

# Home Protection Guide: Snow and Ice Storms



## Introduction

As a homeowner, you take pride in maintaining your investment and protecting it from outside risks. Among these risks, winter weather presents some of the most significant challenges—challenges that may even lead to substantial property damage.



# Winter storm losses in the U.S. average **\$1.2 billion** per year.

The United States experiences some of the most extreme winter weather in the world, and homeowners constantly have to protect their residence from blizzards and extreme cold. The following are some of the most common sources of property damage homeowners must account for during the winter months:

- Cold temperatures
- Heavy snowfall
- Ice buildups
- Frozen pipes
- Water leaks
- Roof damage

In order to adequately protect their property from the elements, homeowners must assess their exposures and take the appropriate actions to help prevent winter weather-related damage. This guide provides a brief overview of the most common winter weather risks and the steps homeowners should take to avoid costly repairs following a storm. It also highlights some liability exposures to consider and ways you can reduce your risk.

## **First Steps Toward Protecting Your Home**

Winter weather is unpredictable, and preparation is key. While specific, preventive action is the primary way to protect your home from the elements, there are some additional, up-front steps to consider:

- 1. **Evaluate your home and vulnerabilities**—Every home is different and has its own set of unique risks. As such, it's critical for homeowners to have a thorough inspection done to better understand the risks specific to their property. Inspections, when completed by a certified professional, can provide valuable insight into your home's age, roof capacity and ability to withstand winter weather.
- 2. Work with a qualified insurance broker—While winter weather poses a real threat to your property, many of the risks can be addressed through the proper insurance. To get a better understanding of your options, it's important to meet with a qualified insurance broker. They can provide a wholesale review of your unique exposures and the policies available to you.
- 3. **Reach out to your local government**—In many cases, your local government can prove invaluable when it comes to protecting your home from the elements. Government websites, public works organizations, utilities companies and building departments can all provide expertise and tips on fortifying your home.

When completing the above steps, it's critical to take any home protection advice you receive seriously, whether it be securing additional insurance or completing an inspection to help you improve your home's defenses. Only then can you begin taking steps toward protecting your home from specific winter weather risks.



Depending on the size and location of your home, winter weather risks can vary. However, there are several concerns homeowners must account for if they are to protect their investment from the elements. Among other things, severe winter weather can lead to things like roof collapse, ice dams and frozen pipes.

#### **Roof Collapse**

Heavy snowfall, ice and freezing rain can wreck havoc on your home's roof. In some cases, roofs can't withstand the heavy loads brought on by extreme weather, causing them to collapse altogether. In addition, as snow and ice melt, water damage can occur if your home's roof isn't structurally sound.

#### Assessing Your Roof and Taking Action

One of the first steps you can take to protect your roof from collapse is to determine whether or not it is susceptible to snow or ice accumulation. The best way to accomplish this is to assess your roof's slope.

If constructed properly, a sloped roof can shed heavy snow, ice or melting water. In general, the gentler the slope, the more at risk you are for roof collapse. Most builders recommend a slope that is greater than 4 inches vertically and 12 inches horizontally. In general, it's best to have a roof with a steep pitch to promote the shedding of snow.

However, even with a sloped roof, snow and ice can still build up on flat areas or around obstructions like chimneys, skylights and dormers. As a result, it's important for homeowners to regularly evaluate their roof, particularly after a significant storm. Specifically, homeowners should look for:

- 1. New water leaks that appear to come from the roof or attic area
- 2. Exterior doors that become difficult to open or close as a result of heavy loads on the roof
- 3. New cracks in drywall and plaster
- 4. Sagging roofs

If you notice any of the above issues following a storm, it's important to take immediate action to clear loads from your roof and avoid a potential collapse.

## Often, the safest and most efficient way to address snow and ice buildup is by hiring a snow removal contactor.

However, there are some practical, do-it-yourself methods to consider:

• Snow removal—To aid in snow removal, homeowners can purchase a long snow rake with an extendible arm. This tool allows you to clear away large accumulations of snow safely from the ground. When doing this, homeowners should remain attentive and keep their distance from falling debris.

- Ice removal—Clearing ice from your roof can be a challenge, particularly because manual ice removal is extremely dangerous and should be avoided if possible. However, there are several safe methods to consider:
  - Use a snow rake to create a drainage path. That way, once the ice melts, water will have a means of egress from the roof, eliminating the risk of standing water and major damage.
  - Work with a contractor to install electric heating cables on your roof. This allows ice to melt and safely drain.
  - Use chemical de-icers to improve drainage.

Be sure to exercise caution when removing snow and ice from your roof. In general, never perform these tasks alone, and ensure you are taking all of the necessary precautions to keep yourself safe.

#### Ice Dams

During cold winter months, a row of icicles on your home's eaves may be a sign that a ridge of ice is forming at the edge of the roof. This ridge, also known as an ice dam, can be the result of uneven heat loss from your home, which causes the roof to warm above freezing and melt accumulated snow. When the snow melts and then re-freezes before reaching the roof's edge, an ice dam forms, causing water to collect behind it. This pool of water can cause extensive damage to the roof, attic, ceilings, walls and contents of your home.

You can prevent the formation of ice dams by following these tips:

- Keep the attic well ventilated. For suspended ceilings, fiberglass batt insulation can be installed to prevent heat loss. For drywall ceilings that are nailed directly to the joists, blown insulation in addition to fibreglass insulation can be effective.
- Identify and remove any heat source in your attic that will heat areas on your roof.
- Seal air leaks to prevent warm air leakage from plumbing vents, attic hatches and junction boxes.
- Keep the attic floor well insulated (between 1 and 2 feet of insulation) to minimize the amount of heat rising into the attic from below.
- Clean leaves and other debris from gutters before the first snow to help prevent ice buildup.
- Install an ice shield under your shingles if you're considering getting a new roof.
- Use a roof rake to clear snow about 3 feet above the gutters to allow water to drain freely.

- Consider hiring an energy specialist to evaluate the performance of your home and recommend some things you can do to minimize energy waste.
- Consider re-roofing. During the installation process, you can install a secondary moisture barrier to help prevent heat loss. For best results, moisture barriers should be place in roof valleys where snow and ice are likely to collect during the winter.

In addition to the above tips, proper roof maintenance is crucial when it comes to preventing ice dams. Specifically, you should ensure that roof drainage systems, such as scuppers, gutters and down spouts are free of debris and working properly. Be sure to also cut back overhanging trees or vegetation, as falling debris can clog your drainage systems.

#### **Frozen Pipes**

One of the messiest and most costly home repairs is fixing a burst, frozen pipe. Water expands as it freezes and puts significant pressure on the metal or plastic pipes that hold it. If you fail to take the proper precautions, your pipes can easily fail during a cold winter.

Generally, pipes that are exposed to outdoor temperatures freeze more readily, such as hose bibs, swimming pool lines and water sprinkler lines.

Pipes that run along exterior walls in the home with minimal insulation also tend to freeze more easily.

Water from a burst pipe can cause damage to carpeting, short out electrical appliances and ruin furniture. Luckily, there are several ways to protect your home:

- Keep the heat in your house at a minimum of 50° F. Keep your thermostat set at the same temperature during the day and night.
- Keep interior doors open. This allows heat from the rest of your house to spread, keeping your pipes warm.
- Seal any cracks and holes found near your pipes. This can help keep cold air out of your home.
- Add extra insulation to your pipes. Experts recommend fitting your pipes with foam rubber or fibreglass sleeves.
- Wrap pipes in heat tape or thermostatically controlled heat cables.
- Disconnect outdoor items such as hoses and faucets.
- Keep your garage door closed if there is a water supply in there.
- Pay attention to weather forecasts. During bouts of extreme cold, allow faucets to drip slightly. This can alleviate pressure in the piping system.
- Ensure your home has a backup generator. Power outages are one of the most common causes of frozen pipes. What's more, without power, your water supply may also be shut off.

- Consider hiring a central monitoring company. These organizations monitor the temperature of your home remotely and can provide a notification if the interior temperature of your home drops too low.
- Do not set your thermostat lower than 55° F when going on vacation. Ask someone to periodically check the temperature in your home while you are away.

If you turn on a faucet and no water or only a trickle comes out, your pipes may be frozen. Turn off the main water valve and keep the faucet on. Apply heat to the pipe by using an electric heating pad, hair dryer or portable space heater, or by wrapping the pipe in towels soaked in hot water. You should apply heat until you regain water pressure. If this does not solve the problem, contact a licensed plumber to inspect your pipes.

## **Liability Concerns to Consider**

Extreme winter weather not only has the potential to damage your home, but it can also create serious liability concerns. During the winter season, walkways, stairs and driveways can become slip and trip hazards as snow falls and ice forms. Should someone injure themselves on your property, you could be held liable for medical costs as well as any other damages, particularly if you didn't take the appropriate precautions following adverse weather.

To adequately protect yourself from such liability concerns, consider doing the following:



**Shovel and de-ice**—It's very common for someone to slip on ice during the winter and injure themselves. In order to keep you and members of the public safe, ensure driveways, stairs and sidewalks around your property are clear of ice and snow. To create an adequate walkway, be sure to clear all or as much snow away as possible. Once you've removed snow, use anti-ice material on walkways and stairs to make them less slippery. Commonly used products include commercial-grade salt and sand. You should always shovel and remove ice after a storm in a timely manner.



**Inspect your stairs**—During the winter, a slip or fall on your outdoor stairs could lead to serious injuries. In addition to clearing snow and ice from your stairs, it's important to inspect them and ensure they are in good condition and equipped with handrails. Stairs should be free of tripping hazards and cracks. Handrails should be installed by a professional to ensure they are sturdy and built to code. For additional protection, provide adequate exterior lighting around your stairs.



**Trim your trees**—You may not realize it, but snow and ice accumulation can cause tree branches to snap and fall. When this happens, the branches can strike passersby or property below, potentially causing significant injury or property damage. To prevent this from happening, trim your trees back, focusing on any branches that overhang your driveway, walkways or your neighbors' property.

Keeping in mind the above tips can go a long way toward reducing your liability risks. It may also be a good idea to speck with your insurance broker, as they can provide even more tips and suggestions to reduce your exposures.

## **Additional Protection**

Weather-related risks can affect your home unexpectedly, often leading to major property damage, costly repairs and liability concerns. While you can't always predict when a pipe will burst or heavy snow will affect the integrity of your roof, the proper insurance can go a long way toward protecting your finances. To learn more about the specific policies available to you, it's important to work with a qualified insurance broker.

Contact General Insurance Services, Inc. today to learn more.

Appendix

# CHECKLIST ASSESSING YOUR WINTER WEATHER DAMAGE RISK

Presented by General Insurance Services, Inc.

In order to protect your home from the elements, it's important to conduct a thorough review of your property. The checklist below provides a list of questions to ask yourself that can help you better assess your risks and identify potential areas for improvement.

ТОРІС	YES	NO
Has your home ever been damaged by winter weather?		
Is the slope of your roof significant enough to shed snow and ice?		
Does your roof have obstructions like chimneys and skylights that cause snow and ice to collect?		
Have you cleaned debris from your roof and drainage systems?		
Are there any tree branches or other vegetation hanging over your roof?		
Do you own/use electric heating cables or chemical de-icers to clear away ice?		
Are your pipes properly insulated?		
Are there any leaks in your attic that allow cold air into your home?		
During particularly cold weather, do you:		
• Open your faucet?		
Maintain a constant and safe thermostat temperature?		
• Open your kitchen and sink cabinets to expose pipes to warmer air?		
Keep your garage door closed?		
Before leaving your home for an extended period of time during winter months, do you:		
• Keep your thermostat no lower than 55° F?		
Ensure someone checks your house regularly?		
Have you identified areas of your building that are susceptible to unusual amounts of snow and ice accumulations?		
Do you promptly remove snow and ice from driveways, walkways and stairs following a storm?		