Temporary Membrane Structures and Tents
Requirements and Recommendations

The Everett Fire Department is committed to promoting public safety and ensuring that your event is successful and safe. The purpose of these guidelines is to familiarize event promoters and vendors with fire and life safety requirements enforced by the Everett Fire Department.

A. DEFINITIONS

1. **TENT** - 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.

2. **MEMBRANE STRUCTURE** - An air-inflated, air supported, cable or frame-covered structure as defined by the International Building Code and not otherwise defined as a tent. See Chapter 31 of the International Building Code.

3. **CANOPY** – A structure or architectural projection of rigid construction over which a covering is attached that provides weather protection, identity or decoration, and may be structurally independent or supported by attachment to a building on one end and by not less than on stanchion on the outer end.

B. APPROVAL REQUIRED - Tents and membrane structures having an area in excess 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 which comply with all of the following:
   a. Individual tents having a maximum of 700 square feet.
   b. The aggregate area of multiple tents placed side by side without a firebreak clearance of 12 feet (3,658 mm), not exceeding 700 square feet total.
   c. A minimum clearance of 12 feet to all structures and other tents.

C. CONSTRUCTION DOCUMENTS

1. A detailed site plan shall be provided with each application for approval indicating access, location on property and parking.
2. A floor plan shall be included for tents or membrane structures with an occupant load of 50 or more. 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.

D. ACCESS, LOCATION AND PARKING

1. Fire access road shall have an unobstructed width of not less than 20 feet and an unobstructed vertical clearance of not less than 13 feet, 6 inches.
2. Tents or membrane structures shall not be located within 20 feet of lot lines, buildings, other tents, canopies and other membrane structures, parked vehicles or internal combustion engines.
3. 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.
2. Membrane structures or tents need not be separated from buildings when all of the following conditions are met (if this exception is used, note the following on the permit form):
   1) The aggregate floor area of membrane structure or tent shall not exceed 10,000 square feet.
   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.
3) Required means of egress provisions are provided for both the building and membrane structure or tent, including travel distances.

4) Fire apparatus roads are provided.

E. STRUCTURAL STABILITY - Tents or membrane structures and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent collapse.

F. MEANS OF EGRESS
1. Exits shall be spaced at approximately equal intervals around structure and at no point in the structure more than 100 feet from exits (see the following chart for number required).
2. Exit openings from tents shall remain open unless covered by a flame-resistant curtain.
3. Means of egress shall be illuminated with a 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.

<table>
<thead>
<tr>
<th>OCCUPANT LOAD</th>
<th>MINIMUM NUMBER OF MEANS OF EGRESS</th>
<th>TENT</th>
<th>MEMBRANE STRUCTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 199</td>
<td>2</td>
<td>72</td>
<td>36</td>
</tr>
<tr>
<td>200 to 499</td>
<td>3</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>500 to 999</td>
<td>4</td>
<td>96</td>
<td>72</td>
</tr>
<tr>
<td>1,000 to 1,999</td>
<td>5</td>
<td>120</td>
<td>96</td>
</tr>
<tr>
<td>2,000 to 2,999</td>
<td>6</td>
<td>120</td>
<td>96</td>
</tr>
<tr>
<td>3,000 and over</td>
<td>7</td>
<td>120</td>
<td>96</td>
</tr>
</tbody>
</table>

G. AISLES
1. Aisles shall be 44'' minimum width.
2. The required width of exits, aisles and passageways shall be maintained at all times to a public way.
3. The arrangement of the aisles is subject to approval by the fire code official.

H. EXIT SIGNS
1. Exits shall be clearly marked.
2. Exit signs shall be installed at required exit doorways and as necessary to indicate clearly the direction of egress when the exit serves an occupant load of 50 or more. The exit sign shall be an approved self-luminous type or shall be internally or externally illuminated by fixtures supplied in the following manner:
   a. Two separate circuits, one of which shall be separate from all other circuits, for occupant loads of 300 or fewer; or
   b. 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 the ICC Electrical Code.

I. FLAME RESISTANT TREATMENT/STANDARDS
1. All materials shall be of flame-resistant material or shall be made fire resistant in an approved manner. Certification shall be submitted with site plan.
2. Membrane structures or tents shall have a permanently affixed label bearing the identification of size and fabric or material.

J. SMOKING/OPEN OR EXPOSED FLAME
1. No smoking allowed in any tent or membrane structure or adjacent area.
2. "No Smoking" signs will be conspicuously posted.
3. No 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 be permitted inside or located
within 20 feet of the tent or membrane structure while open to the public unless approved by the fire code official.

4. Warming of food that uses solid flammables, butane or other similar devices, which do not pose an ignition hazard, shall be approved.

K. FIRE EXTINGUISHERS - Minimum 2A-10BC shall be provided with proper current service tag.
   1. One required for 400-1,500 square feet.
   2. Two required for 1,501-3,000 square feet.
   3. One additional extinguisher for each additional 2,000 square feet or portion thereof.

L. HEATING/COOKING EQUIPMENT - See LPG provisions

References:

International Fire Code
Everett Municipal Code
National Fire Protection Association