



Ice Dam Removal Company CASE STUDY

#20

ICICLES AND ICE DAMS

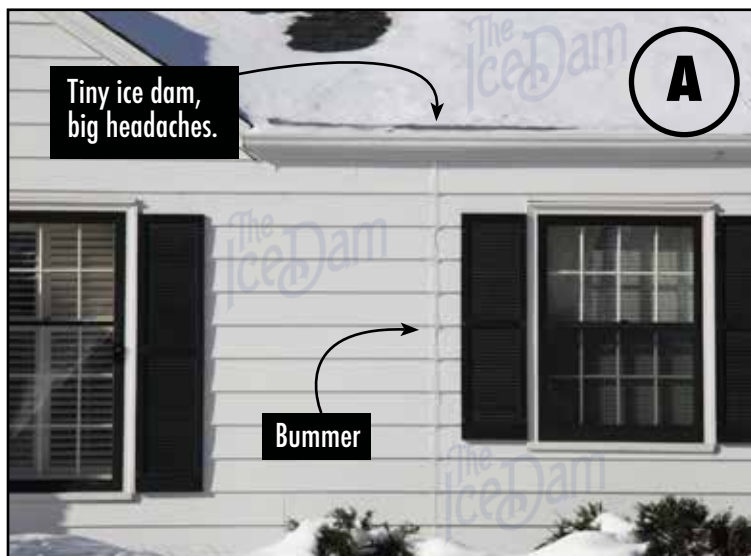
The Relationship Between Ice Dams and Icicles



DO ICICLES MEAN ICE DAMS?

You may notice that the home shown at left has some icicles (sarcasm intended). Obviously, when something like this occurs, it is quite likely that you have ice dams as well as a giant insurance claim from the subsequent water damage it has caused. The fact is, the vast majority of the ice dam steaming projects we complete are not on homes with monster icicles. When we arrive we often see quite modest icicles from the ground. The relationship between icicles and ice dams is not difficult to understand when you study the problem for a while. This Case Study digs into the topic of icicles and ice dam life cycles.

DO ICICLES MEAN ICE DAMS?



Do icicles mean ice dams? The short answer is NO. While icicles on the edge of the roof are often a precursor to ice dams, they are not always present when ice dams begin to cause leaks through a roof system. Ice dams and icicles are part of the same accumulation but they are not the same thing by any means. This brings us to the normal life cycle of an ice dam.

The characteristics of ice dams change over time. The typical lifespan of an ice dam ranges from a few days to a few weeks. During that time it may get thicker or thinner, icicles may appear and disappear on its leading edge, and it may be almost completely hidden under snow or partially or completely exposed. For this reason, there is a big difference between a young ice dam and an old ice dam in terms of the presence of icicles. Very young ice dams often have visible icicles on their leading edge. Over the following days most ice dams tend to grow more in depth than thickness, meaning the ice migrates higher up the roof plane (refer to Ice Dam Company Case Study #06 for more information). Icicles on more mature ice dams tend to melt away from the affects of direct sunlight or warmer outdoor temperatures. However, while the telltale icicles may be missing, the mass of the ice dam is left behind, frequently hidden under a blanket of snow. The photos above (A) and (B) demonstrate this phenomenon on two St. Louis Park homes. Virtually no traditional signs of an ice dam and yet you see water leaking down the exterior wall, through the siding and in the wall cavity itself. Bad news.