

NORTH METRO FIRE RESCUE DISTRICT  
FIRE PREVENTION DIVISION

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**MEMBRANE STRUCTURES, TENTS, AND TEMPORARY STAGE CANOPIES**

All Membrane Structures and Tents shall comply with the 2015 International Fire Code (IFC).

Temporary use shall be for a period of not more than 180 days within a 12-month period on a single premise.

- **A Membrane Structure** is an air-inflated, air-supported, cable or frame-covered structure as defined by the IBC and not otherwise defined as a tent.
- **A Tent** is a structure, enclosure or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.
- **A Temporary Stage Canopy** is a temporary ground-supported, membrane-covered frame structure used to cover stage areas and support equipment in the production of outdoor entertainment events.
- **For this document and the accompanying checklist, Membrane Structures, Tents, and Temporary Stage Canopies will collectively be referred to as "Tents".**

**1<sup>st</sup>** The approval and issuance of a **CONSTRUCTION Permit** is required for a tent having an area in excess of 400 square feet before it can be erected, operated or maintained for any purpose. The owner/erector of the tent submits plans for the Construction Permit. The Construction Permit will be issued to the owner of the tent. **The Construction Permit is required to be paid for and picked up from the Fire District by the owner/erector prior to the erection of the tent.**

**2<sup>nd</sup>** The approval and issuance of a separate **OPERATIONAL Permit** is required to operate a tent in which persons gather for any purpose. The event sponsor/operator of the tent submits plans for the Operational Permit. The Operational Permit will be issued to the event sponsor after successful completion of inspection. An inspection by the Fire District is required prior to the use of the tent. All requests for inspections must be made to, and confirmed by, the Fire Prevention Division.

**3<sup>rd</sup>** One set of approved plan review documents and applicable permits shall be kept on site at all times during the inspections, construction, and operation of a tent. **NOTE: Temporary Stage Canopies must comply with the additional requirements of IFC Section 3105, including an independent 3<sup>rd</sup> party inspection.**

**TO APPLY**

Please submit two (2) complete sets of documents for plan review which must be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in detail that it will conform to the provisions of the code (see attached checklist). **Documents submitted for plan review must be received by the Fire Prevention Division office at least five (5) business days prior to the scheduled event.** Review and approval by the Fire District shall not relieve the applicant of their responsibility for compliance with the code. Any changes that are made to the site and floor plans after approval will require additional review and comment by the Fire District.

**FEES**

- Construction plan review and permit fees are determined by the total valuation of work (i.e., materials & labor) payable to the Fire District at the time the permit is picked up. The owner/erector of the tent submits plans for the Construction Permit. The Construction Permit will be issued to the owner of the tent.
- Operational Permit fees are based on the time required to prepare for and execute the required operational inspection and will be invoiced to the event sponsor/operator. The event sponsor of the tent submits plans for the Operational Permit. The Operational Permit will be issued to the event sponsor after successful completion of inspection.

**This checklist has been provided to help assist you in gathering the proper plan review documents.**

➤ **Site plan (Construction Permit) - Drawn to scale or dimensioned**

*The owner/erector of the temporary structure submits plans for the construction permit.*

- Name & address of site location.
- Number & size of tent(s).
- Location of tent(s) - Tents shall not be located within 20 feet of lot lines, buildings, other temporary structures, parked vehicles or internal combustion engines. *For the purpose of determining required distances, support ropes and guy wires shall be considered as part of the tent.* IFC 3103.8.2
- Generators - Generators shall not be located within 20 feet of the tent(s) and shall be isolated from contact with the public by fencing, enclosure or other approved means. IFC 3104.19
- Anchorage - The structure must be properly anchored (provide anchor type, size and weight) and structurally stable in order to withstand weather related collapse. Documentation of structural stability (wind speed, snow load) must be provided. IFC 3103.9 *Note: Anchoring structures with water-filled or sand-filled barrels is not typically allowed.*
- Emergency access - Access road(s) must generally extend to within 150 feet of all portions of the tent(s) and must be approved by the Fire District. IFC 3103.8 and 503.1.1
- Fire break - A fire break must provide an unobstructed passageway not less than 12 feet wide, free of guy ropes or other obstructions, and shall be maintained on all sides of the temporary structure(s). IFC 3103.8.6
- Means of egress maintenance - Guy wires, guy ropes and other support members shall not cross a "Means of Egress" at a height of less than 8 feet. IFC 3103.12.8
- Exits - The number of exits shall be in accordance with IFC 3103.12.2. Exits shall be spaced at equal intervals around the perimeter and shall be located such that all points are 100 feet or less from an exit.
- Exits shall remain open unless covered by colored contrasting curtains which slide freely on metal supports or doors which swing in the direction of exit travel. IFC 3103.12.3 & 3103.12.4
- Structure fabric &/or material - A certificate must be submitted indicating the name and address of the owner(s) of the tent, date the fabric was last treated with flame-resistant solution, name of person or firm treating the material, trade name or kind of chemical used, name of testing agency, and test standard. The tent shall have a permanently affixed label bearing the identification of size and fabric or material type. IFC 3104.2 and 3104.3
- Water - Identify the nearest fire hydrant or water supply for firefighting purposes. IFC 3104.13

➤ **Floor plan (Operational) - Drawn to scale or dimensioned**

*The event sponsor/operator of the tent submits plans for the operational permit.*

- Name and phone number of event sponsor.
- Exits - The number and capacity of exits shall be in accordance with IFC Table 3103.12.2. Exits shall be spaced at equal intervals around the perimeter and shall be located such that all points are 100 feet or less from an exit. Exits shall remain open unless covered by colored contrasting curtains which slide freely on metal supports or doors which swing in the direction of exit travel.
- Exit signs - Exits shall be clearly marked with signs of an approved self-luminous type or shall be internally or externally illuminated. IFC 3103.12.6
- Fire break - A fire break must provide an unobstructed passageway not less than 12 feet wide, free of guy ropes or other obstructions, and shall be maintained on all sides of the temporary structure(s). IFC 3103.8.6
- Aisles - Unobstructed aisles of not less than 44 inches shall be provided from seating areas and shall be progressively increased in width to provide not less than 1 foot of aisle width for each 50 persons. The arrangement of aisles shall be subject to approval by the Fire District and shall be maintained clear at all times during occupancy. IFC 3103.12.5
- Means of egress - Means of egress shall be illuminated while the structure is occupied. The required width of exits, aisles and passageways shall be maintained at all times to a public way. Guy wires, guy ropes and other support members shall not cross a means of egress at a height of less than 8 feet. IFC 3103.12.7 and 3103.12.8
- Seating arrangement - Please provide complete details showing all contents located inside the temporary structure. The seating arrangement within the structure shall be inspected and approved by the Fire District prior to use. IFC 3103.11
- Signs - "No Smoking" and "Occupant Load" signs shall be conspicuously posted. The occupant load allowed in an assembly structure shall be determined by the Fire District. IFC 3104.6 and 1004.3
- Combustible materials - Areas within and adjacent to the structure shall be maintained clear of all combustible materials or vegetation that could create a fire hazard. Combustible trash shall be removed at least once a day from the structure.
- Fire protection equipment - Fire extinguishers shall be installed in accordance with IFC 906.
- Heating and cooking equipment - Location, type and quantity of heating and/or cooking equipment or appliances to be used **within** the structure shall be installed and vented as specified in the International Mechanical Code and the International Fuel Gas Code. Electrical heating and cooking equipment shall comply with the National Electrical Code. Cooking and heating equipment shall not be located within 20 feet of exits, aisles, passageways or combustible materials. Outdoor cooking shall not be performed within 20 feet of the structure. IFC 3104.15
- LP-gas - The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with the IFC 3104.16.
- Flammable and combustible liquids - Flammable liquid-fueled equipment shall not be used in temporary structure(s). Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from structure(s). Refueling shall be performed in an approved location not less than 20 feet from structure. IFC 3104.17
- Standby personnel - In the interest of public safety, the Fire District may require one or more qualified persons to perform a fire watch during any activity. There shall be one trained crowd manager for every 250 occupants. There shall be an audible announcement 10 minutes prior to the start of each event to notify the occupants of the locations of each exit that is to be used in the event of a fire and/or emergency. IFC 3104.20