



## WASHINGTON COUNTY - ENGINEERING STRUCTURAL DESIGN CRITERIA

The current state building code governing commercial and engineered residential construction is the *2014 Oregon Structural Specialty Code (OSSC)*.

### Seismic:

- Site specific seismic design parameters may be determined based upon using the following USGS link: <http://earthquake.usgs.gov/designmaps/us/application.php> and selecting 2012 *International Building Code* as the design code reference document per 2014 OSSC 1613.3.1.
- Site Class D shall be used unless the Building Official or geotechnical report determines Site Class E or F soils are present at the site.

### Wind:

Design wind pressures are to be determined using the 3-second gust wind speed and the procedures of the *2010 edition of Minimum Design Loads for Buildings and Other Structures (ASCE 7-10)* or in accordance with the alternate method contained in the OSSC. The design wind speeds (3-second gust) for WA County are:

Risk Category	Vult (mph)	Vasd (mph)
I	115	89
II	120	93
III, IV	130	101

Wind exposure category must be determined by the Engineer of Record based upon site conditions.

### Snow:

- Per 2014 OSSC, Ground snow load 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>

### Soils:

Foundation and retaining wall design parameters may be based upon the presumptive load-bearing values per 2014 OSSC Table 1806.2, or as justified by submission of a Geotechnical Report.

- Default allowable foundation bearing capacity within WA County is 1,500 psf.
- Default lateral soil loads shall be 40 psf/ft for laterally unrestrained retaining walls and 55 psf/ft for laterally restrained retaining walls (basement walls). Lateral pressures for walls supporting sloping backfill or surcharge loads must be determined by a Geotechnical Report.
- Minimum frost depth is 12-inches for elevations less than 500-ft. Minimum frost depth is 18-inches for elevations greater than or equal to 500-ft unless the Building Official determines that a deeper frost depth is required for the site.