



This document explains the **building permit** requirements for temporary outdoor stages used in conjunction with performances, presentations or events. Reference to “stages” means stages or raised platforms and any associated overhead structures. Stages governed by this policy are outside of permanent buildings and are standalone structures that consist of a raised area used for the presentation of music, plays or other entertainment; reviewing stands for dignitaries; religious ceremonies; and similar purposes. Temporary stages are erected for a period not to exceed 180 days.

## Are building permits required?

**Yes, in most cases.** In order to ensure public health, safety and welfare, temporary stages are subject to the requirements of the state building code. A permit and inspections are required, unless the stage meets one of these **exceptions**:

1. It covers an area of 120 square feet or less; or
2. It meets all of the following criteria:
  - a. The stage is 48 inches or less above adjoining grade or is intended to be used by less than 10 people at any time; and
  - b. Has no overhead truss structure, side or back towers (for roof, lights, equipment, sound system or promotional material).

## What do I need to submit to get a permit?

An application for permit should include:

1. Site Plan.
2. Description of Intended Use.
3. Construction Details.
4. Structural Analysis.
5. Weather Contingency Plan, if necessary. See Design Requirements for wind and snow loads.

**Site Plan:** Show the location of the stage in relation to property lines and other structures on the site.

**Description of Use:** Describe the proposed use of the stage, and include the schedule for the construction period, period of use, and strike period.

**Construction Details:** Provide complete plans and details for the construction of the stage, stairs and/or ramps, and any truss towers, canopy roof cover or other overhead structures.

Drawings must include dimensions, components, material types, fastener types and specifications.

Where guys or other bracing systems are used, the proposed guy/bracing arrangements must be shown.

If ballasts are used, the plans must clearly identify the type, weight and location of each ballast.

If ground anchors are used, they must be specified in accordance with the manufacturer’s guidelines, taking into consideration the soil conditions at the site where the stage is to be erected.

**Structural Analysis:** A structural analysis is required that meets the requirements of OSSC Chapter 16, performed by an Oregon registered engineer in accordance with established engineering practice. Documents must be stamped and signed.

*Exception:* Conventional, light-frame construction not exceeding 20 feet in height above grade.

A summary sheet must be prepared showing all the design loadings, support reactions, and operating parameters of the temporary structure, and must be provided with the structural calculations that form part of the engineering documentation.

## What are the building code requirements related to temporary stages?

See a summary of Design Requirements on the reverse side of this document.

## Where can I find other requirements related to my event?

You can find information on planning an event at: [www.eugene-or.gov](http://www.eugene-or.gov) > Services > Events

## What if I have additional questions?

Please contact staff at 541-682-5613 (voice-mail) or email [commercialpermitinfo@ci.eugene.or.us](mailto:commercialpermitinfo@ci.eugene.or.us) for information related to these standards. Or visit us at our offices, open 9:00a.m.-5:00p.m., M-F.

## Design Requirements

Temporary outdoor stages must conform to 2019 Oregon Structural Specialty Code provisions related to structural strength, fire safety, means of egress and accessibility.

### A. Structural Strength.

1. **Live load.** The platform or stage must be capable of supporting a 125 psf live load.
2. **Wind load.** Any overhead structures must be designed to resist wind loads. The wind load on all effective wind surface areas, including any additive elements to the temporary structure such as video walls, scenery, coverings, lighting and audio equipment, shall be included in the analysis.

Information must be provided that shows that the structure is capable of resisting wind loads determined using one of the following methods:

- a. Reduced design wind pressure, determined in accordance with OSSC §1609 and ASCE 7-16 using a reduced design wind speed based on how long it will be in place:

Installation period, including erection and strike	Design wind speed ( $V_{ULT}$ )
Less than 6 weeks	75 mph
6 weeks to 6 months	80 mph

- b. Maximum wind pressure that the structure can resist, determined by an analysis of the structure's capacity to resist wind loads. Requires approval from the building official. The ultimate design wind speed shall be permitted to be reduced to not less than 50 mph. In this case, a weather contingency plan is required to be submitted, which includes the following:
    1. Maximum wind speed that the structure can safely withstand.
    2. Qualified, responsible person(s) who will be on site for the whole period of the installation and who has the authority to implement the plan.
    3. Procedures for monitoring local wind speeds and wind forecasts (such as anemometer on site, weather forecasts reviewed at specified intervals, etc.)
    4. Wind speed threshold(s) at which specific actions will be taken (for example: *roof to be lowered to stage level at XX mph, or scrim to be removed at XX mph*)
    5. Procedures in place to evacuate facility and take the identified actions to make the structure safe in the event that forecasted or actual wind speeds reach agreed upon thresholds.
    6. Time it takes to complete each identified action. Can the actions be taken safely before the threshold wind is forecast or likely to arrive?
3. **Bracing.**
    - a. Guys. Where guys or other bracing systems are used, the proposed guy/bracing arrangements, guy/bracing forces and hold down requirements shall be reported in the design calculations.
    - b. Ballast. The weight of ballast required shall resist slippage and uplift with a minimum design factor of 1.5.

4. **Snow load.** Canopy or roof structures that will be erected and in place during the calendar period beginning October 15<sup>th</sup> and ending April 15<sup>th</sup> of the following year, must be designed to support a 20 psf snow load.

If the canopy will not support the required snow load, a weather contingency plan will be required. The plan must detail actions that will be taken to remove or uncover the structure if forecasts indicate the possibility of snowfall during the installation period.

### B. Means of egress

Stages with an area of 750 sq ft or less require a minimum of one exit stair or ramp that complies with OSSC 1011 or 1012 respectively. Larger stages require at least two exit stairs or ramps.

- C. Guards. On other than the audience side, guardrails are required on open sides of stages >30" above grade. (OSSC 1015)

### D. Accessibility.

An accessible route to the stage and vertical means of access (ramp or platform lift) is required.

Exception: A vertical means of access is not required if all of the following apply:

1. There will be no public access to the stage; and
2. There will be no audience participation in the events on the stage; and
3. The presenters or entertainment groups that will be using the stage are known, and the owner or event organizer has verified that there are no individuals with known physical or mental limitations necessitating access. If an individual's need becomes known, the owner, event organizer or employer may be responsible making accommodations.

### E. Fire Safety

1. The stage must be located at least 10 feet from property lines and 20 feet from other buildings.
2. Canopy and sidewall coverings, decorative materials and trim must be either noncombustible or meet the fire propagation performance criteria of NFPA 701.
3. A portable fire extinguisher, minimum 2-A rating, must be provided in a readily accessible location.

### F. Electrical Safety

Electrical installations must comply with OESC Article 520.

References:

ANSI E1.21-2013, Temporary Structures Used for Technical Production of Outdoor Entertainment Events

ASCE/SEI 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures

ASCE 37-14, Design Loads on Structures During Construction, section 6 only.

OESC: 2017 Oregon Electrical Specialty Code (based on 2017 NEC)

OSSC: 2019 Oregon Structural Specialty Code (based on 2018 IBC)