

Is your roof talking to you?

How many times have you been accused of not listening when someone is talking to you? If you're like me, that may be quite often, especially if there's a football game on the TV. So, the question I pose is – are you listening to your roof when it is talking to you?

This past Christmas and the days following, we had what I call a tattle-tail snow. Yes, it was nice to have a white Christmas, especially when I looked out the front window that evening and saw the deer rummaging through the snow for acorns. But what I liked about it was that it told me quite a bit about the homes my neighbors and friends live in.

I call it a tattle-tail snow because the temperatures did not rise above 30 degrees for several days and the skies were overcast the entire time. So when I looked at my neighbors' homes and saw some with snow and some without, it told me the ones without have some issues.

It could be they just don't have enough insulation, period. In those cases, you will find the roof vacant of snow in the area over the heated area of the home, while over garages and overhangs there is still snow on the roof (and I'm not referring to my gray hair!).

Situations like this can lead to roof damage. As snow or ice melts from the high areas of the roof and run down, they refreeze over the eave, creating a dam. Melted snow or ice no longer run off the roof, but continue to build up at the eaves. If there was considerable snow to begin with, the melting snow could eventually be forced up under the shingles, especially on a low pitch roof. The fix for ice dams is more insulation.

You may think you have plenty of insulation in your attic, but if your roof is void of snow and there are other occupied homes that still have snow cover, it's a definite sign something's wrong. It could be the



type of insulation you have. If the snow melt is pretty consistent across the roof, this may be the case. In the last 15-20 years, we've seen many newer homes use blown-in fiberglass insulation. If you've looked in your attic and seen what looks like cotton balls, that's the stuff.

Oak Ridge National Laboratories and the University of Illinois Small Homes Research Council found many years ago that spray in fiberglass loses its R-Value as temperatures decline. What happens is that the warm air above the ceiling is light and wants to rise while the cold air in the attic is dense and wants to fall. At around 30 degrees, there is enough temperature difference that the two begin to displace each other and the effective R-value declines. The fix, add four-six inches of cellulose over-top the existing fiberglass.

Roofs can also tell us other things. One roof I noticed had a square area of melted snow. Having been in this home several times, I knew what the issue was. The owner has a whole house attic fan in their hallway right below the melted area. When I spoke to them, they realized they had not covered the fan with insulation that fall. They could also create a vinyl cover on the inside and use Velcro to cover the louvers. This will

stop air leaks but won't provide any insulation value.

It could also be there is a bathroom or kitchen range vent incorrectly vented to the attic, or even worse, against the roof deck. One attic I was in this summer, I noticed a section of plywood on the roof deck had been replaced when the roof was re-shingled. I'm sure the rotted plywood was caused by the vinyl bathroom vent that was nailed to the truss and blowing right on the plywood. All winter long the vent blows warm moist air against the cold roof deck, eventually rotting it out. Amazingly, the deck had been replaced, but the vent was left in the same condition. Guess that's what they call job security! Want to fix it correctly? All vents, bathroom and kitchen, should be vented to the exterior. And the eave is not considered vented to the exterior.

Okay, I know homes can't actually talk to us. But by paying attention to what is going on around us (such as with heat pumps), we can get some definite clues that there may be some kind of issue or problem. The next time we get a couple inches of snow, pay attention to your roof and those of your neighbors. You might get some clues as to potential issues in your attic.