

SIKA AT WORK WOGAMAN 5-8 SCHOOL DAYTON, OHIO

Décor Roof System USING 60 MIL Sarnafil® G410 FELTBACK MEMBRANE IN LEAD GRAY





DÉCOR GIVES WOGAMAN SCHOOL ROOF A NEW LIFE

"Act your age!" is something you might expect to hear directed to a school student, but not to the school's roof. Yet instead of being problem-free like most roofs its age, the nine-year old shingle roof on the Wogaman 5-8 School in Dayton, Ohio, was performing like a much older roof that was past its prime. "There was a plethora of leaks, with the worst leak being over the principal's office," remarked John H. Carr, AIA and chief construction officer at Dayton Public Schools. As with a misbehaving student, this was a situation that had to be addressed – and soon.

"FUNCTION FIRST, AESTHETICS SECOND"

Gary Mays, president of Mays Consulting & Evaluation Services, Inc. of Delaware, Ohio, thought a membrane roofing system might be good solution for the Wogaman School. "A shingle roof requires ventilation, and with a 3/12 low slope like this roof has, it is easy for water to back up under the shingles," he said. Because the roof is very visible from the ground, its appearance was also important. This made the school's roof a perfect candidate for the Sarnafil Décor Roof System.

The Décor Roofing System combines Sika's G410 feltback thermoplastic single-ply roofing membrane with Décor profiles to give

the appearance of a standing seam metal roof – and thanks to its watertight seams, the durability of this system is unmatched. It is one of the only roofing systems of this type that includes warranty coverage for the hot-air welded ribs that give the roof the appearance of metal.

"I have 40 years of experience with Sarnafil roofs, and have specified millions of square feet of Sarnafil," Mays explained. "I know it is a proven product that works well with no callbacks. I also knew the Décor system would give us the appearance we wanted. It met my criteria of 'function first, aesthetics second."

Carr, who is an architect, has "always been a proponent of membrane roofing." He went on to say that his previous experiences with Sarnafil systems have been positive and he was familiar with the Décor system. "I like the aesthetics of the Décor system, and the lead gray color was a good match for this building."

BATTLING THE THREE S'S: SCHEDULE, SCOPE AND SAFETY

Schedule: Although the Notice to Proceed was signed in June of 2013, work did not begin until mid-August due to funding issues, putting roofing contractor Harold J. Becker Company, Inc., of Dayton in a bit of a bind. "Not only were we installing the roof when school was in

PROJECT

Wogaman 5-8 School Dayton, Ohio

OWNER Dayton Public School District

ROOFING CONTRACTOR Harold J. Becker Company, Inc. Dayton, Ohio

ROOF CONSULTANT Mays Consulting & Evaluation Services, Inc. Delaware, Ohio

ROOFING SYSTEM Sarnafil Décor Roof System using 60 mil G410 feltback membrane in lead gray

PROJECT SIZE 85,000 square feet

COMPLETED October, 2014





session, which creates its own challenges, but we also were scheduled to work through the Midwestern winter," said Casey Bechtel, president and CEO of Harold J. Becker Company. In fact, the tough conditions during the winter months shut down the project in December of 2013. When the project started up again in March of the following year, double crews were put on the job until completion of the project in October of 2014.

Scope: The scope and size of the 85,000-square-foot project were daunting. After the existing roof materials were removed, new fire rated blocking was anchored at the perimeter. Two layers of Sarnatherm and a gypsum board were installed, followed by the Sarnafil G410 feltback membrane and the Décor ribs 18" on center. The system included hot-air-welded laps and coated metal drip edge stripping, valleys, hips and ridges. At predetermined locations, the metal deck received flute filler and three layers of fire retardant 2x10s were installed for the Alpine Snow Guard System base plates.

The tear-off of the old roof included removal of approximately 61,000 fasteners from the original nail board, plus the addition of a couple thousand more on the reinstallation. There were also 2,500 feet of gutters and 1,400 feet of downspouts. Due to the installation of additional insulation between the roof joists, all existing soffits – which totaled approximately 3,000 square feet – had to be removed, located, numbered, stored and reinstalled without damage. All told, the project required approximately 17,500 man hours.

Safety: Safety of the crew and building occupants was a big concern. Scaffolding at different levels and heights was built to keep the crew safe as they worked on the multi-leveled roof. Harold J. Becker Company made sure the students and other occupants of the building were kept safe, too. "They worked hand-in-hand with our construction observer and the school principal to make sure everyone was safe and not inconvenienced by the reroofing project," Mays pointed out. "For instance, if students were taking tests, we made sure work was not being done on the roofs over those classrooms."

SAVINGS AND SATISFACTION

Fortunately, there were two other "S's" on the project, the first being

savings. "Thanks to the additional insulation and new masonry walls, I believe we are going to save 20-25 percent on heating and cooling costs in this building with the new roof," Carr said.

Satisfaction with the quality of the installation was also mentioned, as both Sika and Harold J. Becker received high marks for their performance on this project. "The Sika representative was very good about giving advice and had a good technical background," Mays stated. "Harold J. Becker also did an excellent job. We have been working with them for many years and they are very capable, with very good installation and office crews."

"We are very familiar with Harold J. Becker and are always happy with their work, including on this job," added Carr. It was this professionalism that earned Harold J. Becker first place in the Steep Slope Category of Sika Sarnafil's 2014 Project of the Year competition.

A ROOF FOR THE AGES

Now the new roof on the Wogaman School is acting its age. "The roof came out very well and the Décor system is an excellent success," said Mays. "Everyone with the project is happy with the results."

"We are absolutely pleased with how the roof came out, and would strongly consider using the Décor system again," Carr remarked. "I feel very confident that this roof will last for many years to come."



WOGAMAN 5-8 SCHOOL



WHO WE ARE

The commercial roofing industry has relied on thermoplastic single-ply membranes from Sika for more than 50 years to achieve sustainable roofing and waterproofing solutions.

Sika is a globally active specialty chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar and wind power plants, facades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting load-bearing structures. Sika's product lines feature high-quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the Product Data Sheet prior to any use and processing. ISO 14001: 2004-Compliant ENERGY STAR® for roofing products is only valid in the United States ENERGY STAR is a trademark of the U.S. EPA. LEED® is a trademark of the U.S. Green Building Council Green Globes® is a trademark of the Green Building Initiative











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