

Standing seam metal roof tough and durable

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Since Hurricane Ike arrived in our area I have received numerous questions and concerns regarding various roofing materials, especially the standing seam metal roof systems. The standing seam metal roofing would be my preference as they are a very tough and durable roofing solution.



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There is no material more capable of protecting a structure from wind, rain, hail, fire or rot than a durable and energy efficient metal roof. The initial cost to install may seem high, but a standing seam metal roof is the least costly roof option over the life of the roof because it is virtually maintenance free and can last 50 years or more.

Additionally, standing seam metal roofing can be an excellent choice for house or buildings located in places where weather and temperature changes are drastic. These products are known to be able to control the humid and hot weather in the South, just as well as it can contain the coldness of the North. Thanks to the sliding clips supporting the overall roof structure, a standing seam metal roof can expand and contract according to ambient temperatures without doing damage to the roof.

The attributes of the various kinds of metal roofing are impressive, with most being durable, long lasting and virtually maintenance free, as well in various styles and colors which can easily correspond to your preference. One of the most important attributes of them all is that standing seam metal roofing is fire-resistant.

Asphalt and modified bitumen have previously been the most common choice when it comes to roofing materials, however in more recent years standing seam metal roofing has increased in popularity as the need for protection and flexibility have increased. Standing seam metal roofing has much to offer; easily formed to fit your roof and has become even easier to install than in the past.

Many ecology-minded citizens refer to the standing seam metal roof as, "the environmental roof." The general life expectancy is 50 years or more making it much longer lasting than many houses. It is usually made up of 50 percent recycled material and if any part of your standing seam metal roof should need to be replaced, it is fully recyclable.

Conversely, asphalt requires a huge amount of oil to produce, with an average life of 15 years. At the end of their life, they are then disposed of in landfill sites.

Metal roofing products of old had two drawbacks — standing seams were field formed and panel attachment was through the roof deck, requiring screws, washers, sealant and subsequent maintenance of these points of penetration.

The field forming (folding and crimping) of the standing seams between panels was a tedious process and labor accounted for more than 80-percent of the installed price of the roof covering.

Some of this labor-intensivity has been eliminated with the new cold rolled steel roofing products. Panel edges have been designed with snap locking standing seams to accommodate a concealed fastener that saves installation and maintenance labor while enhancing the appearance and durability of the roofing product. Various gauges and designs also provide a rigidity that allows panels to be installed without substrates

(sheathing) on steeper sloped roofs with spacing of supports as great as 5 foot on center.

The span capability of traditional roof substrates – 7/16 inch OSB and plywood – have played a part in typical roof truss design and spacing, however wood and steel roof trusses in residential spans can be engineered for spacing wider than 2 feet on center.

When a truss can be engineered as a one-ply member at wider spacing, usually by designing with a better grade of lumber or gauge of steel or upsizing chord members, metal roofing products now available can bridge this distance up to 5 feet on center.

Compared with tile at 750 pounds per square (an area equal to 100 square feet) or concrete tile at 900 pounds per square, metal roofing is lightweight. Most varieties run from 50 to 150 pounds per square.

Metal roofing is noncombustible, and given a Class A fire rating (the most resistant). Part of a roof 's classification depends on materials beneath the surface that could ignite in intense heat.

Additionally, metal reflects radiant heat from the sun, minimizing midday heat gain, even though the material itself is low in insulation R-value. Metal roofs are not a recognized radiant barrier and DO need a radiant barrier.

Constructed by interlocking panels one after another, a standing seam roof runs vertically from the rooftop or what is called the roof 's ridge and to the part that is called the eave.

This formulates an interlocking seam wherein the two panels are joined together – the seam rises up from the flat surface of the roof. This construction lets water continuously run without the liquid seeping in between the spaces of the panels.

Panels are preformed of 22-26 gauge steel and have a fluorocarbon coating applied in the factory. Finishes typically have a 20-year warranty, while the life expectancy of the steel panel is 40 or more years.

Metal roof's once had a bad reputation for their bright shiny colors and metallic look, but finishes are now much more compatible with home exteriors and style. Metal roofs have lost their "barnyard" image and now are available in a host of colors, matte finishes, and profiles.

Virtually any color is available, the metal can be finished to remove that high gloss, metallic look, and the end product is a roof that is highly rated to protect against the elements, last a very long time, with little expense for maintenance.