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GIFTS & APPAREL

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EVELYN

Prepare Your Business Ahead of Winter Weather



Winter weather can cause business disruption, structural damage to buildings from excessive snow loads, water damage from burst frozen pipes, and dangerous ice dams on the roof. Regional differences exist between structures and their components located in the Northern regions of the United States and those in the Southern regions.

Prepare Now!

These steps can help you to prepare your business before the winter season, no matter where you're located. Prepare now and be Winter Weather Ready!

PLAN AHEAD

1. Assess your exposure & create a plan

• Assess your exposure

- Consider where you're located. Buildings located in Northern regions of the United States can expect to see more snow and will have different preparedness actions versus buildings in the South, which may be more susceptible to below-freezing temperatures.

• Create a winter business continuity plan

- Create an internal and external communication plan with actions. Determine how to message to employees and customers across multiple channels for before, during and after a winter event.
- Develop an emergency recovery plan for after a winter event to be communicated to employees, customers, clients, delivery services, and other important groups.
- Create a snow and ice removal plan for all roofs and grounds.
- In advance of winter, identify tree removal services, a generator rental supplier, and emergency snow removal services to use in the event of heavy accumulation or power outages.
- Develop a back-up plan for nearby off-street parking if the municipality imposes a parking ban on streets to allow access for plows. This occurs more frequently in the North, even hours before snow is expected, so roads can be pre-treated.
- Test/practice the plans.

• Purchase supplies

- Purchase non-slip water absorption mats for all entrances.
- Purchase snow removal equipment such as shovels, de-icers, and snow blowers.
- Purchase a supply of blankets to give to staff in case they get stranded at work.

• Stay informed

- Find a reliable source for severe weather information. Follow the National Weather Service (NWS) Weather Prediction Center ([WPC](#)) on [Facebook](#) or [X](#), and your [local NWS office](#). Tune in to local news often when winter weather is forecast.
 - Enable wireless emergency alerts on your cell phone.
 - Purchase a weather alert radio that broadcasts emergency alerts from the National Weather Service, preferably one with a hand crank.
- #### • Check your insurance coverage and inventory valuable equipment
- Know what your insurance covers and what it doesn't.
 - Keep your insurance agent's contact information in your phone and accessible offsite.
 - Take a complete inventory of your commercial property and valuable equipment and store it somewhere safely offsite and in the cloud. If you have a loss due to a winter-related event, you'll have to quantify losses to your insurance company.



Why?

Severe winter weather is a significant cause of insured catastrophic losses and is a risk for many businesses across the country. You will want to ensure your team stays safe, and the business can stay open and thrive, no matter what the season brings.

PREPARE YOUR BUILDING

All guidance outlined is to be completed under safe operating conditions. If fall protection is not available, it is best to hire a licensed and insured contractor.

2. Inspect and repair the roof cover, flashing, and gutters

• Know your roof's maximum snow load

- Hire a structural engineer to verify the snow load threshold of the roofing system if you don't know your roof's snow load. This information will be important after an event when determining whether there is too much snow on the roof.

• Low-slope (flat) roofs

- Inspect roof and repair leaks before the winter season.
- Ice dams can also form around internal drains due to slow drainage and water freezing around the drain. If this happens, ensure there is proper sloping to the drain and the drain is working properly with no clogs. Remove all debris and other items from roof and roof drainage systems that may prevent water drainage from the roof as snow and ice melt.
- Check that all flashing is properly secured to the building.
- Check all sealant materials to confirm they are in good condition with no visible cracks or shrinkage.

Steep-slope roofs

- Inspect the roof, secure loose shingles, and repair leaks before the winter season.
- Check and repair flashing seals around roof edges, vent stacks, skylights, and chimneys.
- Repair or replace damaged fascia boards.
- Ensure you have adequate attic insulation with proper ventilation. Seal attic penetrations.

• Gutters & downspouts

- Inspect gutters and ensure they are secured to the building. Replace any missing gutter fasteners.
- Clean gutters and interior downspouts thoroughly, removing all debris and unclogging drains.
- Run test of gutters and downspouts to be sure water does not back up. This can be done using a hose.
- Check downspouts to ensure they divert water away from the foundation.



Why?

Water that does not properly drain off a roof has the potential to freeze, creating dangerous ice dams and adding to snow load. Icicles are an indication of ice dams and, if left unattended, they can cause roof and interior water damage. Improper drainage can also cause excessive snow loads, leading to partial or full roof collapse.



Why?

Plumbing and a wet-type fire protection sprinkler system may freeze in extreme cold due to power outages, inadequately sealed building envelopes, or vacant buildings without proper heating. Older buildings, especially in Southern states, may be more susceptible to below freezing temperatures and are more likely to not have adequate pipe or building insulation. Wind, wind-driven rain, and snow can enter through worn or missing window glazing (the mechanism that seals the glass to its frame).

3. Seal the building envelope & protect pipes

• Exterior

- Inspect doors and add or replace weather stripping when needed.
- Inspect windows for brittle or missing glazing and have a contractor make repairs if necessary.
- Inspect and seal exterior wall cladding. Repair all cracks, holes, and leaks with caulk.
- Insulate pipes in crawl spaces.

• Interior

- Insulate and seal around attic penetrations such as partition walls, vents, plumbing stacks, and electrical and mechanical chases.
- Make sure your pipes along exterior facing walls and in hard-to-reach places like attics are insulated. Wrap pipes in unheated or minimally heated areas of the building.
- Make sure existing freeze-protection devices and alarms are in good working order. Test freeze stats (low temperature sensing devices) and valves before the weather gets cold.
- Hire a licensed fire protection specialist to conduct routine maintenance on fire protection sprinkler systems. Discuss the systems' exposure to winter weather and potential mitigation options.

To learn more visit ibhs.org/winterreadybusiness

4. Winterize your landscaping

- **Keep trees trimmed away from the building.** Pay particular attention to trees within falling distance of overhead power lines.
- **Exterior faucets should be shut off, hoses drained and stored at the start of winter.** If exterior faucets do not have a shut-off valve inside the building, have one installed by a plumber.
- **Shut off and drain irrigation systems.**



Why?

Trees near or overhanging a building can damage the roof cover, siding, and windows under the weight of snow and ice. Trees overhanging power lines can snap under the weight of ice or snow, damaging power lines and causing outages. Lack of power can lead to frozen pipes that burst, resulting in significant water damage and business interruption.

5. Maintain your HVAC system.

- **Schedule preventative maintenance annually and make sure the HVAC system is operating properly and efficiently.**
- **Be sure to change air filters and check that exhaust gases are being ventilated properly.**
- **Select a heating system repair service before an unexpected outage or maintenance issue arises mid-season.** Have someone ready to come quickly – including after hours – and negotiate an emergency rate in advance.

Why?

Loss of heat for even a few hours could significantly disrupt your business during a cold snap, causing dangerously cold temperatures inside the building and resulting in frozen pipes.



6. Service your generator

- **Permanent**
 - Permanent generators should have a proper maintenance plan that includes weekly, monthly, and annual checks. See the manufacturer's specifications for more information.
 - Run the unit weekly on its maintenance plan to ensure it is properly functioning in case of an emergency. Individual units may have a timer that allows a programmed test to be scheduled. Qualified personnel should oversee these scheduled weekly tests.
 - Check the generator enclosure for loose debris or other conditions that could cause the unit to not function properly.
- **Portable**
 - Store in a dry location.
 - Set up a maintenance schedule to include periodic test runs for the unit.
 - When renting a portable unit, make sure you have a contract in place ahead of winter weather. Also consider where the unit will be housed, how it will be delivered, and who will be responsible for receiving it. Note that delivery of the unit can be delayed due to the severe winter weather, which may cause some business downtime.



Why?

The time to maintain a generator is well before a major storm or disaster strikes when professional assistance may be unavailable, power lines are down, and access roads are blocked. Backup power can help maintain a consistent building temperature and reduce the risk of freezing pipes, leading to business disruption and damage.

APARTMENT/CONDOMINIUM OWNERS: Check in with residents regarding any maintenance requests or building concerns they may have. Living or working in your commercial property means they are on constant alert to their surroundings. If they see, hear, or smell something, ask that they say something.

These lower-cost steps help to prepare your building before the winter season. **We can't stop the harsh winter weather, but we can prepare and strengthen our structures to defend against it. As your budget allows, consider Building Upgrades.**

Building Upgrades to Protect Against Severe Winter Weather



Strengthen Your Business!

We can't stop the harsh winter weather, but we can prepare and strengthen our structures to defend against it. Consider upgrading the building as your budget allows.

1. Upgrade internal systems

- Install a monitoring system that provides notifications if the building's temperature dips below a pre-determined minimum.
- Install an automatic excess flow valve on the main incoming domestic water line to monitor and provide early detection of a broken pipe or valve. Excess flow valves automatically stop the flow of water when preset flow settings are exceeded.
- Use wireless sensors to monitor leaks near water sources such as water tanks and commercial appliances.
- Install UL-approved gas or electric heaters in unheated sprinkler control valve and fire pump rooms.
- Implement a secure data backup solution to prevent data loss.
- Purchase and use power surge protectors to protect valuable computer equipment.



Why?

The sooner you know there's an issue, the quicker it can be fixed. Leak detection systems and pressure relief valves installed along plumbing pipes can help you avoid pipe bursts (water damage) should freezing pipes occur.

2. Invest in a generator

- Determine whether a portable or permanent generator is the right fit for your business to provide cost-effective benefits while minimizing associated risks.



Why?

Generators play a vital role in emergency preparedness, ensuring uninterrupted business operations in the event of a power outage. This can be especially crucial during freezing temperatures, leaving the building susceptible to internal temperature fluctuations. Backup electrical power should keep critical electrical and mechanical systems that maintain vital business operations functioning.



Why?

In the winter, windows can accumulate ice due to escaping warm air, resulting in potential damage when the ice melts and water infiltrates window frames or walls. Additionally, older single-pane windows offer inadequate thermal insulation, while aging doors may warp or develop gaps, providing pathways for water intrusion.

3. Replace windows and/or doors

- **If windows or doors show signs of aging or have gaps, cracks, or other areas of concern, replace them.**
 - Choose windows with double or triple pane glass that includes a high thermal resistance (R-value) and thermal break. The R-value tells you how well a system can resist the transfer of heat; the higher the value, the better that system performs. A thermal break is insulation built within the frame of the window to reduce thermal transfer.
 - Install exterior personnel doors and roll-up doors that provide a high R-value.

4. Improve your roof

- **Retrofitting a steep-slope roof**
 - Install snow guards or snow cleats on a steep-slope roof.
 - Add insulation to attic space, particularly around HVAC ducts and other openings, to keep warm air from melting snow on the roof that may re-freeze.
- **Replacing your roof**
 - Install high-quality self-regulating heating cables on eaves, gutters, and downspouts, or around roof drains.
 - Select UL Listed, FM Approved, or Canadian Standards Association (CSA) Certified heating cables. These cables won't remove ice dams but create channels that will allow water to drain off.
 - Install them in a zig-zag pattern near gutters on low-sloped roofs.
 - Connect to drains and drainage system to create a pathway for meltwater to follow.
 - For steep-slope roofs:
 - Add a moisture barrier to the roof deck along the eaves of the roof. This moisture barrier should extend from the roof edge at least 2 ft toward the interior of the building and beyond the exterior wall enclosing conditioned space.
 - Apply a waterproof membrane (peel and stick), also known as an ice and water barrier, on the roof deck edge.
 - Add insulation to attic space, particularly around HVAC ducts and other openings, to keep warm air from melting snow on the roof that may re-freeze.



Why?

Snow guards on a steep-slope roof will prevent snow from sliding off and causing excessive snow load on another portion of the roof or physical injuries. Heating cables and a moisture barrier can help prevent ice dams and water intrusion damage.