

Ice Dams – A Pretty Disaster



Many of us enjoy the winter and all of its beauty, bright snow and twinkling icicles. But while we're tucked inside enjoying the view, that very snow and ice can be creating ice dams and causing disastrous damage to our homes.

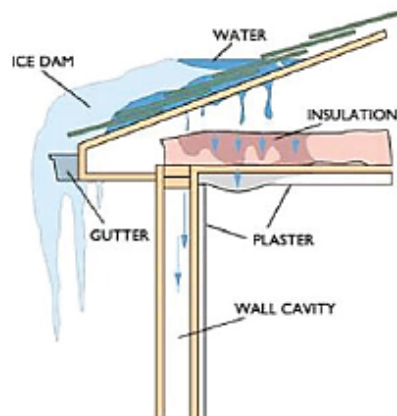
What Is An Ice Dam?

An ice dam is a ridge of ice that typically forms at the edge of the roof, where it is colder, and prevents melting snow from draining off of the roof.

What Causes Ice Dams?

It's important to understand that a roof is a system made up of components including ventilation, shingles, underlayment, soffits, eaves, and attic insulation that work together to provide protection for your home. An efficient system will direct water away from the house. When the roofing system isn't working right (often due to improper ventilation in the attic) indoor heat can rise through the ceiling into the attic and warm the roof surface.

Snow on the heated part of the roof melts and flows down until it meets the part of the roof that is below freezing. At that point, the water freezes again. This process of thawing and refreezing is what causes an ice dam.



Structural Damage

As water accumulates and refreezes it expands. Expanding ice gets caught under the shingles and in the roof and gutter materials. This can cause structural damage by dislodging components or weakening materials due to water damage.

Water Leaks and Mold Problems

When an ice dam forms, water then backs up behind the ice dam and creates a pool of water, which can work its way under the roof covering and flow into the attic. From there it can seep through insulation, ceilings, walls and other areas. Once moisture gets trapped, damage can appear much later; odor, rot, and mold can fester.

What Homeowners Can Do

Generally, preventing ice dams means getting snow off the roof, which can be a very dangerous endeavor. If you are in the midst of an ice dam situation, it's a good idea to investigate and carefully consider home remedies and professional services.

The Best Advice

Know that the single most contributing factor causing ice dams is warm air escaping your house. Warm air that escapes into the attic and lingers can create an ideal environment for ice dams and subsequent problems. Simply controlling the temperature barrier between the ceiling and attic may resolve the problem.

However, there are many aspects to the roof and ventilation systems and how they work together. Simple temperature control may not remedy the problem and more attention to properly ventilating and insulating the attic may be needed. Consider having a professional conduct a Home Performance Audit. Much like an energy audit, the overall house and its systems will be analyzed, which should identify the root cause of the problem.

Seek to remedy the cause and repair existing damage; water can create lingering problems with mold and rot.