

# October Product Spotlight: Metal Roofing and Skylights

**Products and tools every builder should know about.**

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## Top It Off

*Metal roofing manufacturers want you to forget asphalt. Do they make a good case?*

There is a house in Omaha, Neb., that is unlike any other house in the state—perhaps the country. Built under HUD's Partnership for Advancing Technology in Housing (PATH), this “concept” house is loaded with 60 of the best technologies and products home building has to offer and is seen as a model for the future of home construction. The roof the agency chose to use on the house is made from metal.

“Given the PATH Concept Home's concern with sustainability, efficiency, and flexibility in an affordable-home format, a metal roof was a sensible design choice,” says Darlene F. Williams, HUD's assistant secretary of policy development and research, which supports PATH. Williams continues, “Along with its durability and fire resistance, the metal roof ensures the concept home will have beautiful, energy-efficient protection for generations to come.”

## BARNSTORMING

Long the material of choice for agricultural outbuildings and barns, metal roofing has become the darling of the architectural community. Architects who favor metal—such as Kaplan Thompson Architects in Portland, Maine, and Peter L. Pfeiffer, principal of Austin, Texas-based Barley & Pfeiffer Architects—like it because it is attractive, lightweight, fire resistant, and durable.

According to the Metal Roofing Alliance in Belfair, Wash., a metal roof will last two to three times longer than a traditional asphalt roof. Once apt to corrode, especially in seaside applications, metal roofs now come with specialized finishes and coatings to handle salt spray.

“Steel metal roofing has a ‘metallic coating’ made of either zinc or a combination of zinc and aluminum ... [which] prevents rust from forming and is bonded to the steel at the factory,” the metal roofing association writes on its Web site. “Paint is then applied over the metallic coating to provide the long-lasting color homeowners desire.”

It is one of these coatings that Follansbee Steel says allows its roofing to last longer than any other type of metal roof—and longer than asphalt. “The roofing features a zinc-tin alloy so it provides a good coat for the coast,” says Lauren Ban, a public relations representative for the Follansbee, W.V.–based company. “We have conducted a test where roofing withstood up to 5,100 hours in a salt spray machine.” HUD's Williams agrees, which is why the PATH house is clad in Follansbee's product.

## **PRICE WARS**

But if metal is so good, why aren't more production builders using the stuff on their houses? The asphalt roofing industry says the fact speaks for itself: Asphalt accounts for almost 70 percent of the yearly installed squares in this country, the group says, because it is better. The Washington-based Asphalt Roofing Manufacturers Association says that its product offers all of the attributes—low maintenance, long life, high performance, and good looks—but does it better, for a lot less money.

“Asphalt costs significantly less than higher-priced rivals (including tile, wood, cedar, slate, and metal) while totally outperforming them,” the asphalt association says on its Web site. “But the savings don't end there. Because asphalt roofing is durable and requires little or no maintenance, it goes on saving you money throughout the life of your roof.”

The metal industry concedes that its products cost more, but the group counters (and architects such as Pfeiffer confirm) that the long-term financial benefits offset price. Because of metal's fire resistance, home buyers in almost 20 states can receive up to a 35 percent discount on their insurance premiums. Additionally, the metal industry says metal roofing can save up to 40 percent in annual energy costs, and some systems qualify for the 2006 Energy Tax Credit.

In short, it costs more initially, but the industry says the attributes and the long-term cost benefits make it more than worth it. Plus, they say, it will likely be the only roof a house ever needs.

*In these energy-conscious times, is a skylight still a good idea?*

Very few people will debate the merits of a skylight: It brings light into a dark space, creates nice ventilation, and offers heat gain in the winter. The question, though, is whether or not intentionally cutting a hole in your roof is an archaic idea whose time has passed.

People who believe a skylight is old news are thinking about their father's skylights, says Greenwood, S.C.–based Velux America. When properly installed, today's skylights, the company says, don't leak and are highly energy efficient.

“Matched flashing systems and other improvements have done away with the No. 1 fear of people who are considering cutting a hole in a perfectly good roof,” says Joe Patrick, senior product manager at Velux.

It only makes sense for skylight manufacturers to keep up with the times, especially since consumers are interested in energy efficiency, mold, and protection against damaging weather. Manufacturers have worked hard to engineer their skylights and roof windows to address these issues.

Today, skylights are made with weather-tight frames and flashing systems to prevent moisture intrusion and they use the best glazing to avoid heating and cooling loss. Some systems incorporate hurricane-resistant laminated glass for security. And manual and motorized venting systems (with rain sensors) allow home buyers to catch cool breezes when needed.

Manufacturers have long contended that it was the installation, rather than the skylight, to blame in most leaking incidents. What is certain now is that companies have stepped up their efforts to create foolproof products.

Wayne, N.J.–based GAF has come up with the HeavenScape Premium skylight line that it says is quicker and easier to install but also reduces potential leaking problems. Notable features include a special neoprene gasket, permanently encapsulated weather stripping, and a longer bottom apron and wider side flashing. Installed properly, this skylight will perform for a long time, the company says.

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