



North Liberty Fire Department

Operational Permit Application

Temporary Tents & Membrane Structures

Permit Requirements

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*.

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents open on all sides that comply with all of the following:
 - 2.1. Individual tents having a maximum size of 700 square feet.
 - 2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total.
 - 2.3. A minimum clearance of 12 feet to all structures and other tents.

Permit Fee

Application Fee: \$25.00

Application Date: _____

Type of Temporary Structure (Check one)

- Tent with Walls
- Tent without Walls
- Membrane Structure
- Temporary Stage Canopy

Special Uses (Check all that apply)

- Display of Motor Vehicles
- Heating Equipment - Electric
- Heating Equipment - LPG
- Indoor Cooking Equipment – Electric
- Indoor Cooking Equipment – LPG
- Outdoor Cooking Equipment – Electric
- Outdoor Cooking Equipment – LPG
- Sale of Fireworks

Temporary Structure Dimensions

| Structure #1 | Total Size | sq./ft. | Length | ft. | Width | ft. |
|--------------|------------|---------|--------|-----|-------|-----|
| Structure #2 | Total Size | sq./ft. | Length | ft. | Width | ft. |
| Structure #3 | Total Size | sq./ft. | Length | ft. | Width | ft. |

Site Location Information

| | | | | |
|------------------|------|---------------------|------------|--|
| Setup Date: | | Setup Start Time: | | |
| Take Down Date: | | Take Down Time: | | |
| Address/Location | City | Property Owner Name | Parcel ID# | |
| | | | | |

Application Information

| | | |
|-------------------|-------------------|----------------------------|
| Last Name: | First Name: | MI: |
| City: | State: | Zip: _____ |
| | | Group / Organization Name: |
| Home Phone: _____ | Cell Phone: _____ | Email address: _____ |



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| Supplier/Rental Company | | | |
|--|--------------------|----------------|-------------------|
| Business Name: | | | |
| Business Address: | | | |
| City: | State: | Zip: | Business Phone #: |
| Contact Name: | Contact Phone #: | Email Address: | |
| Attach the Following Documents to this Application (Permits will not be processed without all the information below) | | | |
| 1) Certificate of flame resistance for each tent and/or membrane structure. 2) Certificate of flame resistance for interior decorative fabrics or materials. 3) A diagram/site plan & floor plan; see below. | | | |
| Site & Floor Plan Information | | | |
| The Site & Floor Plan shall include (Properly Scaled) on Page 3: 1) Location (IFC 3103.8.2) 2) Dimensions (all sides) of each structure 3) Layout of tables, chairs, bleachers, grandstands & stages (IFC 3103.11) 4) Aisle widths (IFC 3103.12.5) 5) Means of egress facilities (exits & clear exit pathways) (IFC 3103.12) 6) Location of exit signs, if required (IFC 3103.12.6) 7) Means of egress illumination (IFC 3103.12.7) 8) Location of "No Smoking" signs (IFC 3104.6) 9) Location and size of fire extinguishers (IFC 3104.12) 10) Location and type of heating, cooking & electrical equipment (IFC 3104.15) 11) Location of LPG tanks (If applicable) (IFC 3104.16) 12) Location of Flammable & Combustible Liquids (IFC 3104.17) 13) Location of Generators (If applicable) (IFC 3104.19) | | | |
| Statement of Veracity | | | |
| Upon approval of this application, I agree to abide the requirements set forth in the currently adopted edition of the International Fire Code and the authority having jurisdiction, that being the North Liberty Fire Department. I understand that the location must pass an inspection prior to issuance of the requested Permit. I do hereby grant permission for that inspection. Responsible Party: | | | |
| Printed First Name: | Printed Last Name: | Signature: | |
| | | | |

Permit Submittal Requirements.

- 1) Complete and sign permit application
- 2) Submit permit application online: <https://portal.iworq.net/NORTHLIBERTY/new-permit/600/418>
- 3) Attach permit application, product specification sheet and site plan
- 4) Fee= \$25



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SITE MAP

| | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | | | |
|----|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|----|
| 1 | | | | | | | | | | | | | | | | | | 1 | |
| 2 | | | | | | | | | | | | | | | | | | | 2 |
| 3 | | | | | | | | | | | | | | | | | | | 3 |
| 4 | | | | | | | | | | | | | | | | | | | 4 |
| 5 | | | | | | | | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | | | | | | | | 9 |
| 10 | | | | | | | | | | | | | | | | | | | 10 |
| 11 | | | | | | | | | | | | | | | | | | | 11 |
| 12 | | | | | | | | | | | | | | | | | | | 12 |
| 13 | | | | | | | | | | | | | | | | | | | 13 |
| 14 | | | | | | | | | | | | | | | | | | | 14 |
| 15 | | | | | | | | | | | | | | | | | | | 15 |
| 16 | | | | | | | | | | | | | | | | | | | 16 |
| 17 | | | | | | | | | | | | | | | | | | | 17 |
| | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | | | |



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Permit Review & Code Requirements

Upon receipt of application, the authority have jurisdiction will initiate an investigation of the site of the proposed display for the purpose of determining compliance with the currently adopted International Fire Code, 2018 Edition, Section 3101. Online access to complete fire code requirements can be found [<here>](#).

3103.5 Use period. Temporary tents, air-supported, air inflated or tensioned membrane structures shall not be erected for a period of more than 180 days within a 12-month period on a single premises.

3103.6 Construction documents. A detailed site and floor plan for tents or membrane structures with an *occupant load* of 50 or more shall be provided with each application for approval. The tent or membrane structure floor plan shall indicate details of the *means of egress* facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment.

3103.8.1 Access. Fire apparatus access roads shall be provided in accordance with Section 503.

3103.8.2 Location. Tents or membrane structures shall not be located within 20 feet of *lot lines*, buildings, other tents or membrane 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 temporary membrane structure or tent.

Exceptions:

1. Separation distance between membrane structures and tents not used for cooking is not required where the aggregate floor area does not exceed 15,000 square feet.
2. Membrane structures or tents need not be separated from buildings when all of the following conditions are met:
 - 2.1. The aggregate floor area of the membrane structure or tent shall not exceed 10,000 square feet.
 - 2.2. The aggregate floor area of the building and membrane structure or tent shall not exceed the allowable floor area including increases as indicated in the *International Building Code*.
 - 2.3. Required *means of egress* are provided for both the building and the membrane structure or tent including travel distances.
 - 2.4. Fire apparatus access roads are provided in accordance with Section 503.

3103.8.6 Fire break. An unobstructed fire break passageway or fire road not less than 12 feet wide and free from guy ropes or other obstructions shall be maintained on all sides of all tents and membrane structures unless otherwise *approved by the fire code official*.

3103.9 Anchorage required. Tents 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 *fire code official* on request.

3103.11 Seating arrangements. Seating in tents or membrane structures shall be in accordance with Chapter 10.

3103.12 Means of egress. *Means of egress* for temporary tents and membrane structures shall be in accordance with Sections 3103.12.1 through 3103.12.8.

3103.12.1 Distribution. *Exits* shall be spaced at approximately equal intervals around the perimeter of the tent or membrane structure, and shall be located such that all points are 100 feet or less from an *exit*.

3103.12.2 Number. Tents, or membrane structures or a usable portion thereof shall have not less than one *exit* and not less than the number of *exits* required by Table 3103.12.2. The total width of *means of egress* in inches shall be not less than the total *occupant load* served by a *means of egress* multiplied by 0.2 inches per person.

3103.12.3 Exit openings from tents. *Exit* openings from tents shall remain open unless covered by a flame-resistant curtain. The curtain shall comply with the following requirements:

1. Curtains shall be free sliding on a metal support. The support shall be not less than 80 inches above the floor level at the *exit*. The curtains shall be so arranged that, when open, no part of the curtain obstructs the *exit*.
2. Curtains shall be of a color, or colors, that contrasts with the color of the tent.



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3103.12.4 Doors. *Exit* doors shall swing in the direction of *exit* travel. To avoid hazardous air and pressure loss in air-supported membrane structures, such doors shall be automatic closing against operating pressures. Opening force at the door edge shall not exceed 15 pounds.

3103.12.5 Aisle. The width of *aisles* without fixed seating 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 persons served by such *aisle* at that point.

3103.12.5.1 Arrangement and maintenance. The arrangement of *aisles* shall be subject to approval by the *fire code official* and shall be maintained clear at all times during occupancy.

3103.12.6 Exit signs. *Exits* shall be clearly marked. *Exit* signs shall be installed at required *exit* doorways and where otherwise necessary to indicate clearly the direction of egress where the *exit* serves an *occupant load* of 50 or more.

3103.12.6.1 Exit sign illumination. *Exit* signs shall be either *listed* and *labeled* in accordance with UL 924 as the internally illuminated type and used in accordance with the listing or shall be externally illuminated by luminaires supplied in either of the following manners:

1. Two separate circuits, one of which shall be separate from all other circuits, for *occupant loads* of 300 or less.

2. Two separate sources of power, one of which shall be an *approved* emergency system, shall be provided where the *occupant load* exceeds 300. Emergency systems shall be supplied from storage batteries or from the on-site generator set, and the system shall be installed in accordance with NFPA 70. The emergency system provided shall have a minimum duration of 90 minutes when operated at full design demand.

shall be illuminated with light having an intensity of not less than 1 foot candle at floor level while the structure is occupied. Fixtures required for *means of egress* illumination shall be supplied from a separate circuit or source of power.

3103.12.7 Means of egress illumination. *Means of egress* shall be illuminated with light having an intensity of not less than 1 foot-candle at floor level while the structure is occupied. Fixtures required for *means of egress* illumination shall be supplied from a separate circuit or source of power.

3103.12.8 Maintenance of means of egress. 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. The surface of *means of egress* shall be maintained in an *approved* manner.

3104.2 Flame propagation performance treatment. Before a permit is granted, the *owner* or agent shall file with the *fire code official* a certificate executed by an *approved* testing laboratory certifying that the tents and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects, including sawdust where used on floors or passageways, are composed of material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall be treated with a flame retardant in an *approved* manner and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.

3104.3 Label. Membrane structures or tents shall have a permanently affixed label bearing the identification of size and fabric or material type.



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3104.4 Certification. An affidavit or affirmation shall be submitted to the *fire code official* and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit shall attest to all of the following information relative to the flame propagation performance criteria of the fabric:

1. Names and address of the *owners* of the tent or air-supported structure.
2. Date the fabric was last treated with flame-retardant solution.
3. Trade name or kind of chemical used in treatment.
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.

3104.5 Combustible materials. Hay, straw, shavings or similar combustible materials shall not be located within any tent or membrane structure containing an assembly occupancy, except the materials necessary for the daily feeding and care of animals. Sawdust and shavings utilized for a public performance or exhibit shall not be prohibited provided the sawdust and shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time.

3104.6 Smoking. Smoking shall not be permitted in tents or membrane structures. *Approved* "No Smoking" signs shall be conspicuously posted in accordance with Section 310.

3104.7 Open or exposed flame. Open flame or other devices emitting flame, fire or heat or any flammable or *combustible liquids*, gas, charcoal or other cooking device or any other unapproved devices shall not be permitted inside or located within 20 feet of the tent or membrane structures while open to the public unless *approved* by the *fire code official*.

3104.8 Fireworks. Fireworks shall not be used within 100 feet of tents or membrane structures.

3104.9 Spot lighting. Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet of such equipment shall be protected with *approved* noncombustible insulation not less than 91/4 inches thick.

3104.10 Safety film. Motion pictures shall not be displayed in tents or membrane structures unless the motion picture film is safety film.

3104.11 Clearance. There shall be a minimum clearance of at least 3 feet (914 mm) between the fabric envelope and all contents located inside membrane structures.

3104.12 Portable fire extinguishers. Portable fire extinguishers shall be provided as required by Section 906.

3104.13 Fire protection equipment. Fire hose lines, water supplies and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as required by the *fire code official*.

3104.14 Occupant load factors. The *occupant load* allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10.

3104.15 Heating and cooking equipment. Heating and cooking equipment shall be in accordance with Sections 3104.15.1 through 3104.15.7.

3104.15.1 Installation. Heating or cooking equipment, tanks, piping, hoses, fittings, valves, tubing and other related components shall be installed as specified in the *International Mechanical Code* and the *International Fuel Gas Code*, and shall be *approved* by the *fire code official*.

3104.15.2 Venting. Gas, liquid and solid fuel-burning equipment designed to be vented shall be vented to the outside air as specified in the *International Fuel Gas Code* and the *International Mechanical Code*. Such vents shall be equipped with *approved* spark arresters where required. Where vents or flues are used, all portions of the tent or membrane structure shall be not less than 12 inches from the flue or vent.

3104.15.3 Location. Cooking and heating equipment shall not be located within 10 feet of *exits* or combustible materials.



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

3104.15.5 Cooking tents. Tents with sidewalls or drops where cooking is performed shall be separated from other tents or membrane structures by not less than 20 feet.

3104.15.6 Outdoor cooking. Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet of a tent or membrane structure.

3104.15.7 Electrical heating and cooking equipment.

Electrical cooking and heating equipment shall comply with NFPA 70.

3104.16 LP-gas. The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with Sections 3104.16.1 through 3104.16.3.

3104.16.1 General. LP-gas equipment such as tanks, piping, hoses, fittings, valves, tubing and other related components shall be *approved* and in accordance with Chapter 61 and with the *International Fuel Gas Code*.

3104.16.2 Location of containers. LP-gas containers shall be located outside. Safety release valves shall be pointed away from the tent or membrane structure.

3104.16.2.1 Containers 500 gallons or less. Portable LP-gas containers with a capacity of 500 gallons or less shall have a minimum separation between the container and structure not less than 10 feet.

3104.16.2.2 Containers more than 500 gallons. 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 feet.

3104.16.3 Protection and security. Portable LP-gas containers, piping, valves and fittings that are located outside and are being used to fuel equipment inside a tent 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.

3104.17 Flammable and combustible liquids. The storage of flammable and *combustible liquids* and the use of flammable-liquid-fueled equipment shall be in accordance with Sections 3104.17.1 through 3104.17.3.

3104.17.1 Use. Flammable-liquid-fueled equipment shall not be used in tents or membrane structures.

3104.17.2 Flammable and combustible liquid storage. Flammable and *combustible liquids* shall be stored outside in an *approved* manner not less than 50 feet from tents or membrane structures. Storage shall be in accordance with Chapter 57.

3104.17.3 Refueling. Refueling shall be performed in an *approved* location not less than 20 feet from tents or membrane structures.

3104.18 Display of motor vehicles. Liquid- and gas-fueled vehicles and equipment used for display within tents or membrane structures shall be in accordance with Sections 3104.18.1 through 3104.18.5.3.

3104.19 Separation of generators. Generators and other internal combustion power sources shall be separated from tents or membrane structures by not less than 20 feet and shall be isolated from contact with the public by fencing, enclosure or other *approved* means.

3104.20 Standby personnel. Where, in the opinion of the *fire code official*, it is essential for public safety in a tent 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 the times such places are open to the public, or when such activity is being conducted.

3104.21 Combustible vegetation. Combustible vegetation that could create a fire hazard shall be removed from the area occupied by a tent or membrane structure, and from areas within 30 feet of such structures.



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3104.22 Combustible waste material. The floor surface inside tents or membrane structures and the grounds outside and within a 30-foot perimeter shall be kept free of combustible waste and other combustible materials that could create a fire hazard. Such waste shall be stored in *approved* containers and removed from the premises not less than once a day during the period the structure is occupied by the public.

TABLE 3103.12.2
MINIMUM NUMBER OF MEANS OF EGRESS AND MEANS OF EGRESS WIDTHS FROM TEMPORARY MEMBRANE STRUCTURES AND TENTS

| 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 |
| 1,000 to 1,999 | 5 | 120 | 96 |
| 2,000 to 2,999 | 6 | 120 | 96 |
| Over 3,000 ^a | 7 | 120 | 96 |

TEMPORARY STAGE CANOPIES

3105.1 General. Temporary stage canopies shall comply with Section 3104, Sections 3105.2 through 3105.8 and ANSI E1.21.

3105.2 Approval. Temporary stage canopies in excess of 400 square feet shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the *fire code official* and the building official.

3105.3 Permits. Permits shall be required as set forth in Sections 105.6 and 105.7.

3105.4 Use period. Temporary stage canopies shall not be erected for a period of more than 45 days.

3105.5 Required documents. The following documents shall be submitted to the *fire code official* and the building official for review before a permit is *approved*:

1. Construction documents: *Construction documents* shall be prepared in accordance with the *International Building Code* by a registered design professional. *Construction documents* shall include:
 - 1.1. A summary sheet showing the building code used, design criteria, loads and support reactions.
 - 1.2. Detailed construction and installation drawings.
 - 1.3. Design calculations.
 - 1.4. Operating limits of the structure explicitly outlined by the registered design professional including environmental conditions and physical forces.
 - 1.5. Effects of additive elements such as video walls, supported scenery, audio equipment, vertical and horizontal coverings.
 - 1.6. Means for adequate stability including specific requirements for guying and cross-bracing, ground anchors or ballast for different ground conditions.
2. Designation of responsible party: The *owner* of the temporary stage canopy shall designate in writing a person to have responsibility for the temporary stage canopy on the site. The designated person shall have sufficient knowledge of the construction documents, manufacturer’s recommendations and operations plan to make judgments regarding the structure’s safety and to coordinate with the *fire code official*.
3. Operations plan: The operations plan shall reflect manufacturer’s operational guidelines, procedures for environmental monitoring and actions to be taken under specified conditions consistent with the *construction documents*.



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3105.6 Inspections. Inspections shall comply with Section 106 and Sections 3105.6.1 and 3105.6.2.

3105.6.1 Independent inspector. The *owner* of a temporary stage canopy shall employ a qualified, independent approved agency or individual to inspect the installation of a temporary stage canopy.

3105.6.2 Inspection report. The inspecting agency or individual shall furnish an inspection report to the *fire code official*. The inspection report shall indicate that the temporary stage canopy was inspected and was or was not installed in accordance with the approved *construction documents*. Discrepancies shall be brought to the immediate attention of the installer for correction. Where any discrepancy is not corrected, it shall be brought to the attention of the *fire code official* and the designated responsible party.

3105.7 Means of egress. The *means of egress* for temporary stage canopies shall comply with Chapter 10.

3105.8 Location. Temporary stage canopies shall be located a distance from property lines and buildings to accommodate distances indicated in the construction drawings for guy wires, cross-bracing, ground anchors or ballast. Location shall not interfere with egress from a building or encroach on fire apparatus access roads.