



# Property Coverage Risk Management Summary

This material includes information about legal issues and legal developments. Such material is for informational purposes only. It may not reflect the most current legal development and should not be taken as legal advice. An attorney should be contacted for advice on specific legal topics.

BEST PRACTICE	GUIDELINES	NOTES
<b>Building Specific Loss Control and Response Plan</b>	<u>Building Specific Loss Control and Response Plan</u>	Plan is designed to outline a building-specific strategy covering pre-loss actions and post-loss response. Plan documents who will respond, key tasks, and historic issues related to the building.
<b>Capital Improvement Plan</b>	<u>Developing the Capital Plan and Managing Debt, Municipal Finance Training and Resource Center</u>	MIIA recommends and provides Rewards credit for the development, funding, and implementation of a comprehensive Capital Improvement Plan that proactively address overall facility maintenance needs.
<b>Dry Systems/Low Point Drainage</b>	<u>NFPA 13, NFPA 25, 527 CMR 1.00: Massachusetts Comprehensive Fire Safety Code</u> <u>MIIA Technical Guidance Documents</u>	Preventing freeze-ups and water damage in dry sprinkler systems, especially in unheated areas, requires prioritizing the maintenance and clear labeling of all low point drains via inspection. Review system blueprints to identify all drainage points and schedule professional inspections if needed. A thorough drainage process is essential after any system testing or activation and, critically, before long facility shutdowns to ensure complete water removal and freeze protection. Confirm that all dry suppression air compressors are tied to an emergency power supply; if not, pressures may fail during power outages, causing water to enter suppression system, and creating a need for low point drainage. This is a lot of work during an already heightened state of emergency with freezing temperatures.
<b>Facilities Maintenance Software Utilization</b>		This software is highly recommended for scheduling work orders and monitoring the associated costs of maintenance obligations.  Please note that grant support may be available for the initial purchase of this software.
<b>Facilities Maintenance Training</b>		Review seasonal maintenance priorities targeting electrical, plumbing, and HVAC practices.
<b>Fire Sprinkler Maintenance, Inspection, and Testing</b>	<u>Fire Sprinkler Maintenance, Inspection, and Testing</u>	Ongoing compliance with NFPA 25 standards.
<b>Fish Tanks and Aquariums</b>		An often-overlooked exposure especially during summer months when schools are closed and often very warm which causes evaporation of water creating a risk of fire. MIIA has experienced several large-scale fire losses claims as a result of fish tanks that were not disassembled at the end of the school year.

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Freeze-Up Prevention	<u>Massachusetts State Building Code - 780 CMR</u> MIIA Technical Guidance Documents	To mitigate winter freeze-up risks, facilities should implement a comprehensive plan involving heating system maintenance, pipe insulation in vulnerable zones, and ensure clear drainage. Continuous indoor temperature monitoring, especially remotely using smart technologies during unoccupied periods, is crucial, alongside maintaining sufficient heating levels. Preparing backup heating systems is also essential to avoid damage and operational interruptions during power outages.
Freeze/Thaw Cycle	MIIA Technical Guidance Documents	Protecting facilities from freeze-thaw damage requires regular inspections for water intrusion signs like ceiling discoloration and loose flashing. Maintaining proper roof ventilation and insulation is crucial to prevent snow melt and ice dam formation. Consistent gutter cleaning for effective drainage and using heating cables in vulnerable areas can significantly reduce freeze-thaw risks.
Heat Monitoring Protocols		Many newer buildings or upgraded heating systems have temperature monitoring software that will alert you if there is a mechanical failure or allow you to adjust your temperature if needed. If installed in your high-risk areas and properly monitored, this can be an effective tool to remotely monitor your HVAC system.
Heating System Failure	<u>Massachusetts State Building Code - 780 CMR</u> MIIA Technical Guidance Documents	To avoid heating system failures in cold weather, implement building-specific heat setbacks and ensure all exterior doors and windows are tightly closed, locked, and sealed. Use thermographic imaging to detect cold spots and heat loss, particularly around unit ventilators. Regular staff checks during extreme cold are essential for monitoring temperatures, finding cold spots, confirming heating system operation, and preventing equipment damage.
Ice Dam Inspection		Many ice dams can be prevented with roof snow removal that allows the snow to melt and drain away properly. However, in shaded areas, areas prone to ice dams or areas where snow removal is difficult, heated gutter covers may be necessary. This is a key part of a Winterization Action Plan. Heated gutter covers may be considered under the MIIA grant. (Discuss with your Risk Manager)
Inspections & Scheduling	Logs and Checklists MIIA Technical Guidance Documents	For reliable facility operation, maintain thorough documentation of all maintenance, including dates and personnel. Adhere to a preventive schedule for critical systems like HVAC and fire protection based on guidelines. Keep detailed logs of inspections and any corrective actions taken. Record emergency repairs with causes and resolutions for future improvements.
Lightning and Surge Protection	527 CMR 12.00 <u>Massachusetts Electrical Code (Effective 2/17/23)</u> MIIA Technical Guidance Documents	Implementing effective lightning and surge protection for buildings is crucial to safeguard structures, electrical systems, and occupants from the destructive effects of lightning strikes and power surges.
Lithium-ion Batteries Micromobility, Electric Vehicles, Battery Energy Storage Systems	<u>Lithium-Ion Battery Safety, NFPA</u> <u>Lithium-Ion Battery Safety</u>	Massachusetts is moving forward with its clean energy transition, driven by Governor Maura Healey's "Grid Equity Act," which empowers the Department of Energy Resources (DOER) to take a leading role in energy procurement and siting, aiming to reduce costs for residents and businesses. A key aspect of this initiative is the development of crucial guidance, led by MassDEP in consultation with DOER, to ensure the safe and environmentally sound deployment of battery storage and EV charging infrastructure.

## Property Coverage Risk Management Summary, *continued*

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Mechanical Failures	Building Specific MIIA Technical Guidance Documents	To proactively address mechanical failure risks, implement a thorough inspection and maintenance program. This involves scheduling professional inspections of boilers and heat pumps, along with regular unit ventilator checks. Routine testing of backup generators and critical pumps like sump and circulator pumps is essential. Inspecting and protecting low point drains and backflow preventers from freezing is vital for preventing system disruptions and damage during winter.
MFAA Membership	MFAA Membership	MIIA works extensively with the MFAA to educate, train, and remain current with facility management best practices and emerging issues. (Discuss initial membership with your Risk Manager)
Oil & Solvent Soaked Rag Disposal		Oil and solvent soaked rags create a spontaneous combustion risk. It is critical that these rags are properly disposed of in a closed metal waste container designed for that purpose. Failure to properly follow proper disposal protocols is an OSHA violation.
Roof Inspection Program (Including gutters)	Roof Inspection Program	MIIA recommends bi-annual visual roof inspections (fall/spring) to address obvious ponding/ tears /clogged drains /etc. by trained maintenance staff. In some cases, a professional inspection may be required depending on the age/type/condition of the roof. Grant support and Rewards Credit are considered for roof inspections as well as support for the purchase of thermography cameras. (Discuss with your Risk Manager)
School Facilities Protection Before and During a Winter Closure	School Facilities Protection Before and During a Winter Closure	When temperatures or wind chill drops to freezing or below, it is critical to physically check your buildings to ensure no windows were left open, the heat is maintained and working effectively and that uninvent dampers are closed. In addition, pay extra attention to areas known to have insufficient insulation or that have a history of pipe freeze ups. In some situations, space heaters may be necessary to supplement the heat in high risk areas. Grant support for thermography cameras will be considered to assist with this inspection process. (Discuss with your Risk Manager)
Signs of Overstressed Building Structure During Snow Event	Massachusetts State Building Code - 780 CMR MIIA Technical Guidance Documents	Facility personnel must be trained to recognize critical warning signs of compromised structural integrity from excessive snow loads, such as sagging ceilings, unusual noises, visible roof sagging, bowing trusses, door/window issues, cracks, significant leaks, and excessive pooling on flat roofs. Observing any of these signs requires immediate building evacuation and assessment by a licensed engineer to prevent structural failure.
Snow Roof Loads	Massachusetts State Building Code - 780 CMR MIIA Technical Guidance Documents	Before winter, determine and document each roof's structural limits and condition. Inspect regularly for uneven snow, blocked drainage, and damage. Prioritize safety during snow removal, focusing on drifts and weight balance. Ensure clear roof drainage to prevent water pooling and plan for ground snow storage with runoff considerations. Timely and proper snow removal techniques are critical as to not further damage the roof.
Space Heater Guidelines	Space Heater Guidelines	Although space heaters are necessary to bring additional heat to areas during periods of extreme cold, they must be used with caution and monitored carefully.
Sprinkler Cages in Gyms		Sprinkler cages provide critical protection against damage from balls and other objects that might strike sprinkler heads during gym activities. Accidental discharge of sprinklers in a gym can very quickly cause extensive damage to gym surfaces requiring costly repairs.

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System Maintenance	Building Specific MIIA Technical Guidance Documents	Safeguarding facilities requires proactive system maintenance, including regular HVAC inspection and calibration, proper plumbing insulation and drainage, and thorough testing of all security system components. For NFPA sprinkler systems, focus on dry systems and low point drains through regular inspections to prevent freeze-ups and ensure fire safety. Consistent maintenance across HVAC, plumbing, security, and sprinkler systems is vital for safety, efficiency, and continuous operation.
Thermography Self-Inspection Program	<u>Thermography Self - Inspection Program</u>	Recommended - allows facility managers to inspect for heat loss areas that might impact vulnerable plumbing, electrical panel hot spots and roof degradation. Grant support for thermography cameras will be considered to assist with this inspection process. (Discuss with your Risk Manager)
Unit Ventilator Maintenance Program	<u>Unit Ventilator Maintenance Program</u> <u>Unit Ventilator Maintenance Program Checklist</u>	Critical seasonal inspection and maintenance protocol during Fall and Winter. Each year uninvent failure is a leading failure mode leading to costly water damage claims. Grant support for thermography cameras will be considered to assist with this inspection process. (Discuss with your Risk Manager)
Vandalism & Malicious Mischief Prevention Protocols		Develop and implement an "After school - After Business hours" policy limiting access to only those areas where designated activities are allowed preventing visitors from being able to wander throughout the whole building. Examples include locking classrooms/offices, securing access barriers where applicable, signage, and security walkthroughs.
Water Damage by Mechanical Failure Prevention Program	<u>Water Damage by Mechanical Failure Prevention Program</u> <u>Water Damage by Mechanical Failure Prevention Checklist</u>	MIIA recommends and offers rewards for bi-annual inspections of water related mechanical systems including pipes, supply lines, sump pumps, drains, and appliances. Water sensing technology such as water sensing and flow alarms will be considered under the grant program. Grant support has been considered to be used for inspection and replacement of old and deteriorating connections. (Discuss with your Risk Manager)
Worker Roof Safety	<u>FEMA P-957, OSHA 3755-05 2015.</u> MIIA Technical Guidance Documents	Prioritize personnel safety during roof snow management and periodic roof inspection process with thorough training on fall prevention and ladder use, proper PPE, and reliable communication. Clearly mark roof access, egress, and travel paths with OSHA-compliant edge protection. Identify and mark all rooftop hazards, ensure slip-resistant clothing, and enforce safe ladder practices. Establish safety zones below and designated ground snow storage.

**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.