



## 10 ICE DAM FACTS: ICE DAM MYTHS EXPLORED

A handy PDF of one of our most popular web pages on Common Ice Myths

There is a lot of misinformation out there on the topic of ice dams. Our goal here is to be the single definitive source for all things relating to ice dams. Towards that end, here are some common misconceptions about ice dams, roof snow, roof ice and gutter ice removal.

**FACT:** Ice dams can occur with virtually no snow on your roof. It's a question of ice accumulations. It takes very little actual moisture to form ice dams. Even a dusting of snow can create a problem. Of course it is most often the case the thick snow accumulations create ice dams more quickly, but don't be fooled into complacency because it's a low snow season. See Case Study #09.

**FICTION:** Gutters have something to do with ice dams. The truth is gutters have nothing whatsoever to do with ice dams. See Case Study #03 for proof. If your home is prone to ice dams you will get them regardless of whether or not you have gutters. If you have gutters they will fill with ice and provide a foundation for the ice dam above. True. If you don't have gutters, the ice dam simply builds on the cold edge of the roof. We provide ice dam removal for many homes each year that do not have gutters. In fact, some of our repeat clients have removed their gutters upon the advice of a dumb person only to be shocked that the ice dams came back the season after. Whoops.

**FACT:** Gutter systems can be damaged by ice. We see it every year. A section of otherwise fine gutter is either on the ground or hanging pathetically off the edge of the roof, filled with ice. Ice weighs about 60 pounds per cubic foot and gutters are not designed to tolerate that sort of load. It's important to initiate gutter ice removal sooner than later for this reason. See Case Study #11 for common ice dam damage.

**FICTION:** When it comes to insulation, the more the better. Improperly insulated homes are just as bad as under insulated homes when it comes to ice dams. We have fixed countless bad insulation jobs for this reason. Specifically, we frequently find insulation done in such a way as to inhibit proper ventilation. Moreover, if you don't address air leakage into the attic or rafter spaces, all the insulation in the world won't prevent ice dams. See Case Study #04 for details about good eave ventilation.

**FACT:** You can't always see ice dams from the ground. It's true that you can often spot a monster ice dam quite quickly. It's easy to spot the two foot icicles and the little adjoining glacier on your gutter. The sneaky ones are usually above skylights or in roof pan areas far out of sight. Sometimes ice dams grow up valleys and on top of dormers making it almost impossible to identify from the ground. See Case Study #02 for more information on where ice dams form on residential homes.

**FICTION:** Salt socks are a smart way to address ice dams. People use pantyhose, old socks and store-bought cloth tubes filled with a variety of ice-melting compounds for removing ice dams. Corrosive substances like rock salt, sodium chloride, calcium chloride, magnesium chloride and more to melt channels through their ice dams. Some compounds are better than others, but all present risks you should keep in mind. Some of the aforementioned chemicals affect the integrity or color of your roof, some are corrosive to the aluminum when gutter ice is removed this way, some are corrosive to valley metal and other flashings, some damage plant life as the water drains below. You are rolling the dice when you go this route so be aware. See Case Study #13 for more information on salt socks (salt in pantyhose).

**FACT:** Ice should be removed by steam. Here is the skinny. We are roofers and have fixed hundreds of roofs that have been damaged by well-intentioned professionals with hammers, picks and hatchets in their pursuit of removing ice dams to help their clients. The damage we have found caused by the less-than-professional souls is almost funny if it wasn't so serious. In our years we have seen jobs with picks and hammers where removing ice dams was done successfully. It get's down to the question of whether you want to take that risk? We strongly advise against the hack-a-teer approach even if it is a little cheaper. Roof Ice and Gutter Ice should always be removed with steam.

**FICTION:** Ice dams need to be thick to cause a problem. Ice dams as thin as one inch can cause big problems. A good general rule is that the steeper your roof, the thicker the ice dam has to be to cause problems. On lower pitched roofs even a thin ice dam can hurt.

**FACT:** The leaking caused by ice dams may not show up right away. It would be nice if water stains or mold manifested immediately upon entering your home but it simply does not work that way. Often the water that ice dams push into homes travels around wall and ceiling cavities, trapped by vapor barriers and other materials until it finds the path of least resistance to escape. By the time you see water inside, it's usually been there for a while, which results in mold and mildew.