



Design Loads for City of Washougal

The City of Washougal formally adopted the International Codes as of February 15th, 2024.

Applicable codes are as follows:

- 2021 International Building Code w/ WA Amendments - ICC/ANSI A117.1-2017 Accessibility
- 2021 International Residential Code w/ WA Amendments - 2021 Washington State Energy Codes
- 2021 International Mechanical Code w/ WA Amendments - Washougal Municipal Code Title 17
- 2021 Uniform Plumbing Code w/ WA Amendments - Washington State Water Conservation Code
- 2021 International Fuel Gas Code w/ WA Amendments

The minimum design loads are as follows:

Ground Snow Load*	Wind	Seismic	Subject to Damage				Winter Design Temp	Ice Shield Req'd	Flood Hazards	Air Freezing Index	Mean Annual Temp	Soil Bearing Pressure
25 PSF	See Chart below	Residential: D0	Weather	Frost	Termite	Decay	Per WSEC	N/A	***	N/A	50°	1500# Unless Noted By Geo Engineer
		Commercial: **	Moderate	12" Min	Slight to Moderate	Slight to Moderate						

* Roof snow load shall be designed as a minimum 25 psf.

** All locations within the city are classified as Seismic Design Category D0. Seismic design parameters for specific sites shall be determined based upon zip-code or latitude and longitude using the web tool developed by the United States Geologic Survey located at: <http://earthquake.usgs.gov/research/hazmaps/design/>

*** Based on FEMA maps of local area.

- For all structures within 1500 feet of the Columbia River, exposure "C" and shall be based on specific site location and conditions.
- Structures located inland and beyond 1500 feet of the Columbia shall be designed per Exposure "B".
- Cell towers shall be designed to meet TIA-222-G standards using the following 2 analyses: 105 mph 3 second gust without ice (Annex B Table using footnote 1.)

Wind Speed Table

3-Second Gust Wind Speeds for the City of Washougal, Washington for Use with the 2021 IBC (ASCE7-16)

Risk Occupancy Category (ASCE 7-16 Table 1.5.1) | 3-Second Gust Wind Speed (**rounded to the nearest 5 mph**)

Wind design speeds are coordinated with Risk Categories for structures, per 2021 IBC and ASCE 7-16. Location specific basic wind speeds shall be permitted to be determined using www.atcouncil.org/windspeed

Risk Occupancy Category (Table 1604.5) 3-Second Gust Wind

Residential (IRC) & Commercial (IBC) II V = 97 mph

Commercial (IBC) III V = 103 mph

Commercial (IBC) IV V = 108 mph