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Water Damage Prevention: Ice Dams



The formation of icicles is a good indicator that there is poor insulation/venting in the attic area. This can lead to water damage.

In colder areas of the country, the formation of ice dams can occur due to inadequate insulation and ventilation in the attic. The attic air temperature will warm and melt the snow/ice on the roof, which will accumulate at the roof edge, eaves, and/or valleys where it will refreeze. The additional melting of snow will become trapped in these areas with nowhere to drain; and the melted water will back up and seep under the roofing material, causing damage to walls, ceiling, insulation, and other areas.

To prevent ice dams from forming, take the following precautions:

- ☐ Make sure there is adequate insulation and ventilation in the attic to keep it cool.
 - Indications of inadequate ventilation include rust spots, rusty nails, and an odor of mildew.
 - As a minimum, most buildings in the U.S. should have between a R22 and R49 value in the attic.
 - Hire a licensed contractor to assist with determining the existing R value and to apply any additional insulation, if needed.
- ☐ Consider installing soffit vents to increase ventilation.
- ☐ Seal any openings in the attic, such as heat ducts, light fixtures, vent pipes, etc.
- Make sure gutters, eaves, and downspouts are kept clean.
- ☐ Clear snow two to three feet from all roof edges with a snow rake.

Snow rakes are specifically designed to effectively remove the snow without damaging the roof components. This practice allows melting snow to drain and not be trapped under the snow and ice.



The heavy accumulation of snow on the roof could lead to the formation of an ice dam. Snow should be removed two to three feet from the roof edge.

While it is difficult to avoid ice and snow in the winter months, you can prevent ice dams from forming on your building by following the above recommended tips. By doing so, you could save your facility thousands of dollars in repairing damage to your building's walls, ceilings, insulation, and other areas.



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