

MODIFIED BITUMEN BEING **USED IN A ROOF VALLEY ON** A RESIDENTIAL PROJECT,



Residential Mod Bit

Big D Roofing Adopts New Modified Bitumen Product for Extra Protection in Residential Roofing

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ne of the more important advances in residential roofing in recent years has

been the increased use of modified bitumen products. These products are not going to replace shingles but they are increasing the quality of residential roofing installations by providing extra protection beneath the

One roofing contractor embracing the new technology is Big D Roofing, Garland, Texas. Big D has been installing residential roofing since

Larry Portman is a senior adminis-1954. trator at Big D who has been with the company for more than 25 years. He is responsible for most of the purchasing of materials at Big D. He is assisted by his colleague Terry Dobson who oversees work in the field and advises him on the performance of the materials. Meanwhile, Portman researches new products and coordinates with suppliers and distributors to ensure delivery of the necessary materials to every project in a timely manner.

Logistics is a big job at Big D. The company installs in the neighborhood of 1,500 to 2,000 roofs per year. When Portman is not involved in allocating resources to Big D roofing projects, he often is soaring through the skies over Texas. An avid skydiver, Portman says that jumping out of airplanes is his way of "relaxing" from his management and administrative responsibilities at Big D.

Most of the roofing projects involve asphalt shingle roofs for new

construction residential homes, including independent custom homes and multi-family apartments. Additionally, Big D installs roofs on commercial buildings and retail establish-

One crucial material for residential roofing is the underlayment that is used underneath the shingles, in the valleys, and other vulnerable areas. The line where two slopes intersect is called a valley. Shingles can be applied over the valley in a woven or closed fashion; nonetheless, the valleys carry much of the runoff from a roof, so a weatherproof underlayment is necessary in the valleys.

The conventional material for this application is the well-known granulated 90# roll roofing (i.e., "90 pound"). Portman has long sought an alternative to 90#. "The 90# roll roofing has drawbacks but for as long as I can remember it was the only solution," he says. "A major drawback is that it's heavy, because of the granulated mineral surface and high thickness; but, even though it's thick, it's still subject to tearing." In many parts of the country, roofing contractors use metal instead of 90# but metal has always been more expensive than 90#. As a consequence of the huge price increases for metal building products in the last couple of years, metal underlayment for valleys has become more expensive than ever. "To save cost, most roofing contractors in this area went to a narrow 20" metal valley. This is not up to our standards at Big D Roofing, explained Portman.

Meanwhile, for Portman, the 90# material was becoming harder to get and prices were climbing. "Many distributors did not like to carry this product because of its heavy weight and consequently problems with shipping and storing," says Portman. "They considered it a niche product, so we were paying a premium for it."

According to Portman, the thickness created aesthetic problems known among roofers as the "90# hump." There were other problems, too. The 90# material is not very strong. Despite its thickness, it could still rip and tear. "There was a constant concern about tearing. This material is supposed to provide extra protection at vulnerable sections and yet it ripped fairly easily," says Portman. "That does not sound like the best material for the job." Suffice it to say that Portman and Dobson were on the lookout for a superior product for this application.

LeakBarrier ValleyFlash™ from Tarco is a modified-asphalt membrane made from a blend of asphalt and styrene-butadiene-styrene (SBS). The latter is basically a rubber compound, which soaks up the asphalt like a sponge. This material is then fabricated with a fiberglass mat that shapes the material. The result is a strong waterproof membrane that is ideally suited for the valleys of residential roofs.

Portman learned about LeakBarrier ValleyFlash from Tarco's vice president of sales, Steve Wilcox, who is based in Dallas. "Modified bitumen membranes were first widely used in commercial roofing; however, in recent years Tarco has developed products for residential applications," says Wilcox. "By its very nature, a modified bitumen membrane is much stronger than a traditional roof felt. Therefore, the LeakBarrier ValleyFlash product doesn't need to be nearly as thick as the 90# product that conventionally has been used in valley applications."

According to Wilcox, Tarco has dedicated production lines at two of its plants to meet the soaring demand for modified bitumen products for residential applications. Tarco launched the LeakBarrier line of products nearly five years ago with its peel-and-stick Ice and Water Armor™. The latter generally is used for eaves but can also be used on ridges and valleys. "ValleyFlash is not a peel-and-stick product but it offers a similar level of extra protection," says Wilcox. "The peeland-stick feature is not necessary for the ValleyFlash underlayment because shingles are nailed down over the product. Consequently, ValleyFlash costs substantially less than the peeland-stick product."

ValleyFlash passes much more stringent waterproofing tests than 90#. It meets ASTM D-4869 four-hour shower test standards. According to Portman, Dallas does not get as much rain as coastal cities, but torrential downpours are common, which is why the extra protection is essential for residential roofing in this region. "We are not compromising on quality. Testing suggests that roofs with ValleyFlash underlayment will have longer life cycles than those with 90# underlayment," he says.

Another important feature of ValleyFlash is its ability to self-seal around nails. The modified bitumen material flows to fill any gaps. When a nail is driven through the underlayment, the SBS-modified asphalt soon seals any spaces around the nail. It is literally the same as driving a nail through a piece of asphalt-saturated rubber.

"Tarco's ValleyFlash is priced as a viable substitute for 90#," says Portman. "I also appreciate the service provided by Tarco. On-time delivery and technical support were big fac-

tors in choosing Tarco products. The competitive pricing is great for Big D's bottom line, and the roofers appreciate its light weight." He explains that the rolls are a lot easier to handle than 90# because a one-square roll of Valley Flash is much lighter than a one-square roll of granulated 90# felt. Also, the ValleyFlash is much easier than the 90# to cut.

Portman explained that another important advantage is that the ValleyFlash is not as thick as the 90# so there is no problem with humps from

flashing showing through the shingles. In other words, the finished roofs look a lot better.

"Our guys love ValleyFlash. I hear nothing but good things from the field. We are now providing our customers with a superior roof and it is easier for us to install it. It's a win for everybody," says Portman. With ValleyFlash being delivered on time and doing its job in the roof valleys, Portman can spend more time relaxing at his favorite sport - skydiving deep in the heart of Texas.

