TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

ROOF SNOW LOAD [a] (psf)	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			OUTDOOR DESIGN TEMP (F) - Heat/Cool	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD[e]	AIR FREZING INDEX	MEAN ANNUAL TEMP
	Speed [b] (mph)	Topographic effects[c]	Special wind region	Windborne debris zone		Weathering[d]	Frost line depth	Termite					
25	110	Yes	No	No	D2	Moderate	12”	Slight to Moderate	83/24	No	N.A.	113	53

MANUAL J DESIGN CRITERIA							
Elevation	**Latitude**	**Winter heating**	**Summer cooling**	**Altitude correction factor**	**Indoor design temperature**	**Design temperature cooling**	**Heating temperature difference**
338 feet	**47º34’39’’**	**72ºF max**	**75ºF min**	**0.99**	**72ºF**	**75ºF**	**48ºF**
Cooling temperature difference	**Wind velocity heating**	**Wind velocity cooling**	**Coincident wet bulb**	**Daily range**	**Winter humidity**	**Summer humidity**	
8ºF	**N.A.**	**N.A.**	**66**	**Medium**	**75%**	**68%**	

a. This is the minimum roof snow load. When using this snow load it will be left to the engineer’s judgment whether to consider drift or sliding snow. However, rain on snow surcharge of 5 psf must be considered for roof slopes less than 5 degrees.

b. The 110 mph Ultimate Design Wind Speed (3-second gust) as adopted by the 2018 IRC/ASCE 7-10 (or if using the IBC for structural design, the 98 mph Basic Design Wind Speed as adopted by the 2018 IBC/ASCE 7-16 may be used).

c. Wind exposure category and Topographic effects (Wind Speed-up Kzt factor) shall be determined on a site-specific basis by the Engineer of Record (components and cladding need not consider topographic effects unless otherwise determined 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 C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

e. The City of Mercer Island participates in the National Flood Insurance Program (NFIP); Regular Program (No Special Flood Hazard Area). Further NFIP participation information: CID 530083, Initial FHBM Identified 06/28/74, Initial FIRM Identified 05/16/95, Current Effective Map Date (NSFHA), Reg-Emer Date 06/30/97, 53033C0654G effective 8/19/2020.