LETTERS

Venting Case Study Raises Questions

To the Editor:

I have tremendous respect for Henri de Marne. His sessions at the JLC-Live show were informative, thought-provoking, and extremely well presented. But his recent case study on roof moisture problems ("Case Study: Roof Ventilation Retrofit," 6/95) raises more questions for me than it answers.

What was the relative humidity inside this house? It appears to have been very high. Was anything done to reduce the amount of moisture generated within the house itself, or were all corrective measures directed solely at trying to vent this excess moisture off through the roof?

The ice damming shown in one picture implies that the roof insulation and ceiling airtightening were woefully inadequate. Based on that evidence, could not his case study just as easily have been written from the point of view of a "hot roof" advocate? This roof seems to have missed being a well-built hot roof by as wide a margin as it missed being a well-built cold roof.

Paul Eldrenkamp
Byggmeister Associates
Newton, Mass.

Henri de Marne responds:

When I first visited the house for the original owners, there were only two people living in it and both were working outside the house during the week. The relative humidity in the house was normal for the occupancy and the climate. There was not much the owners could have done to reduce the RH without discomfort.

Some damage was already evident, as described in the article, and they were advised to seal the few areas where drywall tape had separated and to paint with a low-perm paint. I also suggested that additional ventilation be provided in the eaves of the roof over the attic to render the ridge vent more effective (since there already was some ventilation provided, albeit quite ineffective). None of these suggestions was heeded and the house was sold.

The new owners were told that the problems had been fixed. When I went to see them, there was no evidence of excessive interior moisture and no condensation on the windows. Their lifestyle was not inducing unusual moisture and the basement had remained dry. The attic had 9 inches of fiberglass insulation, certainly acceptable if not as good as the 12 inches recommended in the Vermont climate.

In my experience, I am more than ever convinced that, since perfection or near perfection is practically impossible to achieve in general construction, it is far wiser to build a cold roof than a hot one, despite what the advocates of hot roofs may say. Unless the insulation package consists strictly of well-applied rigid insulation or dense pack cellulose with no fibrous insulation, and unless all possible convection paths are thoroughly sealed and vapor retarders are applied to

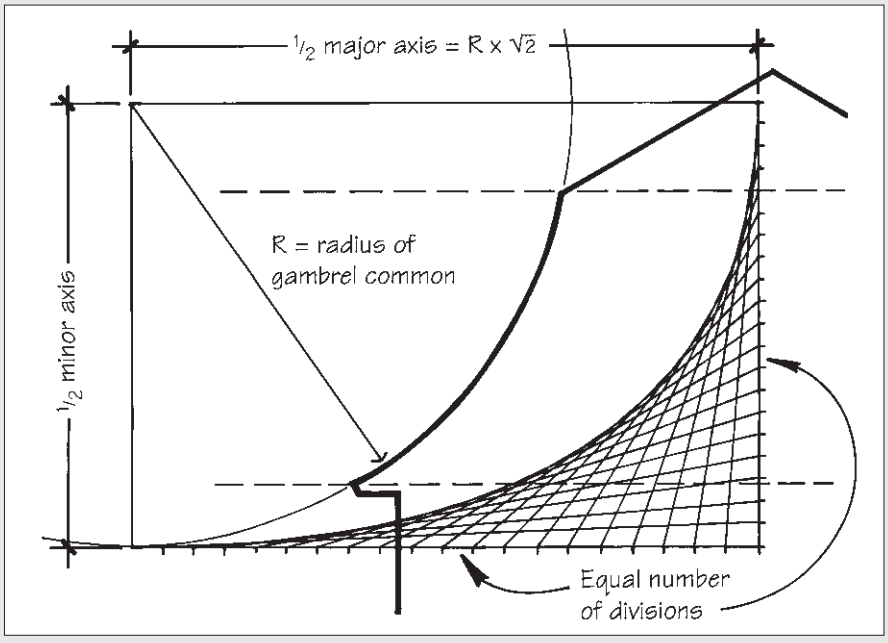
Alternate Method for Elliptical Valley

To the Editor:

I enjoyed Patricia Hamilton's article "Framing a Complex Gambrel" (5/95). Here is an alternative way to scribe the elliptical valley rafter and a general method for scribing elliptical curves. Lay out a rectangle using one-half the major axis as the length and one-half the minor axis as the height. Next, divide the rectangle sides into an equal number of parts. Now join the corresponding marks with a straightedge or line. This series of lines tangent to the ellipse can be used for any size or shape of ellipse. Remember that a circle is an ellipse whose minor and major axes are equal. For the valley rafter, just multiply the circle's radius by $\sqrt{2}$ to get half the major axis.

This method was shown to me by the first carpenter I apprenticed with and I've never been afraid of an ellipse since.

Paul Tucker
Dillsburg, Pa.



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perfection, I believe it is very risky to build a hot roof in cold climates.

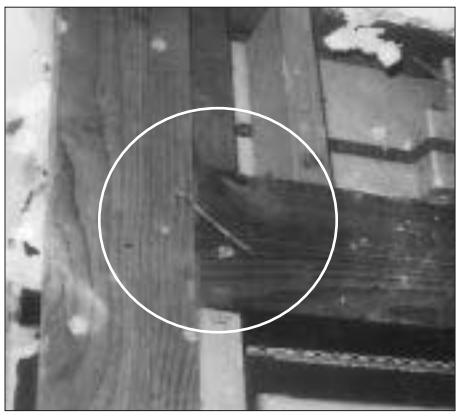
In Vermont, for instance, there are 5,000 hours in a year where we are subjected to a dewpoint with temperatures of 46°F or less with an indoor temperature of 72°F and 40% RH, which is quite normal in today's houses and desirable for health reasons. Under these circumstances, is it reasonable to take the risk to build a hot roof unless you are absolutely sure that all is done perfectly and that the house will not be affected by seasonal movements? I don't believe so. For these reasons, I remain a firm believer in above-average construction practices and cold roofs.

Seismic Staples

To the Editor:

I am a general contractor specializing in upscale second story additions in Southern California. Because of the lingering effects of the Northridge earthquake, I have also become involved with earthquake repairs and deal with both cosmetic and structural repairs on a daily basis.

Recently, my crew began a second story addition on a home built in the late 1940s. I was surprised on my walk-through to find no cracks in the plaster at the corners of the door and window openings. During demolition, we found out why. When the house was built the framer installed what looks like a heavy gauge staple (about 6 inches long with 2-inch legs) at all joints between headers and king studs.



I have never run into these before, but they seem to work in a similar fashion to the Simpson A-35s we use now. All I can say is that every other house I've worked in except this one had the telltale cracks. These "staples" certainly were effective.

Gary Greenbaum
Westside Construction
Los Angeles, Calif.

Cyberspelling

To the Editor:

In the article "Builders Explore Cyberspace" (*Eight-Penny News*, 7/95), the reference to the WWW Business Yellow pages was misspelled. The correct spelling is *http://www.cba.uh.edu/ylowpges/ylowpges.html.*

Neil Katin
Los Altos, Calif.
via Compuserve

Effective Air Seal

To the Editor:

As an insulation contractor from upstate New York, I read with great interest the article "Air-Sealing the Story-and-a-Half," by David Legg (8/95). I applaud Mr. Legg for his efforts and suggestions. I hope they do not fall on deaf ears. All of the problems addressed in this article are effectively and permanently solved without much effort by applying Icynene spray foam insulation. The use of cardboard, foam board, caulk, and aerosol foam is commendable. However, the permanence of these materials is suspect. Cardboard will eventually decompose due to effects of humidity and temperature. The caulk and foam sealants will be compromised by the shrinkage or expansion of lumber as it goes through its seasonal humidity cycle, and I have not yet found a tape that is truly permanent.

Icynene stays soft after application and will consistently move with the lumber it is attached to. I will sometimes ask the builder to install the plywood floor and the drywall on the knee walls before we insulate so I can have a surface to spray against. If this is too much bother, I apply a poly film and rigid foam to the "finish" side of a knee wall, spray my foam, and remove the rigid insulation and poly. If the homeowner sees us detailing the trouble spots with foam and asks us about the cost of spraying the rest of the house, there is a strong possibility (75% closure) they will demand we complete the house with Icynene.

Patrick Dundon
Dundon Insulation Inc.
Windsor, N.Y.

Correction

The correct number for Synapse Software, maker of GC *Works* (*State-of-the-Art Contractor,* 6/95) is 800/420-2521.

Keep 'em coming! Letters 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*, RR 2, Box 146, Richmond, VT 05477; or e-mail to 76176.2053@compuserve.com.