

**TABLE R301.2
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD ^a (psf)	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD ^f	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed ^b (mph)	Topographic effects ^c	Special wind region	Windborne debris zone		Weathering ^d	Frost line depth ^e	Termite				
25	98	Yes	No	No	D ₂	Moderate	18"	Slight to Moderate	No	See footnote ^f	170	51 °F
MANUAL J DESIGN CRITERIA												
Elevation		Altitude correction factor		Coincident wet bulb		Indoor winter design dry-bulb temperature		Indoor winter design dry-bulb temperature		Outdoor winter design dry-bulb temperature		Heating temperature difference
459 feet		0.99		66 °F		72 °F		72 °F		24 °F		48 °F
Latitude		Daily Range		Indoor summer design relative humidity		Summer design gains		Indoor summer design dry-bulb temperature		Outdoor summer design dry-bulb temperature		Cooling temperature difference
47°53'		M		50%		5		75 °F		83 °F		8 °F

- a. Design snow loads shall be determined in accordance with King County Public Rule 16-04 Structural Loading: Minimum Roof Snow Loads. $P_g = C_g * h_{msl}$ where P_g = ground snow load, C_g = ground snow load coefficient determined by interpolating the isolines established in the "King County Ground Snow Load Map," and h_{msl} = site elevation in feet above sea level, but the design roof snow load shall not be less than 25 psf.
- b. The basic wind speed is determined from the basic wind speed map in Figure R301.2(2) and reflects the ultimate design wind speed. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4 or by the Engineer of Record
- c. Topographic effects (Wind Speed-up Kzt factor) shall be determined on a site-specific basis in accordance with Section R301.2.1.5 or by the Engineer of Record.
- d. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The grade of masonry units shall be determined from ASTM C34, C55, C62, C73, C90, C129, C145, C216 or C652.
- e. The frost line depth may require deeper footings. Designer to verify if deeper frost depth is required based on geotechnical reports and studies.
- f. The City of Newcastle participates in the National Flood Insurance Program (NFIP). Areas of special flood hazard shall be determined per Newcastle Municipal Code Chapter 14.25.