



New Snow Load Requirements for the Municipality of Clarington

The climatic design data provided in the Supplementary Standard SB-1 of the Ontario Building Code are based on weather observation by the Atmospheric Environment Services, Environment Canada. The climatic design has been researched and analyzed for the Canadian commission on Building and appear at the end of Supplementary Standard SB-1, Table 1.2. This table and values have been used by all Municipalities in Durham to determine the ground snow loads for all buildings in Durham.

The Municipality of Clarington has recently consulted with Environment Canada to review the required ground snow loads for areas other than Newcastle (Bowmanville) 1.4 kilopascals and Newcastle 1.5 kilopascals. The study has identified six different ground snow load zones for the Municipality based on the geodetic elevation.

Effective immediately the ground snow loads for the Municipality of Clarington will follow the Zone map found below. These values will be supplementary to the values as found in the Ontario Building Code SB-1, Table 1.2 Column 12 for Newcastle and Newcastle (Bowmanville).

All certified models that fall within a zone that has been changed will require new stamped engineered truss drawings that reflect the new ground snow loads.

To calculate the design snow load for all single-family dwellings, semi-detached dwellings, townhouse dwellings, and other buildings that are designed as Part 9 buildings, refer to the Ontario Building Code, Division B, Article 9.4.2.2 Specified Design Snow Loads.

For all buildings which are not designed using Part 9 of the Ontario Building Code, use Part 4 of the Ontario Building Code to calculate the required design snow load.

One alternative to using the Zone map found below would be to calculate the ground snow load manually using the following calculation for elevations between 110 metres and 290 metres and rounding to one decimal place:

$$1.2 + (1.4/215) * (\text{Elevation} - 75) = \text{Ground Snow Load Kilopascals}$$

Example:

For an elevation of 212 metres, the ground snow load would be:

$$1.2 + (1.4/215) * (212-75) = 2.1 \text{ kilopascals}$$

A second alternative to using the Zone map found below would be to use the chart found on the Zone map to determine the ground snow load for the specified geodetic elevation.

If you have any questions about the new ground snow load requirements for the Municipality of Clarington, please contact the Building Division.

