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Snow Loads in New York State

Using The 2000 IBC With New York Enhancements

The snow load map provided as a New York enhancement to the 2000 IBC shows values that are higher than the map provided in the current New York State Uniform Fire Prevention and Building Code.

This does not mean, however, that the design snow loads have increased. Quite to the contrary – the new map is merely an adjustment of the original map, so that when the new **ground snow load** values are processed through the provisions of the IBC, the **flat roof snow loads** are essentially the same as they have been.

The key is the new terminology. The current New York Code simply provides a “snow load”, which corresponds to the “flat roof snow load” in the IBC. However, the snow map provided in the IBC represents the “ground snow load”, which is the primary factor to be used for the calculation of the flat roof snow load.

The IBC snow load provisions start with the mapped value of ground snow load, which represents a 50-year recurrence interval. The flat roof snow load is calculated from the ground snow load by a formula provided in the Code. The resulting flat roof snow load will generally be about 70% of the ground snow load.

However, the snow map that is provided in the IBC has approximately 3/4 of New York State not mapped. These areas are noted as requiring case specific site studies, as extreme local variation makes mapping difficult. Unfortunately, the method for preparing a case specific site study is very difficult, and the data that would be required is not provided. The result is that the IBC map is not useful in most of New York State.



To provide a usable snow map for New York State, the NYS/IBC Technical Sub-committee developed a new snow map using the old map with the values divided by 0.7 to provide an effective ground snow load value. The result is that when the new map values are converted to flat roof snow loads, the results are typically identical to those under the current code.

If you have questions on the snow load provisions of the new code for New York State, **FRA Code Services** has the expertise and resources to provide assistance and support your project needs. **Jim Burton** has over ten years of experience in the NYS Uniform Fire Prevention and Building Code provisions and their application to building projects. **Tom Tyson, PE, of FRA Engineering**, is a member of the ASCE 7 Standard Committee, Minimum Design Loads for Buildings and Other Structures, which is the source document for the 2000 IBC for snow loads. Mr. Tyson also served as an Advisory Expert to the NYS/IBC Technical Sub-committee that developed the New York Enhancements to the IBC.

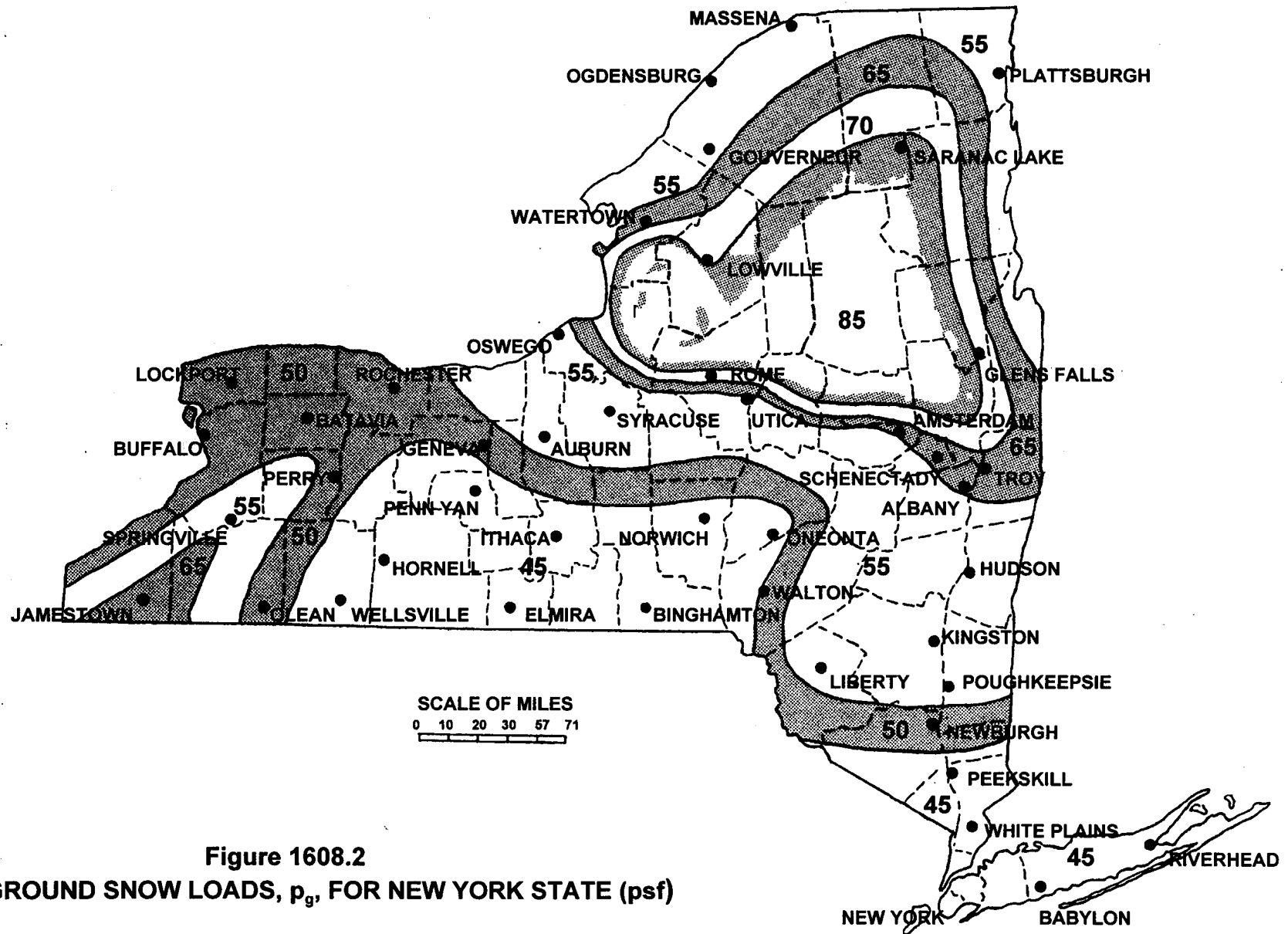


Figure 1608.2
GROUND SNOW LOADS, p_g , FOR NEW YORK STATE (psf)