



DESIGN CRITERIA

Table R301.2 (1) from 2015 IRC and from 2015 IBC General Design Criteria

Roof and Ground Snow Load	20 psf, (min. roof live load is 20 psf, also)
Ultimate Design Wind Speed and Exposure	110 mph (all parts of City are Exposure C)
Nominal Design Wind Speed	85 mph, Wind Speed-up Req's of 1609.1.1.1 (IBC) Apply to all hillside & hilltop development in Richland
Seismic Design Category for IRC	C for IRC*
Seismic Design for IBC 2015 Table 1613.3.5(1)(2)*	SDS = 0.50, SD1 = 0.20
*When designing lateral engineering for a residential building that is permitted under the IRC (but did not meet IRC prescriptive bracing), the IBC must be used for all engineering formulas, theories, etc. In these cases, a soils report may be required to justify using anything less than a Seismic Zone D from the IBC.	
Weathering	Severe Ice Shield Underlayment is REQUIRED due to occasional severe conditions, see R905, wherein the underlayment is only applicable for roof slopes of 6:12 pitch or under; over 6:12 it is not required.
Frost Line Depth	24 inches
Termite Damage	Slight to Moderate
Decay Damage	None
Energy Code Design Criteria (Richland is Climate Zone 5B under 2015 WSEC)	
Mean Annual Design Temperature	50 F
Winter	11 F
Summer	101 F
Summer Degree Range	30 F (change)
Yearly Degree Average	53.9 F
Heating Degree Days	4895
Cooling Degree Days	830
Average # of Clear Days	225 (occurs primarily April 1 to November 1)
Air Freezing Index	808
Other Design Information:	
Latitude & Elevation above sea level	46 North & 350 feet
Flood Hazard Information:	
Date City of Richland entered NFIP	1958
Date of currently adopted flood maps	March 1, 1984 (FIRM maps)