



Design Criteria and Current Codes

Commercial Permits

- 2019 Oregon Structural Specialty Code (OSSC)
 - 2019 Oregon Zero Energy Ready Commercial Code (Chapter 13 of the 2019 OSSC)
 - Part I – Commercial Energy Provisions - ASHRAE 90.1-2016
 - Part II – Multi-family Energy Provisions – 2018 Int. Energy Conservation Code
- 2019 Oregon Mechanical Specialty Code (OMSC)
- 2017 Oregon Plumbing Specialty Code (OPSC)
- 2017 Oregon Electrical Specialty Code (OESC)

Referenced Standards:

- ASCE 7-16 Minimum Design Loads and Assoc. Criteria
- ICC A117.1-90 Accessible and Usable Buildings and Facilities
- NFPA 13-16 Standard for Installation of Sprinkler Systems (Also 13D-16, 13R-16)

General Design Requirements

- **Earthquake:** Section 1613 – Link to information <https://hazards.atcouncil.org/>
- **Snow:** Section 1608
The minimum design roof snow load is 25 psf where applicable per the *2019 Oregon Structural Specialty Code*. Ground snow load used for determining drift requirements is based on *Snow Load Analysis for Oregon* as published by the Structural Engineer Association of Oregon. Ground snow loads at a specific site can be determined at the following link: <http://snowload.seao.org/lookup.html>.
- **Wind:** Section 1609
- **Soils:** Geotechnical investigations per Section 1803 (reporting per Sec. 1803.6)
- **Rain:** Figure 1611.1, 1.3” per hour (100-year, 1-hour rainfall)

Residential Permits

- 2017 Oregon Residential Specialty Code
- 2017 OPSC
- 2017 OESC

The structural requirements for residential projects may be either prescriptive or engineered. In prescriptive design, the **ORSC** (Oregon Residential Specialty Code) defines a conservative method of construction to resist vertical and lateral loads. In engineered design, an engineer licensed in the State of Oregon prepares engineering calculations and drawings that demonstrate how the structure resists vertical and lateral loads.

The following are design values may be used for prescriptive residential design:

Snow: 25 psf

Frost Depth: 12 inches

Wind: 120 mph (Figure R301.2(4))

Seismic: Design Category is D1