

Membrane/Tent Permit

When do I need a membrane/tent permit?

Tents and membrane structures having an area in excess of 400 square feet (37 m²) require a permit and approval from the *fire code official*.

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents open on all sides which comply with all of the following:

2.1. Individual tents having a maximum size of 700 square feet (65 m²).

2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet (3658 mm), not exceeding 700 square feet (65 m²) total.

2.3. A minimum clearance of 12 feet (3658 mm) to all structures and other tents.

How long are these permits valid?

Temporary tents, air-supported, air-inflated, or tensioned membrane structures can be erected for 180 days within a 12-month period on a single premise.

How to Obtain Applications

Applications may be obtained at the Permit Assistance Center, online, or mailed upon request.

What information will I need to provide?

Provide information about the dates that the tent(s) will be used.

Before a permit is granted, the *owner* or agent shall submit information demonstrating that the tents and 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, are composed of material meeting the flame propagation performance criteria of NFPA 701 or shall be treated with a flame retardant in an *approved* manner and meet the flame propagation performance criteria of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.

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

The applicant shall provide 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.

With an *occupant load* of 50 or more (based on 8 square feet per person), a detailed site and floor plan for tents or membrane structures with shall be provided with each application. The tent or membrane structure floor plan shall indicate details exiting, seating capacity, arrangement of the seating and location and type of heating and electrical equipment.

Where can tents be located?

Tents or membrane structures shall not be located within 20 feet (6096 mm) 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 when the aggregate floor area does not exceed 15,000 square feet (1394 m²).
2. Curtains shall be of a color, or colors, that contrasts with the color of the tent.

Fire apparatus access.

Fire access roads must be provided to within 150 of the furthest most point of the tent, 20 feet wide unobstructed vertical clearance of 13 feet 6 inches. An on-site turn around and all weather surface must be provided complying with the Thurston County Roads Standard.

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 (66 N).

Aisles.

Aisle widths *without* fixed seating shall:

1. In areas serving employees only, the *aisle* width shall be 24 inches (610 mm) minimum but not less than the width required by the number of employees served.
2. In public areas, smooth-surfaced, unobstructed *aisles* having a width of not less than 44 inches (1118 mm) minimum shall be provided from seating areas, and *aisles* shall be

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progressively increased in width to provide, at all points, not less than 1 foot (305 mm) of *aisle* width for each 50 persons served by such *aisle* at that point.

Exits

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 (30 480 mm) or less from an *exit*. Tents, or membrane structures or a usable portion thereof shall have at least one *exit* and not less than the number of *exits* required by Table 2403.12.2. The total width of *means of egress* in inches (mm) shall not be less than the total *occupant load* served by a *means of egress* multiplied by 0.2 inches (5 mm) per *person*.

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) | 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 |

For SI: 1 inch = 25.4 mm.

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 signs.

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

Where required, exit sign illumination.

Exit signs shall be either the UL 924 internally illuminated type or shall be externally illuminated by lights supplied in the following manner:

1. Two separate circuits, one of which shall be separate from all other circuits, for *occupant loads* of 300 or less; or
2. Two separate sources of power, one of which shall be an *approved* emergency system, shall be provided when 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.

Means of egress illumination.

Means of egress shall have lights not less than 1 foot-candle (11 lux) 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.

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 (2438 mm).

Inspections.

The entire tent, air-supported, air-inflated or tensioned membrane structure system shall be inspected at regular intervals, but not less than two times per permit use period, by the permittee, *owner* or agent to determine that the installation is maintained in accordance with this chapter.

Exception: Permit use periods of less than 30 days.

Combustible material.

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.

Smoking.

Smoking shall not be permitted in tents or membrane structures. *Approved* "No Smoking" signs shall be conspicuously posted

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 (6096 mm) of the tent or membrane structures while open to the public unless *approved* by the *fire code official*.

Fireworks.

Fireworks shall not be used within 100 feet (30 480 mm) of tents or membrane structures.

Spot lighting.

Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with *approved* noncombustible insulation not less than 9 1/4 inches (235 mm) thick.

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Safety film.

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

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.

Portable fire extinguishers.

A 2A:10BC Portable fire extinguisher shall be provided for each 1500 square feet and within 75' of travel distance.

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 *International Mechanical Code* and the *International Fuel Gas Code*, and shall be *approved* by the *fire code official*.

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 when required.

Where vents or flues are used, all portions of the tent or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

Cooking and heating equipment shall not be located within 10 feet (3048 mm) of *exits* or combustible materials.

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*.

Tents with sidewalls or drops where cooking is performed shall be separated from other tents or membrane structures by a minimum of 20 feet (6096 mm).

Outdoor cooking.

Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet (6096 mm) of a tent or membrane structure.

LP-gas.

LP-gas equipment shall be *approved* and in accordance with Chapter 38 and with the *International Fuel Gas Code*. LP-gas containers shall be located outside. Safety release valves shall be pointed away from the tent or membrane structure. Portable LP-gas containers with a capacity of 500 gallons

(1893 L) or less shall have a minimum separation between the container and structure not less than 10 feet (3048 mm). Portable LP-gas containers with a capacity of more than 500 gallons (1893 L) shall have a minimum separation between the container and structures not less than 25 feet (7620 mm).

Portable LP-gas containers, piping, valves and fittings which 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.

Flammable-liquid-fueled equipment shall not be used in tents or membrane structures. Flammable and *combustible liquids* shall be stored outside in an *approved* manner not less than 50 feet (15 240 mm) from tents or membrane structures. Storage shall be in accordance with Chapter 34. Refueling shall be performed in an *approved* location not less than 20 feet (6096 mm) from tents or membrane structures.

Display of motor vehicles.

Batteries shall be disconnected in an appropriate manner. Vehicles or equipment shall not be fueled or defueled within the tent or membrane structure. Fuel in the fuel tank shall not exceed one-quarter of the tank capacity or 5 gallons (19 L), whichever is less. Fuel systems shall be inspected for leaks. Fuel tank openings shall be locked and sealed to prevent the escape of vapors. The location of vehicles or equipment shall not obstruct *means of egress*.

Places of assembly.

When a compressed natural gas (CNG) or liquefied petroleum gas (LP-gas) powered vehicle is parked inside a place of assembly, all the following conditions shall be met:

1. The quarter-turn shutoff valve or other shutoff valve on the outlet of the CNG or LP-gas container shall be closed and the engine shall be operated until it stops. Valves shall remain closed while the vehicle is indoors.
2. The hot lead of the battery shall be disconnected.
3. Dual-fuel vehicles equipped to operate on gasoline and CNG or LP-gas shall comply with this section and IFC Sections 2404.18.1 through 2404.18.5.3 for gasoline-powered vehicles.

Competitions and demonstrations.

Liquid and gas-fueled vehicles and equipment used for competition or demonstration within a tent or membrane structure shall comply with the following:

1. Fuel for vehicles or equipment shall be stored in *approved* containers in an *approved* location outside of the structure.

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2. Refueling shall be performed outside of the structure.
3. Fuel spills shall be cleaned up immediately.

Generators.

Generators and other internal combustion power sources shall be separated from tents or membrane structures by a minimum of 20 feet (6096 mm) and shall be isolated from contact with the public by fencing, enclosure or other *approved* means.

Standby personnel.

When, in the opinion of the *fire code official*, it is essential for public safety in a tent or membrane structure 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.

Standby personnel shall keep diligent watch for fires during preparation through closure of the property and take prompt measures to extinguish fires that occur and assist in the evacuation of the public from the structure.

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

Combustible waste material/vegetation.

Inside tents or membrane structures and the grounds outside and within a 30-foot (9144 mm) perimeter shall be free of combustible waste, vegetation and other combustible materials that could create a fire hazard. Such waste shall be stored in *approved* containers and removed from the premises at least once a day during the period the structure is occupied by the public.

How do I Apply?

Submit a completed application package to the Permit Assistance Center with the applicable fee. Complete package requirements are outlined on each Supplemental application.

What Form of Payment is Accepted?

Application fees may be paid by check, credit card (Visa or MasterCard), or cash.

Review Process and Timing

If the application is complete, a project tracking number is assigned and routed to the applicable reviewing department(s). Timelines vary depending on the type of application.

Do I need an Appointment?

No. Applications are processed on a first come first serve basis.

Hours of Operation

The Permit Assistance Center is open Monday through Friday from 8 a.m. until 12:30 p.m.

Arrive no later than 11:30 a.m. if submitting an application.

If technical assistance is needed, representatives from Planning and Environmental Health are available Tuesday through Thursday.

I Still Have Questions...

For additional information, speak with a staff member at the Permit Assistance Center. Contact information is listed below. You may also review all Thurston County Codes online on the County website referenced at the bottom of page 1.