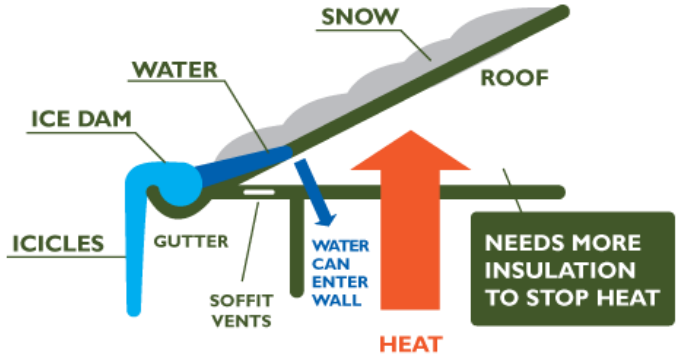
Wary of ice dams and leaks in your house… what you should do

Last winter was harsh on homes here in the Boston area. Heavy snow falls combined with long periods of freezing cold temperatures caused extensive damage to poorly insulated houses. Driving through the street of any suburbs or walking in the city, you could marvel at the beautiful and amazing icicles. Unfortunately, they were the sign of trouble leading to ice damming and water leaking for many homeowners.

How ice dams form

Ice dams form at the lower edges of pitched roofs when the snow melts, runs down the roof, hits much colder surfaces (e.g., eaves and gutters), and freezes. As the ice in the gutter gets thicker over several days or weeks, it eventually stops the water from snow melting higher up on the roof, causing ice dams and icicles hanging down. Once ice dams are formed, water is trapped and starts to back up under roof shingles. It can eventually find its way into the house, leaking through light fixtures, ceilings, walls, windows, etc.

Poorly insulated ceilings and roofs are the big culprit for ice damming! They allow heat from the inside of the house to escape and warm the roof surface. If the temperature in the attic is above freezing and there is snow on the roof, the snow melts.



Source: Energy Smart Home Performance

Short term to-do list

If you have seen signs of ice dams forming on your roof, call your builder to have:

- ✓ Your roof evaluated by a professional roofer to assess the extent of ice damage and determine if additional thermal insulation is required.
- ✓ Your electrical wiring inspected by a licensed electrician to determine if it has been compromised, in cases where water came in through light fixtures. Compromised wiring may cause fire later on.
- ✓ Any wet fiberglass insulation removed and replaced to prevent mold.
- ✓ The sheetrock of your house inspected. If it got wet, he will assess the possibility of having it drying out or recommend having it ripped out and replaced.

Preventing ice dams in the future: a two-part solution

Step #1: Insulate and air seal your attic

These are the keys to preventing ice dams. Ice dams formed when attics and roof surfaces are too warm. Since the heat primarily comes from the ceiling of the house, the attic needs to be insulated to slow down the heat transfer. Air leaks from the inside of your house will also transmit a lot of heat into the attic, so they are important to seal as well.

Step #2: Increase your attic ventilation

No matter how much you insulate your attic, some heat will always come through. That's why, it is important to add ventilation to your attic to prevent heat buildup. Have your attic ventilation checked by your builder who can recommend improvements.

For a solution specific to your home's ice dam issue and for preventive recommendations, **contact us**.