



Clarification on Snow Load Design for New York State Building Code

By TPI's Technical Advisory Committee working with WTCA and the WTCA New York Chapter

The State of New York has adopted, with amendments, the 2000 editions of the **International Residential Code** and the **International Building Code**. These codes, referred to as the **Residential Code of New York State** and the **Building Code of New York State**, went into effect on December 31, 2002. The **Residential Code** applies to detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height. The **Building Code** applies to all construction not covered by the **Residential Code**, which typically covers all commercial construction. The snow map, an important State of New York amendment, is provided for your information and use.

There has been some confusion within the State of New York regarding the application of the snow load provisions in the new codes. This TAC communication is intended to explain how the NY snow load provisions are interpreted and how they are being enforced by the NYS Codes Division. Specifically, the NYS Department of State – Codes Division's Mark Blanke, P.E. has stipulated that he agrees with the interpretation presented herein and a similar announcement will go out to all NYS Building Officials in the form of a technical bulletin by mid-November, 2003. WTCA will distribute the NYS bulletin to truss manufacturers serving the NY marketplace and provide follow-up web posting as soon as it is available.

When designing a roof system that falls under the **Residential Code**, the stated ground snow on the New York State snow map may be used as the design snow load for the roof with no ground-to-roof adjustments applied to the ground snow load. This method would negate the need to apply unbalanced snow loads to the roof system.

However, if the ground snow is adjusted by the ground-to-roof adjustment factors found in **ASCE 7-98** as permitted by the **Residential Code**, then the unbalanced snow load factors also found in **ASCE 7-98** and the **Building Code** shall also be applied to the design roof snow load.

When designing a roof system that falls under the **Building Code**, the ground snow stated on the New York State snow map shall be adjusted by all appropriate ground-to-roof adjustment factors to determine the appropriate roof design snow load. This also includes the unbalanced snow load factors that must be applied to the design roof snow load to create additional unbalanced load cases. A step-by-step outline of the **ASCE 7-98** snow load procedure is included for your information and use.

As the New York codes have been in effect since December 31, 2002, TPI TAC advises that all projects are designed using the snow load calculation methods as outlined above. If you have any questions or have pending projects that have not been designed in accordance with the methods outlined in this letter, please contact your truss design engineer.