

# Livonia



## Tent & Temporary Structures

The City of Livonia  
Inspection Department  
Tent & Temporary  
Structures Guide.



Inspection Department  
33000 Civic Center Dr.  
City Hall Annex  
Livonia, MI 48154  
(734) 466-2580

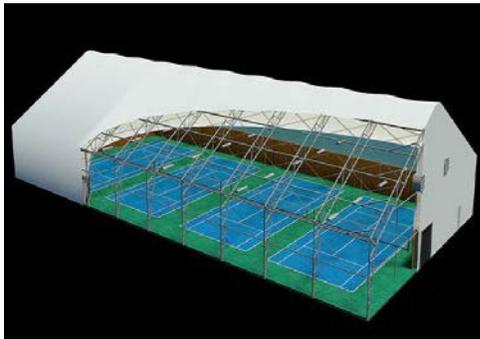
The following information comes from the Michigan Building Code Section 3103 Temporary Structures and 2015 International Fire Code, Chapter 31, entitled “Tents and Other Membrane Structures.” *When used in this document, the term “tent” encompasses all structures defined below.* Certain events may be subject to requirements beyond those seen in this document. Any questions about the information provided in this document may be directed to the Inspection Department (734) 466-2580.

***Definitions***

Tent - A tent is a structure, enclosure, or shelter, with or without side walls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents it protects.



Membrane Structure - A membrane structure is a cable, or frame-covered structure as defined by the Building Code, which is erected for fewer than 180 days and not otherwise defined as a tent, canopy or awning.



Air-Supported Structure - A structure wherein the shape of the structure is attended by air pressure, and occupants of the structure are within the elevated pressure area.



### ***Permit***

A permit from the Inspection Department is required prior to the erection, assembly or operation of tents having an area greater than of 120 square feet. The applicant must submit the information below use “[BS&A Online](#)” to apply for a permit and check permit status. When the plan has been approved, and fees paid, you can print the approved permit documents and schedule an inspection. Only after the permit has been issued may the setup begin. The permit shall not be valid for more than 180 days in a 12-month period. The permit submittal shall consist of the following information:

- A Site Plan (shows tent location on property along with other structures including buildings, fences, generators, propane cylinders, heating equipment, etc.).
- A Floor Plan (details the interior layout of the tent including the proposed use, table and chair arrangements, exit locations, fire extinguisher placement, etc.).
- Flame retardant certification for the tent fabric and any interior decorative material.
- Any other documentation applicable to the installation (engineering documents, etc.)

### ***Inspection***

A building inspector is required to inspect and approve the tent prior to it being accessible to the public. Inspections are scheduled by using “[BS&A Online](#)” to schedule an inspection and view inspection results. You are strongly encouraged to schedule the inspection far enough in advance to allow for corrections to be made before the event begins. The installer is required to be on site during the inspection unless previous arrangements have been made with the inspector. The user is encouraged to be on site during the inspection as well.

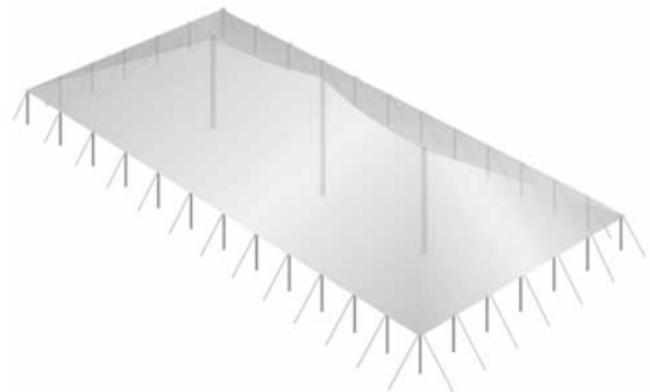
Upon the inspector’s arrival, the tent shall be completely erected with all interior elements and decorations in place, and compliant with all applicable code requirements. All submittal information given to the applicant at permit pick-up shall be on site and available for the inspector.

### ***Combustible Vegetation and Waste Material***

Combustible vegetation and waste material that could create a fire hazard shall be removed from the area occupied by a tent and from areas within 30 feet of tents.

### ***Anchoring***

Tents shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing. SMFR may require analysis by a Colorado licensed engineer when anchoring provisions are questionable. When required, this analysis shall be provided in writing and shall be provided with the plan review submittal and to the inspector on site.



### ***Elevated Platforms***

These requirements generally assume that tents are being installed on the ground. Elevated platforms on which tents will be erected require plans prepared by a Michigan licensed professional engineer. In addition to Inspection approval and permitting, these plans may require separate approval and permitting from the Livonia Fire Department. The engineer who prepares the plans must also inspect and approve the final installation of the elevated platform prior to the tent being erected. The engineer's approval shall be in writing and shall be provided to the Inspection during the tent inspection.



### ***Flame Retardant Identification***

A label shall be permanently affixed to the tent identifying the flame-retardant properties of the material.

### ***Location and Separations***

Tents shall be separated from other tents, from permanent buildings, and from lot lines by at least 20 feet (for tents used for cooking, see next section).

Exceptions:

1. When the total floor area of multiple tents is below 15,000 square feet, no separation is required between each tent.
2. When the total floor area of a single or multiple tents is below 10,000 square feet, and the floor area of tent and building combined is below the allowable building area in the building code, no separation is required between tents and permanent buildings.

All parts of a tent shall be located within 150' of an approved fire apparatus access road unless otherwise approved by Livonia Fire Marshall.

### ***Cooking and Food-Warming Operations***

Chafing fuel is permitted with chafers designed for such use in any tent. Chafing operations shall remain 10 feet away from exits or tent sidewalls. Chafing fuel cylinders which are not in use may not be stored in a tent.

Warming ovens and cooking operations that do not produce grease-laden vapors are permitted inside tents, provided the tent where these operations occur is separated from other tents by at least 20 feet and such tents are not used for assembly purposes.

Cooking appliances or operations which produce open flame, sparks, or grease-laden vapors shall not be installed or performed within 20 feet of any tent. This includes appliances such as grills, smokers, and deep-fat fryers. Class K fire extinguishers shall be present when deep-fat fryers are utilized.

***Propane Cylinders and Heating Equipment***

Propane cylinders shall be 10 feet from the sidewall of a tent and securely fastened in place to prevent unauthorized movement or damage. Hose used for propane equipment must be listed for the purpose and clearly identified by a stamp on the outside of the hose. Propane installations over 500 gallons require a separate submittal and permit from LFD.

Heating equipment shall be listed and installed in accordance with the manufacturer’s instructions. Equipment designed to be vented shall be vented to the outside air. In no case shall vents or flues be within 1 foot of the tent.



***Smoking and Open Flame***

Smoking shall not be permitted in tents. Approved “No Smoking” signs shall be conspicuously posted inside the tent. Open flames shall not be present within 20 feet of any tent.



***Generators and Electrical Installations***

Generators shall be located a minimum of 20’ from any tent. Cords or cables that cross egress paths must utilize cable ramps or other approved means to avoid trip hazards. All electrical fixtures, devices, cable assemblies, and extension cords shall be in good repair and installed in accordance with electrical codes. Separate permits and inspections will be required for the electrical installations.

***Parking and Vehicle Limitations***

No vehicle parking is permitted within 20’ of a tent. The parking area shall be designated by a visual barrier (cones, rope, etc.) to keep vehicles the required distance away.

Exceptions:

1. Vehicles on display during an event may be located inside a tent provided the fuel tank does not exceed one-quarter tank or 5 gallons (whichever is least), and the battery is disconnected. Fueling or defueling may not take place inside the tent.



***Decorative Materials***

Fabrics and other materials used to decorate the interior of a tent must be treated in accordance with NFPA 701 (large-scale test method). Certification of testing must be submitted for review and must be on site for the inspection. Hay, straw, shavings, or similar combustible materials shall not be located within any tent except those necessary for the daily feeding and care of animals.



***Occupant Load***

The following shall be used to determine the occupant load:

| FUNCTION OF SPACE                                 | OCCUPANT LOAD FACTOR        |
|---|-----------------------------|
| Assembly – Standing space (dance floors, etc.)    | 5 square feet per occupant  |
| Assembly – Concentrated (chairs only – not fixed) | 7 square feet per occupant  |
| Assembly – Un-concentrated (tables and chairs)    | 15 square feet per occupant |
| Mercantile (Retail display and sales)             | 30 square feet per occupant |
| Other Uses  | Consult with plan reviewer  |

**Number of Exits**

The minimum number of exits shall be as follows:

| OCCUPANT LOAD           | MINIMUM NUMBER OF EXITS | MINIMUM WIDTH OF EACH EXIT (in inches) |                    |
|-------------------------|-------------------------|--|--------------------|
|                         |                         | Tent                                   | Membrane Structure |
| 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 <sup>a</sup> | 7                       | 120                                    | 96                 |

- a. When the occupant load exceeds 3,000, 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.

**Exit Distribution and Discharge**

Exits shall be spaced at equal intervals around the perimeter and located so no point within the tent is over 100 feet from an exit. This measurement is determined as the travel path a person would be required to follow to reach the exit.

The exit discharge path from the tent must be unobstructed to a yard or public way large enough to accommodate the calculated occupant load and may not cross hazardous locations such as driveways in parking lots with the potential for moving traffic.

**Exit Signs and Emergency Lights**

Exit signs shall be provided for each exit when the occupant load of the tent exceeds 50. The exit signs shall be of an approved self-luminous type or shall be internally illuminated from the tent’s electrical supply with a battery back-up capable of operating for a period of not less than 90 minutes.

Emergency lights shall be provided for each exit when the occupant load of the tent exceeds 50. The emergency lights shall be wired from the tent’s electrical supply with a battery back-up capable of operation for a period of not less than 90 minutes.

Combination Exit Sign/Emergency Lights may be used to satisfy these requirements.



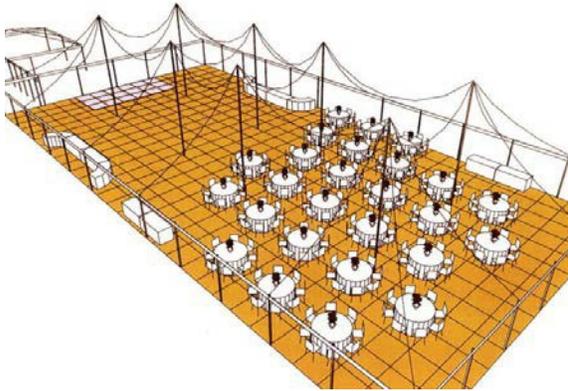
### ***Exit Covers***

Exits from the tent shall remain open unless covered by a flame-retardant 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***

Aisles shall be maintained clear at all times during occupancy of the tent. The width of aisles shall be in accordance with the following:

1. In areas serving employees only, the minimum aisle width shall be 24 inches, but not less than the width required by the number of employees served.
2. In public areas, smooth-surfaced, unobstructed aisles having a minimum width of not less than 44 inches shall be provided from seating areas, and aisles shall be progressively increased in width to provide, at all points, not less than 1 foot of aisle width for each 50 person served by such aisle at that point.



### ***Portable Fire Extinguishers***

Portable fire extinguishers (2-A:10BC minimum) shall be installed where they will be readily accessible and immediately available for use. They must be mounted on a bracket no more than 5 feet off the floor. No point within the tent may be located more than 75 feet of travel distance away from a fire extinguisher. Fire extinguishers may not be removed from adjacent businesses to provide protection for a tent. Decorative materials shall not obscure any fire extinguisher. Class K fire extinguishers shall be present when deep-fat fryers are utilized for cooking (only allowed 20' away from tents).



# INSPECTION REQUESTS

## Tent & Temporary Structure



The Inspection Department offers two convenient methods to allow you to request an inspection:

- Use “[BS&A Online](#)” to schedule an inspection and view inspection results. You will need to schedule an inspection at least one business day prior to the inspection date (before 3:30 pm).
- **QR Code for BS&A Online**– Scanning the QR Code above will give you direct access to BS&A Online as mentioned above.

Inspections scheduled before 3:30 p.m. may be added to the workload for the following working day. Electrical inspections fill up faster than other inspections, they will not be guaranteed the next day. Inspections will be done Monday through Friday from 9:30 a.m. - 3:30 p.m. Inspections may be done earlier or later depending on the Inspector’s workload. Inspectors will be available by phone from 8:30 – 9:30 a.m. and 4:00 – 5:00 p.m. See our [Staff Directory](#) to call the morning of your inspection for an a.m. or p.m. window. Inspections may be available outside the normal business hours by special arrangement. Additional fees for “After Hours” inspections shall be paid in advance of the inspection.

**A request to cancel an Inspection needs to be called in to the Inspection Department at (734) 466-2580 before 9:00 a.m. on the day of the requested Inspection.**

**Please make sure your project is ready for an Inspection. Inspections will not be done and a re-inspection fee may be charged if the following items are not completed or in place:**

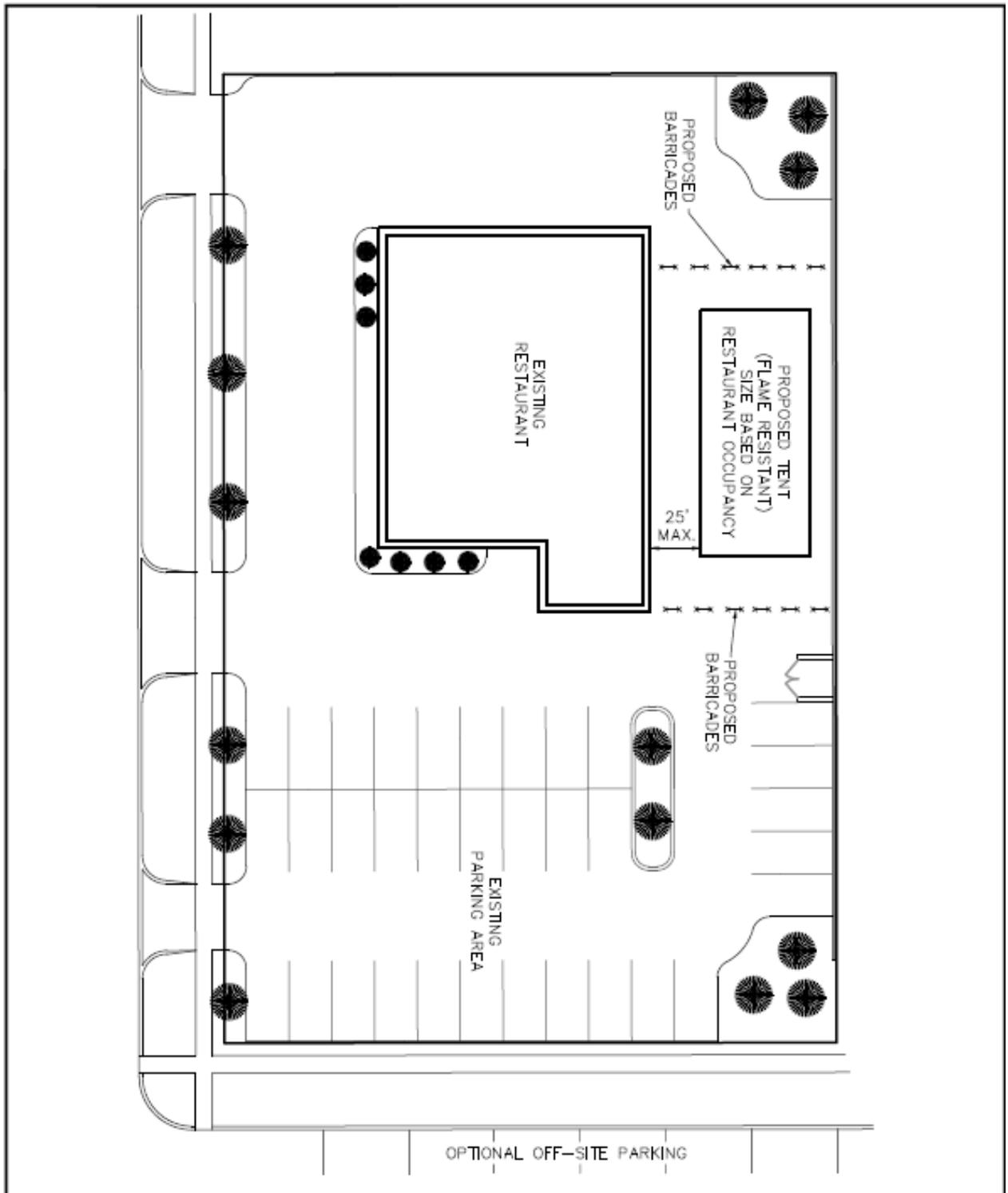
- Safe access to the job site and throughout the area to be inspected.
- Approved plans on site.
- The job is ready for inspection (refer to “Building Inspections”).
- The Street address and lot number posted and visible from street.
- Temporary soil erosion control properly installed if applicable.
- The Street kept clean.
- All building construction debris and materials contained on the property.
- Tree protection properly installed and maintained if applicable.

**Inspection results will be left on site after each inspection has been completed.**

**City of Livonia Sticker** This will have a list of all the inspection groups. If signed and dated at inspection requested the Inspection was Approved.

**Inspector’s Correction Notice** Inspection not approved. The Inspector’s Correction Notice will contain a list of items that need to be addressed before calling for a re-inspection. A re-inspection fee will be due for items not corrected at the time of the second Inspection. Inspections shall be approved before proceeding with the next phase of construction.

It is your responsibility as the permit holder to check the job site for the Inspection results. Please read the information on the Inspector’s Correction Notice. If you have any questions regarding this information, please call your Inspector between 8:30 – 9:30 a.m. and 4:00 – 5:00 p.m. see our [Staff Directory](#) online. For the quickest results use “[BS&A Online](#)” to view inspection results. Most Inspectors work in real-time, however there still could be a slight delay.



# CITY OF LIVONIA

Inspection Department  
 33000 Civic Center Drive  
 Livonia, Michigan 48154  
 (734) 466-2580 Office, (734) 466-2095 Fax

## TEMPORARY OUTDOOR SEATING DETAIL

DATE: 6/01/2020 JOB NO.: TOS-1

SCALE: 1" = N/A



SHEET 1 OF 1