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**At What Point
Should I Start Running
My Own Panels?**

**Understanding Metal
and Tile Underlayments**

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Understanding Metal and Tile Underlayments

By Steve Ratcliff, President, Tarco, Little Rock, Arkansas

A closely watched application for premium underlayments is in metal and tile roofing. This application is an ideal match because it combines the water-sealing performance of premium underlayments with the physical ruggedness of a metal or tile rooftop. Underlayments protect the building from water damage when the primary roof leaks while the primary roof protects the underlayment from physical harm and UV rays.

Modified bitumen has been used

contractor should consider a premium self-adhering metal roofing underlayment specifically formulated to provide high-temperature stability of up to 260 degrees Fahrenheit as measured by ASTM D-5147. This high softening temperature is important for metal roofing, because temperatures can soar beneath a metal roof.

The most visible difference between metal roofing underlayment and other types of underlayment is the surfacing. A hybrid polymer system will allow the underlayment

Another important benefit of a premium metal roofing underlayment is its tacky underside. Generally known as *peel-and-stick* products, the SBS-modified asphalt on the bottom side is covered with a split-back release film that can be peeled off to expose the sticky surface. The right amount of tack can be subjective, and preferences vary among roofers. Some contractors prefer lower adhesion, which allows for easier realignment if the sheets are initially misplaced; others prefer stronger adhesion to ensure a good

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in underlayments for metal and tile roofs in the past but there were several drawbacks associated with them. The first has to do with the high temperatures that are reached beneath a metal or tile roof. In direct sunlight these roofs become quite hot, and this heat is conducted to the underlayment. Aluminum or copper roofs, and dark-colored painted steel roofs, can be hot enough to cause SBS-modified bitumen to melt and drip down the side of the building. In metal roofing applications, it is critical that the underlayment used have the ability to withstand high temperatures. Also, the SBS-asphalt blend must remain stable at these temperatures.

Since compound stability is not immediately visible, the roofing

to withstand high temperatures (resistant up to 260° Fahrenheit). Underlayment with a top surface of polyester fabric is the best choice for use under large metal roofs particularly in commercial applications. The fabric provides adequate slip resistance for installers, yet it easily slides beneath the metal roofing. At the same time, the smooth polyester fabric surface provides better contact with the metal roof, improving heat conduction from the roof to the deck, which helps to reduce the peak temperatures.

The combination of polyester fabric surface and compound stability in one premium, self-adhering membrane results in a trouble-free underlayment for metal and tile roofs.

grip to a particular material or slope. For many installers it is a matter of what feels right, and one membrane is often chosen over another because of the contractor's familiarity with the product. The tacky surface of premium underlayments is a labor saving feature, which allows contractors to add value while minimizing added labor. Contractors can offer homeowners a premium upgrade without a major increase in the overall job cost.

Often, metal roof systems that fail due to corrosion actually rust from the inside out, as the result of condensation on the metal's underside. One way to prevent this is to cover the entire roof deck with a premium underlayment, which prevents moisture from forming

beneath the metal. Whenever a vapor retarder is installed under an entire roof system, adequate ventilation must be provided within the attic space. In similar circumstances, watertight underlayments also require proper ventilation, including both ridge and soffit venting. If these precautions are observed, the use of waterproofing underlayments with metal roofs is an attractive option for both the contractor and the building owner.

Premium self-adhering underlayments made of SBS-modified asphalt have been broadly adopted, applauded and accepted by roofing contractors. As a result, most

contractors now are familiar with various types of self-adhering underlayments and their installation. Most contractors prefer the convenience of self-adhering (peel-and-stick) membranes for residential and commercial metal roofing applications.

About Tarco

Tarco is one of the largest independently owned manufacturers of residential roofing products and commercial roofing products in North America. A major producer of underlayments since 1978, Tarco offers traditional roll roofing as well as premium LeakBarrier® underlayments and

other roofing materials.

Whether the primary roof is shingle, tile, metal or membrane, Tarco makes an underlayment that has been specially engineered and optimized for easy installation and superior performance.

You can depend on Tarco for superior value, exceptional customer service and convenient on-time delivery - Underlayments are Our Business

For further information, contact Tarco at: phone: 501-945-4506. Fax: 501-945-7718 or toll free: 800-365-4506. Tarco is on the Internet at www.tarcoroofing.com.

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