

Homes Plus

If insulating between roof rafters, do so throughout entire attic

Q. We corresponded several months ago regarding ice-up of my roof causing icicles and freezing over of my front stoop. I eventually got around to noting that there was a second furnace/AC system located in the attic crawl space, and you indicated that there is virtually no way to prevent the heat generated by the system from radiating out and causing the snowmelt conditions I described (essentially, the attic heat melted the new-fallen snow on the roof, the water from which dripped downward, causing ice dams and icicles on lower levels, finally causing a buildup of ice on the front stoop below.)

I am writing to check out a new line of thinking with you: Suppose I were to spray foam insulation on the underside of the roof — at least in



Henri de Marne
Home repair

the offending area, if not the entire roof? This way, I would be insulating the roof from the warmth in the winter and, presumably, from the sun's heat in the summer. I was thinking about using one of the two-component disposable foam systems now on the market for do-it-yourselfers. Or I would hire a contractor to do it. I am aware that you do not typically insulate the roofs (but rather the floors of the attics, creating pockets of cold between the floors and the roofs). This makes me wonder if there is a reason not to insulate the roof directly as I am considering.

A. You can try lessening the snowmelt by spraying foam between the rafters, but you should do it in each bay. Otherwise, snow will continue to melt like before in the areas you have not insulated. There is no guarantee that this will totally prevent snowmelt and ice dams. You will probably notice that the snow will melt more directly over the rafters, as they will not have the R-factor of the foam insulation. Be sure that you use closed-cell spray foam and make it thick enough to be more effective. Avoid open-cell foam, as it would absorb moisture that may damage the roof sheathing.

You should also have effective ventilation below the foam insulation to remove as much of the heat generated by the furnace as possible. This

may entail installing a sizable screened louver in each gable (if you don't already have them in), and they should be as high as possible. You may need to install a small fan to ensure constant air exchange. Also, make sure that the heat and air-conditioning ducts are insulated thoroughly (they are rarely as well insulated as they should be) in order to reduce their losses and increase their efficiency. This will be particularly important if you install a fan. Please let me know whether it works.

Q. I had ceramic tile installed in the kitchen. Between eight and 10 areas showed loosened grout within 10 days. Installers didn't keep their promise to come back. We tried redoing it ourselves, but we had the same result. Another

contractor (friend) redid these areas. Still loosened after a few days. Another contractor said he would redo it, but before we spend another few hundred, maybe we can use your advice.

A. The problem is not the grout but something beneath it. It could be the adhesive, the underlayment, the subfloor or the structure that is deficient. First, you need to identify the layers beneath the tile. Without more information about the installation sandwich, it is impossible to pinpoint the problem.

If the tiles are installed over wood, the thickness of each layer and its fastening schedule must be determined. If the tiles are installed over a backerboard, was a thinset mortar support bed installed between the board and the subfloor?

Were the Tile Council of North America handbook or the installation material instructions referenced or followed? Once you have determined the cause of the grout failure and corrected it, the grout can be redone, and you should have no further problem with it.

Q. I have gotten conflicting answers about how to go about studding up the exterior walls of my basement. The house is a ranch built in the early 1970s and has three poured concrete walls. One long wall is studded with 2-by-6-inches, insulated with fiberglass batts, sheetrocked, and has doors and windows. This side is at grade level. The other three sides are below grade with earth that slopes away from