

Q&A

Can You Combine Ridge and Gable Vents?

Q. *I'm reroofing an older ranch house that has continuous soffit vent panels and gable-end attic vents but no ridge vents. I'm wondering if I should add a continuous ridge vent; it would be fairly easy to do while the roof is stripped. Is it okay to combine soffit-to-ridge roof ventilation with gable-end vents?*

A. *Mike Keogh, a specialist in energy conservation and ventilation from Campbellford, Ont., responds:* Upgrading existing ventilation when reroofing is a smart move — an opportunity that is missed all too frequently. But should you add a ridge vent to a roof with gable vents? No way — that's a prescription for disaster. Gable vents will alter the air flow around the ridge vent and, especially when wind is parallel to the ridge (at right angles to the gable), can actually reverse air flow through the ridge vent, pulling rain or snow into the attic.

Unfortunately, however, even when

they're matched with continuous eaves venting, gable vents are not very effective because most of the air flow is along the floor of the attic. This leaves much of the attic volume unvented (see illustration), with pockets of dead air that can store summer heat and radiate it into the living space below.

The most efficient option is ridge venting combined with continuous soffit vents. If in this case, you choose to add ridge vents, you must either remove the gable vents or seal them up from inside the attic. Sealing and leaving them may look better from outside, to avoid creating a blank gable. There are also some attractive, strictly decorative gable vents available.

Bending a Base Cap

Q. *I was recently asked to add a cherry base cap along the finished stringer of a custom staircase that makes a broad sweeping curve along the wall in several*

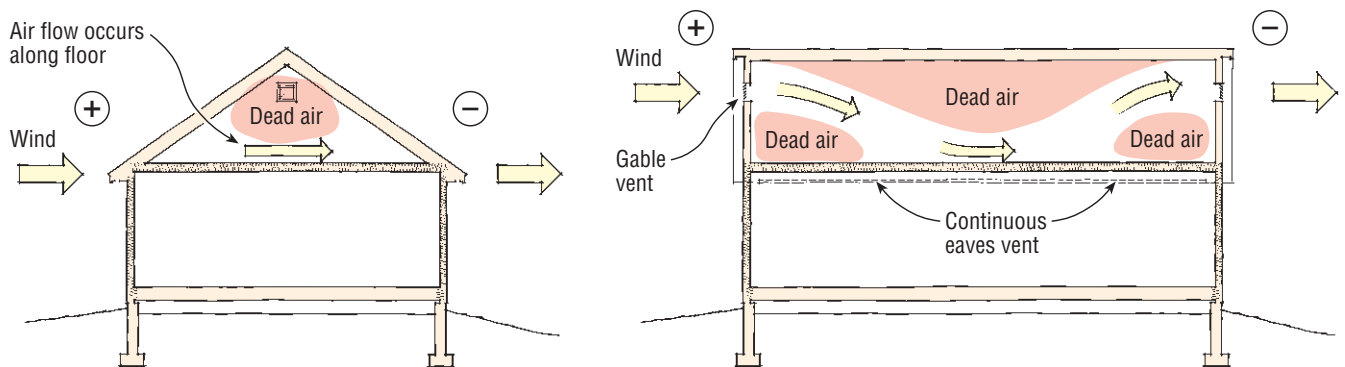
places. What's the best way to make this molding? Should I use a softer, more pliable wood and stain it to match the cherry? Your help is greatly appreciated.

A. *Associate editor Dave Frane responds:* If I were doing the project, I'd laminate a curved cherry molding off site.

The most straightforward way to do that is to rip the milled stock into narrow strips that can easily be bent, then glue-laminate the strips around a curved form. The form can be a doubled-up piece of $\frac{3}{4}$ -inch plywood with a curve cut on the edge, or a series of 2x4 blocks screwed or tacked to a sheet of plywood or a workbench top.

The idea is similar to using bending rail stock to make a curved handrail. If you need an 8-foot length of curved basecap, start with three 8-foot straight lengths and rip them until the profile of the stacked pieces matches that of the original molding. You'll have to account for the parts of the molding

Eaves and Gable Venting, an Ineffective Match



Wind Perpendicular to Ridge

Wind Parallel to Ridge

On a house with eaves and gable vents but no ridge vents, wind perpendicular to the ridge tends to create air flow along the floor of the attic but leave hot dead air in the roof peak (left). When the wind is perpendicular to the gable, the cooler outside air enters the gable vent and drops to the floor of the attic before rising to exit at the other end, again leaving zones of dead air (right).

lost to the table saw kerf, which is why you start with extra pieces.

Glue the ripped pieces together on the form and hand sand the finished piece to the final profile. This will take a lot more elbow grease than other methods but requires no special equipment. Yellow glue is okay if you work fast, but I prefer epoxy because it sets slowly and spans gaps. Put plastic under and behind the strips so you don't glue them to the form. Use plenty of clamps to avoid gaps in the finished molding. Tight joints between laminations mean that less glue will show, which will make for a better-looking molding.

The curve on the form should be tighter than the curve on the wall because the molding will spring back slightly when it comes off the form. The amount of spring-back is related to the number of layers in the lamination: The more layers, the less spring-back.

Rigid Foam Under Siding?

Q. *I'm removing the wood siding from a '70s colonial, down to the sheathing, and plan to put up vinyl siding. I'm thinking of covering the exterior with foil-faced foam for extra insulation but am concerned about trapping moisture in the walls. The house is located in New England. Should I use the foam, or should I just use house-wrap below the vinyl?*

A. *Contributing editor Paul Fiset responds:* Although the energy crisis hit during the '70s, most homes built during that decade were still under-insulated, so it's a good idea to upgrade. Adding an exterior layer of insulation to the walls is easy to do while you're residing. It creates a continuous layer of protection that mutes through-conduction of the framing members. The installation of a "winter coat" also keeps walls warmer, reducing the likelihood that condensa-

tion will form within the wall cavities. In your climate, it's best to select insulating sheathing that is somewhat permeable to vapor. Northern building codes require the installation of interior vapor barriers. Installing an impermeable barrier on the exterior of the wall can trap moisture that reaches wall cavities, creating conditions that are ripe for mold, mildew, and rot. So it's best to avoid the use of foil-faced foam panels in cold climates. Using unfaced polystyrene or other semipermeable foams is a reasonable choice in your cold location. Dow Sturdy-R is urethane foam board with a perm rating of 3 and an R rating of 5 per inch, a good choice.

Got a question?

Send it to Q&A, *JLC*, 186 Allen Brook Ln., Williston, VT 05495; or e-mail to jlc-editorial@hanley-wood.com.

