



Dealing with Ice Dams

Ice dams form when melting ice and snow refreeze around the eaves of your roof and back up under the shingles, causing leaks and water damage to interior walls and ceilings. Once an ice dam forms, the damage is already done, so the focus should be on prevention.

What Causes Ice Dams?

Because heat rises, the air in your attic, even in winter, is warmest at the top or ridge and coolest down by the eaves. That's why snow on the roof will begin to melt first at the top and possibly refreeze when it reaches the cooler eaves. With nowhere else to go, accumulating ice backs up under the shingles or under the roofing felt or sheathing, and, as it warms and melts, causes interior leaks.

Ice dams are not caused by overflowing gutters, dark colored shingles that absorb heat, or low roof pitch, although each of these can contribute to roofing problems. Ice dams are caused by heat build-up in your attic and inadequate ventilation.



Prevention Tips: Before Winter Sets In

- Make sure your gutters are clear of leaves and debris.
- Check and seal places where warm air could leak from your house to the attic, such as vent pipes, exhaust fans, chimneys, attic hatches, and light fixture.
- Have your roof and attic inspected for proper ventilation and insulation.
- Look for signs of inadequate ventilation, such as rust spots, rusty nails, or a mildew smell, which are all signals that moisture has formed on the inside of your roof. (Condensation forms on the warmer of two back-to-back surfaces, thus on the inside of a roof in winter.)
- If you have soffit vents in your eaves, make sure they are not blocked and insulation surrounding them is secured so that air can flow easily. If you do not have soffit or ridge vents, you can have them installed or install them yourself fairly easily.
- Install one of the following:
 - Snow and ice slides—these are metal strips about 24" wide installed as a retrofit solution over the existing roof to prevent ice and snow from "bonding" to the lower roof.
 - Rubberized ice and water shield—place beneath the roof shingles for the first three to six feet from the eaves up.
 - Heating cable—place along the eaves to melt ice. While generally effective, heat cables can cause pooling behind the ice if the snow pack is very heavy or if the cable is not turned on early enough.

Prevention Tips: After Winter Sets In

- If possible, keep snow from accumulating on the lower three to six feet of your roof.
- If you have not already done so, eliminate possible warm air leaks to your attic, as outlined above.