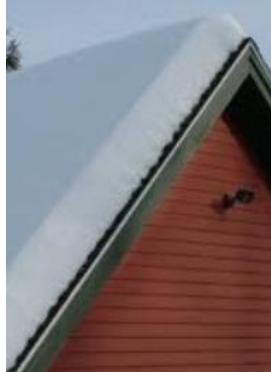




## Potential Roof Collapse from Excessive Snow

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Did you know that between the last week of December 2010 and mid-February 2011, over 80" of snow and ice fell in southern New England causing hundreds of roof collapses and school and business closures? Through appropriate planning, much of your risk can be decreased and unplanned downtime avoided.



Fuss & O'Neill provides evaluation and design services for bridges, buildings, and other specialty structures for a variety of governmental, industrial and private clients. Our multi-disciplined team allows us to complete the multi-faceted needs of any structural assignment. We develop tailored and cost effective solutions that are functional and aesthetically compatible with their surroundings.

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Most roofs in southern New England are designed to support 18" – 22" of average density snow, except the depth where drifting or sliding snow occurs is typically greater. The density of snow is highly dependent on the weather and can vary greatly from day to day. It is important to develop a snow management plan so that when the first snow starts falling, you are prepared. Your plan should include the following steps:

- Check and clear debris from all drains and gutters
- Inspect and repair any areas of damaged roofing
- Familiarize yourself areas where heavy snow accumulate
- Determine the conditions that will require snow to be removed when the snow attains a certain depth
- Establish procedures for removing snow, including methods and problem areas
- Verify that all snow removal equipment is in working order

When snow starts to deepen on a building's roof, visual inspections should begin to ensure the safety of all occupants and protect the contents inside. In addition to protecting the building's occupants and contents, these inspections should identify areas of deeper snow so that focused snow removal efforts can be accomplished. This will typically reduce overall snow removal costs and may alleviate concerns from your insurance carrier. Pay particular attention when the following atypical conditions are observed:

- Unusual framing deflections
- Uncommon noises
- Cracks in sheetrock or masonry walls
- Excessive displacements of sprinkler heads, pipes, etc.
- Ceiling tiles falling out
- Leaks

Even though cracked walls, displaced mechanical equipment, falling ceiling tiles, and leaking may not indicate immediate structural problems, these atypical conditions can cause property damage or injury; therefore, should be monitored.