



Technical Guidance Document

Addressing Warning Signs of an Overstressed Building Structure During a Snow Event

Monitoring warning signs of structural stress during a snow event is crucial for safety. This Technical Guidance Document outlines best practices for assessing building integrity and mitigating risks associated with heavy snow loads.

Collect the Following Information About the Building

- Applicable building codes
- Design snow load
- Structural framing system
- Thermal properties
- Renovation history

Identify Specific Interior Observation Points – to alert facility managers of roof sagging or other roof/wall movement.

Inspect Specific Roof Areas in Addition to Roof Structure and Building (FEMA)

To prevent added weight and ensure adequate drainage to prevent leaks:

- Gutters and downspouts for damage, debris, and drainage
- Seals and flashing around rooftop penetrations and rooftop equipment are intact
- Openings around exhaust vents are clear
- Internally and externally drained roof downspouts are clear of debris
- Roof soffit and ridge ventilation are clear
- Cold eave electric heaters are properly functioning, if present
- Attic areas are dry and free of excess moisture

To assess structural integrity ensure:

- Vertical position of trusses are not leaning out-of-plane
- Metal plates are connecting truss member chords
- Lateral braces are firmly connected to roof structure and do not show signs of over-stress or disrepair

Contact Professional Assistance – immediately when:

- The roof or structural integrity is in doubt
- Determine if you need to evacuate the area until a structural engineer can assess the situation

ADDITIONAL TECHNICAL GUIDANCE – also see the following technical guidance documents to prevent heavy snow loads from impacting the structural integrity:

- Freeze and Thaw
- Snow Load Management

Disclaimer: The material contained herein is intended for general informational purposes only. It is not intended as legal advice and should not be construed as such. Any inquiries concerning Massachusetts law should be directed to a city solicitor, town counsel or other licensed attorney.

