

Project Profile



Project

Waterford High School
Waterford, Connecticut

Owner

Town of Waterford

Roofing Contractor

Allied Restoration Corporation
East Hartford, Connecticut

Architect

JCJ Architecture
Hartford, Connecticut

Construction Manager

O & G Industries, Inc.
Torrington, Connecticut

Roofing System

Décor Roof System, using
60 mil Sarnafil® G410
feltback membrane in light
gray (steep slopes), and
adhered 72 mil Sarnafil
G410 feltback membrane
in white (low slopes)

Project Size

72,000 square feet

Completed

December 2012

Décor Roof System the Smart Choice for Waterford High School

Some say that experience is the best teacher. If that's the case, then Jay Miner, director of the Department of Buildings and Grounds for Waterford (CT) School district, is an excellent student. When the Waterford School District was planning to replace most of its high school with a new, very visible building, they wanted a roof with the appearance of a standing seam metal roof. "This is a flagship school and is near Town Hall on Main Street, so we wanted something that would look nice," Miner explained.

However, Miner had several standing seam metal roofs in the school district, and wasn't pleased with their performances. One roofing system he was enthusiastic about, though, was the Sika Sarnafil single-ply roofing system. "I have five Sika Sarnafil roofs on different schools in the district — some of which were installed in the 1970s — and they are all doing very well," he stated.

Enter the Décor Roof System. This system uses the Sarnafil G410 thermoplastic single-ply roofing membrane with Décor profiles to give the appearance of a standing seam

metal roof. 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.

"We knew Jay likes the quality and warranty he receives with a Sika Sarnafil single-ply system, so we decided to show him a Décor roof we had installed on another nearby school," said Herbert H. Williamson, president of Allied Restoration Corporation of East Hartford, Connecticut. "He was impressed with the watertightness of the Décor system, which is superior to a standing seam roof."

Bill Ayles, construction administrator at JCJ Architecture of Hartford, was also pleased with the Décor system. "We liked the aesthetics of the Décor roof," he stated. "It has the look of a standing seam metal roof, but is much more durable and has a longer life span." The light color of the Décor system would also help the building in its quest to receive LEED® Silver certification.

A Tall Order

Although Allied Restoration is an Elite Sika Sarnafil contractor with more than 10 years of experience installing Sika Sarnafil systems, the crew still faced several unique

Sika®

Sarnafil®

challenges with this installation. One was the 12/12 roof slope, with the distance from the eave to the peak measuring approximately 55 feet. Most eave elevations from ground level exceed 50 feet, with the peak of the roof approximately 90 feet above grade. "It was like putting a roof on the side of a cliff," Miner remarked. "Allied had to be very careful and safe during the installation."

Allied Restoration dealt with this challenge in several ways, according to Ed Gebhardt, senior project estimator at Allied. "To address the safety issues we had scaffolding on the building and the crew was tied off with safety harnesses," he stated.

There were also concerns about bringing the rolls of membrane up to the top of the steep portion of the roof. "We used a pulley system to hoist the membrane rolls to the top of the roof and had ladder brackets to provide a work platform," Gebhardt explained. Workers used chicken ladders to maneuver up and down the roof for application of the Décor ribs and associated detail work.

Keeping the membrane in place was another issue. Large "sticks" were put inside the membrane rolls so the workers could hold on to the membrane and prevent it from rolling down the roof as the membrane was installed, Gebhardt said.

"We had to create a lot of special tools and equipment — including hoists, sleds, and the pulley system — that were unique to this installation," remarked Pete Barile, field superintendent at Allied. "These tools were needed to assure quality and safety."

Once the tools were in place, Allied installed one inch of polyisocyanurate insulation,



The new Waterford High addition is directly alongside the existing high school complex. The older building features a Sarnafil roof that was installed more than a decade ago by Allied Restoration Corporation.

followed by one-half inch of gypsum board on the sloped roof, and then the adhered membrane. Flat portions of the roof had tapered insulation and half-inch gypsum board under the adhered membrane.

Throughout the installation, Allied worked closely with Sika Sarnafil representatives. "Their technical representatives are as good as they get," said Barile. "No matter what the challenge, they were always there for us and very willing to help."

Allied Restoration also received high praise. "They really did a fantastic job with the installation, especially if you consider the challenges that a roof pitch of this significance presents," Ayles said. Gus Kotait, project manager at O&G Industries of Torrington, Connecticut, the construction

manager on the project, added, "Allied took a definitely challenging installation and got the job done." Facing all of the above, Allied Restoration responded with professionalism and attention to detail and it earned the company Third Place in Sika Sarnafil's 2012 Contractor Project of the Year competition, Steep Slope Category.

Tests from Mother Nature

Soon after the Décor roof was installed, Waterford High School was hit by Tropical Storm Sandy and experienced 70 mph winds. "Even though that storm was quite a blow to us, the roof came through with no damage," Miner remarked. "That's why I'm such a big supporter of Sika Sarnafil systems. They give you a good bang for the buck."

The roof also looks great. "At first the town selectmen were concerned about the appearance, but now that it is complete it is considered a showpiece," Barile stated. "In fact, everyone thinks it's a metal roof."

"The roof system has been performing perfectly with no indications of any issues and we are extremely happy with the aesthetics," Ayles remarked. "In fact, we are so pleased with the Décor system that we are specifying it on another school nearby."

Another lesson taught from experience.



Sika Sarnafil
A Division of Sika Corporation
100 Dan Road
Canton, MA 02021
Telephone: 800-451-2504
Fax: 781-828-5365
usa.sarnafil.sika.com

Sika Sarnafil
A Business Unit of Sika Canada Inc.
6915 Davand Drive
Mississauga, Ontario L5T 1L5
Telephone: 905-795-3177
Fax: 905-795-3192
can.sika.com

