers and other fire-protection appliances shall be provided in every tent, canopy, and temporary membrane structure as follows:

Fire extinguishers may not be removed from adjacent businesses to provide protection for the structure.

A least one 40BC rated fire extinguisher shall be provided for each kitchen, mess hall, power generator or transformer and at locations where flammable or combustible liquids are used, stored, or dispensed.

Portable fire extinguishers shall be provided. Travel distance to the nearest 2A:10BC extinguisher shall not exceed 75', per FCNYS §906 and §3104.12.

Portable fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use. These locations shall be along normal paths of



travel, unless the fire code official determines that the hazard posed indicates the need for placement away from normal paths of travel, per FCNYS §906.5

Fire extinguishers provided for the protection of cooking grease fires shall be Class K, per FCNYS §906.4.2.

Heating and Cooking Equipment

Heating or cooking equipment, tanks, piping, hoses, fittings, valves, tubing, and other related components shall be installed as specified in the Mechanical Code New York State and shall be approved by the Fire Marshal.

Cooking and heating equipment shall not be located within 10 feet of exits or combustible materials per FCNYS §3104.15.3.

Tents where cooking is performed shall be separated from other tents, canopies or membrane structures by a minimum of 20' per FCNYS §3104.15.5.

Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20' of a tent, canopy or membrane structure per FCNYS §3104.15.6.

Operations such as warming of foods, cooking demonstrations and similar operations that use solid flammables, butane or other similar devices which do not pose an ignition hazard, shall be approved per FCNYS §3104.15.4.

Electrical heating and cooking equipment shall comply with the National Electrical Code - NFPA 70 per FCNYS §3104.15.7.

Flammable and combustible Liquids/Gases

Flammable-liquid fuels shall not be used in temporary membrane structures, tents or canopies per FCNYS §3104.17.1.

Flammable or combustible liquids and LP-gas shall be stored outside in an approved manner not less than 50' from tents, canopies or membrane structures, per FCNYS §3104.17.2.

Refueling shall be performed in an approved location not less than 20 feet from tents, canopies or membrane structures per FCNYS §3104.17.3

LP-Gas

LP-gas containers shall be located outside. Safety release valves shall be pointed away from the tent, canopy or membrane structure per FCNYS §3104.16.2.

Portable LP-gas containers with a capacity of 500 gallons or less shall have a minimum separation between the container and the structure not less than 10', per FCNYS §3104.16.2.1.

Portable LP-gas containers with a capacity of more than 500 gallons shall have a minimum separation between the container and structures not less than 25', per FCNYS §3104.16.2.2.

Portable LP-gas containers, piping, valves and fittings which are located outside and are being used to fuel equipment inside a tent, canopy or membrane structure shall be adequately protected to prevent tampering damage by vehicles or other hazards and shall be located in an approved location.

Portable LP-gas containers shall be securely fastened in place to prevent unauthorized movement, per FCNYS §3104.16.3.

Housekeeping

Weeds, combustible vegetation and other combustible waste shall be removed from and kept free from inside and within 30 feet of the structure. Such waste shall be stored in approved containers until removed from the premises. If the structures are placed over grasses, the grasses shall be watered and live and cut to a length of no more than 4 inches in height.

Hay, straw, trash, and other combustible materials shall not be stored within 30 feet of the tent unless being used for the care and daily feeding of animals. Sawdust/shavings utilized for public performance or exhibits shall not be used within structures unless the sawdust/shavings are kept damp.

Standby Personnel

When, in the opinion of the fire code official, it is essential for public safety in tent, canopy or membrane structure used as a place of assembly or any other use where people congregate, because of the number of persons, or the nature of the performance, exhibition, display, contest or activity, the owner, agent or lessee shall employ one or more qualified persons, as required and approved, to remain on duty during such times such places are open to the public, or when such activity is being conducted, per FCNYS §3104.20.

There shall be trained crowd managers or crowd manager supervisors at a ratio of one crowd manager/supervisor for every 250 occupants, as approved.

January 2022
Syracuse Fire Department
Fire Prevention Bureau

