



Information for Designers

Local Design Criteria for Roanoke City, Salem City, Roanoke County and Town of Vinton

This information is provided for use by builders and designers and is in accordance with the 2012 editions of the Virginia USBC, the International Building Code and the International Residential Code.

Residential 1&2 Family Construction Design Parameters IRC Table R301.2(1)

	Ground Snow Load	Wind Speed MPH V _{3s}	Seismic Design Category	Subject to Damage From				Winter Design Temp	Ice Shield Req?	Flood Hazards
				Weathering	Frost Depth	Termite	Decay			
Roanoke City	30 psf	90	B	Severe	18"	Moderate - Heavy	Slight - Moderate	16°F	No	Note 1
Roanoke County	30 psf	90	B	Severe	24"	Moderate - Heavy	Slight - Moderate	16°F	No	Note 3
Salem	30 psf	90	B	Severe	24"	Moderate - Heavy	Slight - Moderate	16°F	No	Note 2
Town of Vinton	30 psf	90	B	Severe	24"	Moderate - Heavy	Slight - Moderate	16°F	No	Note 4

Commercial Construction Design Parameters IBC Chapter 16 and ASCE 7-2005

	Ground Snow Load	Wind Speed MPH V _{3s}	Spectral Response Acceleration		Frost Depth	Weathering	Flood Hazards
			S _s %g	S ₁ %g			
Roanoke City	30 psf	90	28 %*	7%*	18"	Severe	Note 1
Roanoke County	30 psf	90	28 %*	7%*	24"	Severe	Note 3
Salem	30 psf	90	28 %*	7%*	24"	Severe	Note 2
Town of Vinton	30 psf	90	28 %*	7%*	24"	Severe	Note 4

*Interpolated values from IBC figures 1613.5(1) and 1613.5(2); reference IBC tables 1613.5.6(1) and 1613.5.6(2) for seismic design category. More conservative spectral response coefficients are permitted.

Additional Design Information

Current Code Editions	Miscellaneous Data
2012 Virginia Uniform Statewide Building Code Effective 7/14/2014 Referenced Codes: <ul style="list-style-type: none"> ▪ 2012 International Building Code ▪ 2012 International Plumbing Code ▪ 2012 International Mechanical Code ▪ 2012 International Fuel Gas Code ▪ 2012 International Energy Conservation Code ▪ 2012 International Residential Code ▪ 2012 International Existing Building Code ▪ 2012 International Fire Code ▪ 2009 ANSI A117.1 Accessible & Usable Buildings & Facilities ▪ 2010 NFPA 13 Standard for the Installation of Sprinklers ▪ 2010 NFPA 72 National Fire Alarm Code ▪ 2011 NFPA 70 National Electrical Code 	<ul style="list-style-type: none"> ▪ Wind Exposure (IBC Sec. 1609.4) - Category B ▪ Yearly Heating Degree Days – 4,150 ▪ Yearly Cooling Degree Days – 1,154 ▪ Climate Zone – 4 ▪ Mean Annual Temperature – 55° ▪ Air Freezing Index – 250 ▪ Latitude: 37° 19' N ▪ Longitude: 79° 58' W ▪ Soil Class: SC, ML-CL & Inorganic CL 60 ▪ 1500 psf Shrink/Swell

Contact Information

City of Roanoke	City of Salem	Roanoke County – Town of Vinton
Neil Holland, CBO Building Commissioner City of Roanoke 215 Church Ave, SW Roanoke, VA 24011 (540) 853-1117 Fax: 853-1594 neil.holland@roanokeva.gov	Todd Sutphin, CBO Building Official City of Salem 25 East Main Street Salem, VA 24153 (540) 375-3036 Fax: 375-4042 tsutphin@salemva.gov	Morgan Yates Building Commissioner Roanoke County P.O. Box 29800 Roanoke, VA 24018 (540) 772-2065 Fax: 772-2108 myates@roanokecountyva.gov

Notes:

1. Entered NFIP - 1974 Current FIRM adopted – 09/28/2007 Community Number - 510130 (Roanoke City)
2. Entered NFIP - 1974 Current FIRM adopted – 09/28/2007 Community Number - 510141 (Salem City)
3. Entered NFIP - 1974 Current FIRM adopted – 09/28/2007 Community Number - 510190 (Roanoke County)
4. Entered NFIP - 1974 Current FIRM adopted – 09/28/2007 Community Number - 510131 (Town of Vinton)