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](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:

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Vult (mph)</th>
<th>Vasd (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>115</td>
<td>89</td>
</tr>
<tr>
<td>II</td>
<td>120</td>
<td>93</td>
</tr>
<tr>
<td>III, IV</td>
<td>130</td>
<td>101</td>
</tr>
</tbody>
</table>

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](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.