Appendix D – Climactic data for design of buildings and structures

Climatic data for the design of *buildings/structures* in the Town of Gibsons shall be:

Design Element	Design Value
January 2.5% design dry bulb temperature	-7° C
January 1% design dry bulb temperature	-10° C
July 2.5% design dry bulb temperature	25° C
July 2.5% design wet bulb temperature	19° C
Annual total degree days below 18° C	3100
Maximum fifteen-minute rainfall	6 mm
Maximum one day rainfall (50 years)	74 mm
Annual rainfall	1.400 mm
Annual total precipitation	1.500 mm
Moisture Index	1.51
Driving rain wind pressure 1/5 years	160 Pa
Ground snow load, snow component Ss (30 years)	3.8 kPa
Ground snow load, rain component Sr (30 years)	0.4 kPa
Ground snow load, snow component Ss (50 years)	4.2 kPa
Ground snow load, rain component Sr (50 years)	0.4 kPa
Hourly wind pressure 1/10 years	0.38 kPa
Hourly wind pressure 1/30 years	0.45 kPa
Hourly wind pressure 1/50 years	0.49 kPa
Hourly wind pressure 1/100 years	0.54 kPa

NOTE: *The Town will consider site-specific building design data obtained from the Atmospheric Environment Service, Environment Canada, which will be the applicant's responsibility.*

Seismic Hazard Values

Seismic Hazard values will be addressed on a site-specific basis using building design data obtained from Natural Resources Canada, which will be the applicant's responsibility. An online site specific seismic hazard calculator is available via:
https://earthquakescanada.nrcan.gc.ca/hazard-alea/interpolat/calc-en.php

Ground Frost

The depth of construction for ground frost shall provide a minimum earth cover or backfill of:

(a) 460mm (18") for foundations and footings

(b) 600m (24") for water pipe