



Project Profile

Project

Staley Middle School
Frisco, TX

Owner

Frisco Independent School District

Architect

Corgan Associates, Inc.
Dallas, TX

Roofing Consultant

Amtech Roofing Consultants, Inc.
Richardson, TX

Roofing Contractor

Merit Roofing Systems, Inc.
Richardson, TX

Roofing Systems

Décor Roof System, using 60 mil, G410
membrane in hunter green

Project Size

55,006 square feet

Completed

August 2005

Sika Sarnafil's Décor Roof System Makes the Grade at Staley Middle School

A standing seam steel metal roof on the new addition to the Staley Middle School in Frisco, Texas had many challenges and leaks. After numerous attempts, no solution was deemed acceptable to resolve the problems found at the many roof intersections and connections. "There were a number of leaks resulting from a variety of issues, such as inappropriately installed receivers and counterflashing," said Steve Alberico, project manager at Amtech Roofing Consultants, Inc. of Richardson, Texas. "We were constantly chasing leaks, and every time we thought we were caught up we had more leaks. The school district was getting frustrated."

Color, Grade and Waterproofing Key Issues

When it became apparent that the roof would have to be replaced, several considerations were taken into account. One was how quickly a new roof could

be installed – the school district wanted the work to be done during the 10-week summer break so as not to inconvenience its students. "That time frame made a tear-off of the old roof difficult, so we needed to find a roofing system that could be applied over the old roof," Alberico explained.

Installing a new metal roof over the old roof posed some challenges, however. One was the additional weight of another metal roof. Another concern was that overlaying a new metal roof would lift the roof much higher than the previous roof, which would cause problems in several places where the roof had been attached to older buildings, Alberico said. "There was a brick wall that had through-wall flashing, and another metal roof would have raised the roof three inches, which would require us to move the through-wall flashing. We wanted something thinner, like a single-ply membrane– that would raise the roof only a ½ inch and save us the trouble and expense of doing that."

Not any single-ply membrane would do,

Sika®

Sarnafil®

however. The school district wanted the look of a metal roof – and something that would match the hunter green metal color used on the roof on the other part of the Staley building. After their experience with the existing roof, they were extremely sensitive to a system that would be absolutely leak free.

Sika Sarnafil to the Head of the Class

Fortunately, there was one single-ply system that would meet all of the school district's requirements: the Sarnafil Décor Roof System. Décor Profiles and Battens, which are made of the same proven product formulation as the membrane, are permanently fused to the Sarnafil membrane with a hot-air welder to provide the appearance of a standing seam metal roof.

"We had worked with Sika Sarnafil for years and the Décor system was a perfect fit for this application," Alberico said. "When you have to match a standing seam appearance the only game in town is Décor. It was the closest we could get to replicating the system and getting a color match."

Alberico was happy with the decision to use the Sarnafil system. "Deciding to go with a single-ply roof made the job much easier," he explained. "Sika Sarnafil has a great reputation and their technical people were very helpful and responsive. Once we established that was the way to go we felt very comfortable."

Steve Hulsey, principal at Corgan Associates, Inc., an architectural firm in Dallas, said, "What sold us on the Sarnafil system was that they could fill in the old roof with insulation and lay the single-ply system and ribs right over it, which would give the school district the metal roof look they wanted."

Teamwork Gets the Work Done on Deadline

The first stage of the installation involved



Sarnafil Décor Roof System on the Staley Middle School in Frisco, TX

installing pre-cut polyisocyanurate insulation board to fill the voids between the standing seams. Then 2.3-inch board stock was used to project above the tops of the seams. This was followed by a layer of 1/4 inch Dens-Deck®, which was placed over the filler boards to limit the height of the new roof to less than one inch. The Sarnafil felt-back membrane was then adhered to the Dens-Deck. "We were able to accommodate all the angle changes and in some areas able to extend the flashing up and over walls where there had been problems before," said Brian Kimbrell, president of Merit Roofing Systems, Inc. of Richardson, TX.

Despite all the angles and changes in planes, Merit was able to install the Décor ribs uniformly, perfectly mimicking metal's appearance. "This roof was very visible so the aesthetics were very important and required a great attention to detail in its installation," explained Kimbrell.

"The team effort between the consultant and manufacturer made a tough job go very smoothly," Kimbrell said. "Everyone was open to ideas and had lots of good suggestions. The Sika Sarnafil regional people

were very helpful and 'hands on' – it was great to have factory people right there behind us." He added, "I wish I had more jobs like this!"

An A for Performance

The roof has been earning high marks since it was installed, according to Blake Vaughn, director of maintenance for Frisco Independent School District. "We are very pleased with the roof and most definitely would use this system again in the future," he stated. "We thought it would be a good match and it has been. In fact, most people driving by don't even realize it is a different roof; although the building's occupants appreciate staying dry during rainstorms!" Hulsey is also very pleased with the Sarnafil Décor Roof System's performance. "The roof did what they said it would do and worked fantastically," he said. "I would absolutely use this system again."

Alberico also echoed this sentiment. "This is a unique system that solves a unique problem, and I don't know of anyone else who offers a system like this. I would certainly go with the Décor system in the future."

To learn more:

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