

As if slippery sidewalks and snow-covered cars aren't bad enough during the winter, you face another potential headache: ruined carpets and water damage to your ceilings and walls from leaks caused by ice dams or bursting pipes. You can avoid the resulting aggravation and expense by taking several basic steps right now to prevent this kind of damage.

FIRST THINGS FIRST

1. Work involving your home's structure may require a building contractor, however, or even a registered design professional such as an architect or engineer.
2. Before making any structural changes to your home, check with your local building officials to be sure what you're doing complies with local building codes.

Report any property damage to your insurance agent or company representative immediately after a severe weather event or other natural disaster and make temporary repairs to prevent further damage. For information about filing an insurance claim after a natural disaster, contact:



General Claim Information:

1 (800) 236-5010

DirectConnect™ claim reporting:

1 (877) 922-5246

Institute for Business & Home Safety®

The Institute for Business & Home Safety's mission is to reduce the social and economic effects of natural disasters and other property losses by conducting research and advocating improved construction, maintenance and preparation practices.

DisasterSafety.org

Protect Your Home Against Severe Winter Weather



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ICE DAMS

An ice dam is an accumulation of ice at the lower edge of a sloped roof, usually at the gutter. When interior heat melts the snow on the roof, the water will run down and refreeze at the roof's edge, where temperatures are much cooler. Eventually, the ice builds up and blocks water from draining off of the roof. This, in turn, forces the water under the roof covering and into your attic or down the inside walls of your house.

Once an ice dam forms, the potential damage can be serious. Take these steps now to avoid trouble later:

- Keep the attic well ventilated. The colder the attic, the less melting and refreezing on the roof.
- Keep the attic floor well insulated to minimize the amount of heat rising through the attic from within the house.

This two-step approach decreases the likelihood that ice dams will form or, at least, reduces their size.

As an extra precaution against roof leaks in case ice dams do form when you re-roof, install a water-repellent membrane under your roof covering. Talk with your local building official about minimum code requirements for ice dam protection.

Unfortunately, ice dams may be unavoidable if your home has recessed lighting near the roof. Heat generated from these lights melts snow, which then contributes to ice dam buildup. The only sure way to avoid this problem is to eliminate recessed light fixtures near the roof.



FREEZING PIPES

Frozen water in pipes can cause water pressure buildup between the ice blockage and the closed faucet at the end of a pipe, which leads to pipes bursting at their weakest point. Pipes in attics, crawl spaces and outside walls are particularly vulnerable to freezing in extremely cold weather, where holes in your house's outside wall for television, cable or telephone lines allow cold air to reach them.

To keep water in pipes from freezing, take the following steps:

- Fit exposed pipes with insulation sleeves or wrapping to slow the heat transfer. The more insulation the better.
- Seal cracks and holes in outside walls and foundations near water pipes with caulking.
- Keep cabinet doors open during cold spells to allow warm air to circulate around pipes (particularly in the kitchen and bathroom).
- Keep a slow trickle of water flowing through faucets connected to pipes that run through an unheated or unprotected space. Or drain the water system, especially if your house will be unattended during cold periods.

SNOW CAN OVERLOAD A ROOF

A heavy snowfall brings with it the danger of roof collapses. The age of the building is a major factor in the snow load risk. Light metal buildings will typically have less capacity to handle a high snow load. For flat roofs, the step-down area between roof sections is a potential source of overload because of the tendency for ice and snow collection.

The best source for determining how much snow load a building can handle is the design plan. Most roof designs can handle at least 20 lbs per square foot. These designs can range from 10 to 20 lbs per square foot in Mid-Atlantic states, and 40 to 70 lbs per square foot in New England.

For safe removal that won't endanger you or damage your roof, consult a roofing contractor.

Follow these guidelines to help estimate the weight of snow on a roof:

- **FRESH SNOW:** 10 to 12 inches of new snow is equal to one inch of water, or about 5 lbs per square foot of roof space. Anything more than 4 feet of new snow can put the roof at risk.
- **PACKED SNOW:** 3 to 5 inches of old snow is equal to one inch of water, or about 5 lbs per square foot of roof space. Anything more than 2 feet of old snow could be dangerous.
- **FRESH AND PACKED SNOW:** The combined weight of two feet of old snow and two feet of new snow could be as high as 60 lbs per square foot of roof space. This will test the limits of even the best designed roof.
- **ICE:** One inch of ice equals about a foot of fresh snow, so keep in mind this added weight when calculating how much a roof design can handle.



ICE BUILD UP IN DRAINS AND GUTTERS CAN RESULT IN WATER TO BE FORCED BACK UNDER YOUR ROOF CAUSING DAMAGE.