

Department of Code Administration  
City of Alexandria, Virginia

Residential Design Criteria										
Ground Snow Load	Wind Speed	Seismic Design Category	Subject to Damage From			Winter Design Temperature	Ice Barrier Underlayment required	Flood Hazard	Air Freezing Index	Mean Annual Temperature
			Weathering (for Concrete)	Frost-line Depth	Termite					
25 #/ft <sup>2</sup>	115 mph	B	Severe	24"	Moderate to Heavy	17°	Yes	FIRM 4/30/1982	<1500	56°

Commercial Design Criteria					
Ground Snow Load	Wind Speed <sup>2</sup> Risk Cat. II	Seismic – Spectral Response Acceleration		Weathering	Frost Line
		S <sub>s</sub> %g	S <sub>1</sub> %g		
See Note 1	115 mph	15%	4.2%	Severe	24"

1. Until the Virginia Construction Code (VCC) is revised to reflect the updated ground snow load values from ASCE 7-22, the following options may be used:

a. The design may use the snow load from figures 1608.2(1) and 1608.2(2) in the 2021 VCC, and the design must comply with ASCE 7-16 requirements. Using the ground snow loads from VCC section 1608.2 combined with ASCE 7-22 is not permitted.

b. The design may use ASCE 7-22 provisions including the ground snow load values.
2. For all other risk categories see Figures 1609.3(2) through 1609.3(4) in the 2021 VCC.

MANUAL J DESIGN CRITERIA							
Elevation	Latitude	Winter heating	Summer cooling	Altitude correction factor	Design temperature Heating	Design temperature cooling	Heating temperature difference
66 ft	38 N	17F	92F	—	68F	75F	51F
Cooling temperature difference	Wind velocity heating	Wind velocity cooling	Coincident wet bulb	Daily range	Winter humidity	Summer humidity	—
17F	15mph	7.5mph	76F	18M	—	—	—