

# Ice Dam Prevention on Roofs

## SIMPLE WAYS TO ALLEVIATE THE PROBLEM

**Ice dams occur when a snow-covered roof over the attic is warmer than the eaves — the overhang of a roof. If the roof is warm, it will cause the snow to melt and run under snow along the roof. When the melted snow hits the cooler eaves, it freezes. As ice builds up on eaves, it eventually traps water behind it. The water backs up under shingles and finds its way through seams in the building paper and roof decking to enter the attic and living area. Wallpaper, plaster and paint surfaces may be damaged in the process. Fortunately, there are several ways to remedy the problem.**

## WHEN SEEPAGE HAS ALREADY BEGUN

If you have an immediate problem with ice dams, you should remove the snow from the part of the roof directly above the ice dam. This limits the amount of water that can collect behind the dam.

- ◆ *Remove the snow using a roof rake, hoe or push broom.* Roof rakes have long handles that allow you to stay on the ground when clearing a single-story roof. You can purchase them at hardware stores.
- ◆ *Avoid using sharp instruments, such as axes, to break channels through the ice.* This is likely to cause roof and structure damage.

## PREVENTION

A cooler attic area will help decrease problems with ice dams. Here are two ways to keep attics cool:

- ◆ *Increase insulation in the attic to at least 12 inches.* Also, close any thermal shortcuts —openings that allow air to move from the heated part of the house into the attic. Chases around chimneys, plumbing vents, junction boxes for ceiling light fixtures, attic hatches and ceiling fan mounts are common thermal shortcuts.
- ◆ *Create adequate attic ventilation to remove any heat that escapes into the attic.* One square foot of free ventilation opening is recommended for every 150 square feet of attic space. Ventilation should be divided between eaves and the house ridge to take advantage of the fact that warm air rises. When installing eave or soffit vents, be sure that the opening is not blocked by insulation. You can do that by installing a cardboard or plastic channel over the insulation lined up with each vent.

### Additional resources:

Your county Extension office