

Letters



Leaky Ridge Vents

To the Editor:

A recent storm has caused the kind of leaks that occur once or twice a decade. At a house under construction, the wind blew powdery snow into the ridge vent [a low-profile plastic type]. The melted snow leaked through the insulation and Sheetrock and onto the floor below (see illustration). The Sheetrock had been hung, but not taped. The water on the floor was in a line below the ridge.

Afterwards, the builder I am working with laid 6-mil poly on top of the insulation and collar ties, and attached it to the underside of the rafters with furring strips. The theory is that this will collect moisture [if the vent leaks again] and allow it to evaporate. Poly was also used as a flashing on the former exterior wall of the main house, where the addition joined it.

We may have to use a fan to avoid trapping the moisture in the insulation. But because the poly curves upward as it goes away from the ridge, there should be adequate ventilation to allow the moisture in the batts to evaporate.

We would be interested in anything you might suggest.

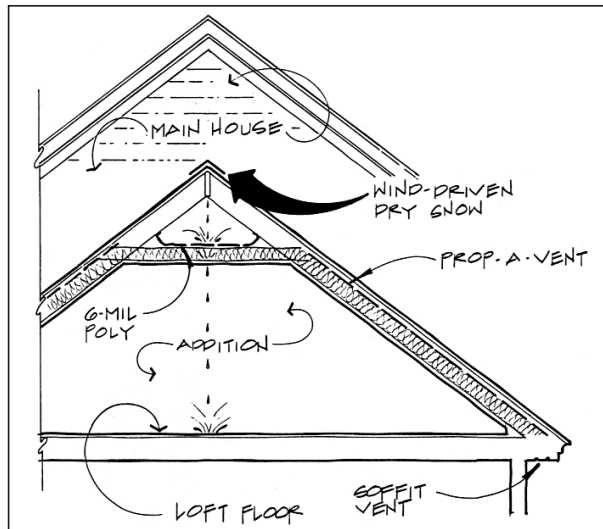
Richard Devens III, AIA
Architect, Landscape Architect
Center Sandwich, N.H.

Many ridge vents include vertical baffles below the vent openings to deflect wind-blown snow and rain upward past the vent. Other ridge vents use internal baffles or filter materials to accomplish the same goal of keeping out rain and snow. Manufacturers of such vents claim that these features are necessary to prevent the kind of wind and rain intrusion you experienced. We are not aware of any independent research that backs up these claims. But your experience supports the use of such features—at least in your location.

Your solution using polyethylene might work—if the poly is sealed perfectly, is not punctured, and doesn't deteriorate from the attic heat. Also, you run the risk of interior moisture condensing on the underside of the poly (a cold-side vapor barrier). However, this shouldn't be a problem if the poly touches the insulation for only a few feet.

A better solution might be to rip off the existing ridge vent and install one with baffles or some other protection against leakage. A few examples of products available are: Ridgemaster (Mid-America Building Products, 9246 Hubbell Ave., Detroit, MI 48228; 313/838-4520); Shingle Vent (Air Vent, Inc., 4801 N. Prospect Rd., Peoria Heights, IL 61614; 309/688-5020); and Top Cat (Greenstreet Plastics, Inc., P.O. Box 7139, St. Louis, MO 63177; 314/225-9400).

—The Editors



Simple Sill Seal

To the Editor:

In response to your article in Eight-Penny News, 2/90, "Stop Leaks at Band Joists," I am of the opinion that this important area of air leaks is being addressed in a manner that is too complicated, costly, and time consuming to the average builder.

The way I have approached this troublesome area is simple, fast, and effective. After installing the foam plastic sill sealer on top of the foundation, we put a 3-foot roll of Tyvek centered and punched through the anchor bolts around the perimeter of the foundation. After the framing is complete, the outside piece of Tyvek is turned up on the sheathing and tacked. When the rest of the wall is papered with Tyvek the seam is sealed with 3M tape. The interior piece is folded down on the inside foundation wall and caulked to the foundation with silicone caulk.

We have found this Z flash to be extremely effective against air infiltration and very cost effective.

Frank Dunphy
Dunphy Construction Company
Quincy, Mass.

Shallow Foundation Info

To the Editor:

In 1985 I initiated research into frost-protected, shallow foundations at NAHB National Research Center. Consequently, I read with great interest Bill Eich's excellent article on the method (JLC "Shallow Foundations: Beating the Frost," 3/90). It is exciting to see builders like Bill using the technology to improve quality, save

energy, and reduce foundation costs. Two footnotes should probably be added to the article, however.

First, builders who want to build these foundations should order a copy of *Frost-Protected Shallow Foundations For Houses and Other Heated Buildings*, a translation of the Norwegian Building Research Institute design details, from NAHB Technology and Codes Department, 15th and M Streets NW, Washington, DC 20005 (price: \$10). This manual provides the dimensions of insulation required to protect foundations in varying U.S. climates, and a U.S. climate map for use with the insulation tables.

Second, builders should be aware that both molded EPS (beadboard) and extruded EPS (e.g., Dow Styrofoam and other brands) are widely used in Norway, Sweden, and Finland for protecting shallow foundations. In proper density both molded and extruded are suitable.

Dick Morris
NAHB
Washington, D.C.

Swayed by Digital Mania

To the Editor,

Reading Clayton DeKorne's review of the Smart Level (Toolbox, 1/90) brought back all of the anger I felt at myself for having once again succumbed to digital mania (the overwhelming desire to purchase anything with digital readouts). I was swayed this time by my fondness for extreme accuracy when laying out cabinets and door jambs. I can only say that if Mr. DeKorne thinks that 0.1 degree of accuracy almost defies human perception, he must be half blind.

The first thing I did with my Smart Level (after impressing all of my subs

with it), was to place it against my 8-foot level and try to draw a plumb line. I found that no matter what I did, the Smart Level's 0 degree readings were spread out over approximately 3/8 inch. This is not a range which most carpenters would find acceptable, and certainly not any finish carpenters.

On top of the lack of sufficient accuracy, there is the problem with holding the triangular-shaped rail against a wall which Mr. DeKorne mentioned. (I have read, however, that the manufacturer may be providing slip-on adapters to solve this problem.)

I still prefer my old spirit vial levels because I can flip them around to find the best average reading. At best, the Smart Level provides an expensive way to read the pitch of a roof. I wish I had sent it back.

John Atchley
Lakeville, Conn.

Clayton DeKorne Responds:

I can understand your frustration with a tool that does not perform as expected. In retrospect, I agree with you that a tenth of a degree is "perceptible." It is a bit more than 1/8 inch over eight feet. For a lot of work, however, this is tolerable, and most spirit levels I have used will vary this much without the bubble touching the line.

As you point out, a spirit level can be flipped around so you can split the difference to get a more accurate reading. But it is also possible to "split the difference" with the Smart Level. Mark a 0 reading and mark a .1 reading. Either reading will be accurate to within half the difference (1/12 inch) between these two marks. By choosing a line midway between these marks, you will find the most accurate line. The more accurate (and less rhetorical) statement I should have made is: "Over 8 feet, any reading is accurate to within 1/12 of an inch." This is just under 3/32 inch.

Since you indicate that your Smart Level is not this accurate, it sounds to me like it's defective. According to company spokesman, Stuart McFaul, Wedge Innovations will replace the level if the problems were caused by a manufacturing defect.

In response to the problem of holding the level steady on a vertical plane, Wedge has produced the clips you mention. These are being sent to all Smart Level owners by the company free of charge and reportedly have been included with all new Smart Levels since mid-April. ■



Keep 'em coming... We welcome letters, but they must be signed and include the writer's address. *The Journal of Light Construction* reserves the right to edit for grammar, length, and clarity. Mail letters to JLC, 1233 Shelburne Road, Suite C1, South Burlington, VT 05403