

Climatic and Seismic Values for Building Design in Burnaby

The purpose of this brochure is to advise that the climatic and seismic data for the design of buildings, structures or part thereof in the City of Burnaby shall be those listed on Page 2 of this brochure.

"This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal Codes or laws. You must satisfy yourself that any existing or proposed construction or other works complies with such Bylaws, Codes or other laws."

The climatic and seismic values listed in Division B, Appendix C of the 2018 BC Building Code (BCBC) apply generally to the design of all buildings in the City of Burnaby.

One set of the data collected from an observing site located near Simon Fraser University (SFU) at an elevation of 330 m can be applied to the SFU area.

The other set of data collected from another observing site located at Burnaby Mountain Terminal at an elevation of 137 m can be applied to all areas of Burnaby other than the SFU area.

When Storm Water Management is a requirement of development approval, the City's Engineering Department **may** require different rainfall duration and intensity criteria than those listed below.

Site specific climatic design data can be obtained by contacting the Atmospheric Environmental Service, Environment Canada at (416) 739-4365. The information on seismic hazard can also be obtained at <http://www.earthquakescanada.nrcan.gc.ca/index-en.php>.

Further Information

If you have any questions please call 604-294-7130.

	CLIMATIC and SEISMIC VALUES	SFU Elev:330 m	General Elev:137 m
1.	2.5% January Design Temperature	-7°C	-7°C
2.	1% January Design Temperature	-9°C	-9°C
3.	2.5% July Design Dry-Bulb Temperature	25°C	25°C
4.	2.5% July Design Wet-Bulb Temperature	17°C	17°C
5.	Annual Total Degree Days Below 18 °C	3100	2735
6.	15 Min. Rainfall	10 mm	10 mm
7.	One Day Rainfall (1/50)	150 mm	140 mm
8.	Annual Rain	1850 mm	1840 mm
9.	Moisture Index	1.93	1.92
10.	Annual Total Precipitation	1950 mm	1900 mm
11.	Driving Rain & Wind Pressure (1/5)	160 Pa (3.4 psf)	160 Pa (3.4 psf)
12.	Ground Snow Load, Ss (1/50)	2.9 kPa (60.6 psf)	2.7 kPa (56.4 psf)
13.	Associate Rain Load, Sr (1/50)	0.7 kPa (14.6 psf)	0.4 kPa (8.4 psf)
14.	Hourly Wind Pressures: Probability 1/10 Probability 1/50	0.36 kPa (7.5 psf) 0.47 kPa (9.8 psf)	0.36 kPa (7.5 psf) 0.47 kPa (9.8 psf)
15.	Seismic Values: Sa (0.2) Sa (0.5) Sa (1.0) Sa (2.0) Sa (5.0) Sa (10.0) PGA PGV	 0.768 0.673 0.386 0.236 0.076 0.027 0.333 0.500	 0.768 0.673 0.386 0.236 0.076 0.027 0.333 0.500