



SIKA AT WORK

POMONA COLLEGE

STUDIO ART HALL

CLAREMONT, CALIFORNIA

Sarnafil® EnergySmart Roof® System USING
60 mil G410 FELTBACK MEMBRANE IN TAN

Sarnafil

BUILDING TRUST



STUDIO ART HALL SHOWCASES STRIKING SARNAFIL ROOF

One of the most distinctive features of the Pomona College Studio Art Hall in Claremont, California, is the canopy roof. The 33,500-square-foot wood and curved steel framed roof mimics the peaks of the nearby San Gabriel Mountains, and the building itself won a merit award in the 2015 Innovative Design in Engineering and Architecture with Structural Steel awards program. Yet the unique design elements that make this building stand out also posed several challenges when installing the roof.

SELECTING THE RIGHT MEDIUM

The first problem was selecting the right type of roofing system. The design originally specified a three-ply built-up roof with a modified cap sheet over a full tapered insulation system. "Not only did this system fail to deliver the required wind uplift rating but it also could not conform to the uniquely shaped roof elements," explained Michael A. Williams, project manager at Eberhard Roofing & Waterproofing of Van Nuys, California. Eberhard worked with the architect and the Sika representative to see if installing a Sarnafil EnergySmart Roof over a lightweight concrete system was a better alternative. Not only did this option save the college \$150,000, but it also increased the FM wind rating to a 1-240 rating, exceeding the college's expectation.

"This rating was important because the roof lacks parapet walls so there is a lot of wind uplift activity on the roof," stated Mark Vanderslice, president of Roofing & Waterproofing Forensics, Inc. of Yorba Linda, California, the consultants on the project. "Another big issue was the roof terminates to a metal edge, and the architect

didn't want a lot of visible metal that would interfere with the design. I like the Sarnafil single-ply system because its attachment to metal is clean and permanent since the membrane is hot-air welded to clad metal." He continued, "We also like using the Sarnafil system because of its product performance, its ability to overcome some challenging architecture details, and because of the positive long-term relationship we have with Sika."

"I've been installing Sarnafil roofing systems for almost 25 years, so I felt comfortable recommending the system for this installation," Williams remarked. "Sika has the most reliable group of representatives of any roofing manufacturer, and whenever I bid a Sarnafil job I get a lot of support from Sika."

AN INTRICATE EXECUTION

The shape of the roof also created some difficulties. Dale Hawkey, superintendent at Hamilton Construction of Pomona, California, the general contractor, said, "Because the curvature of the roof varies from 0 to 9 feet, there were a lot of details that we had to create as we went along regarding the flashing and skylights. This called for a lot of meetings between us, the consultant, and the roofing contractor." He added that Sika representatives also played a lead role in helping with the drawings.

The complex geometry of the roof also required field mock-ups to see how the roof was going to be installed, Vanderslice explained. "Some of the roof features and interfaces to windows and openings were made

PROJECT

Pomona College Studio Art Hall
Claremont, California

OWNER

Pomona College
Claremont, California

ROOFING CONTRACTOR

Eberhard Roofing & Waterproofing
Van Nuys, California

ROOF CONSULTANT

Roofing & Waterproofing Forensics, Inc.
Yorba Linda, California

GENERAL CONTRACTOR

Hamilton Construction
Pomona, California

ROOFING SYSTEM

Sarnafil EnergySmart Roof System using
60 mil G410 feltback membrane in Tan

PROJECT SIZE

33,500 square feet

COMPLETED

June, 2014





much more possible with the advent of using the Sarnafil system and clad metal.”

In addition, Eberhard Roofing installed a ballasted monocrystalline photovoltaic system over the roof system. The 20.16kW solar system used 64 Suniva 315 watt modules and was installed on Claw Grizzly Bear II ballast which “molded nicely with the curvature of the roof,” Williams said. The sustainable Studio Art Hall achieved a LEED Gold certification by the U.S. Green Building Council.

The building’s fire sprinkler system posed another challenge to the roof installation. The plumbing for the sprinklers, which ran across the top of the roof deck, was installed first. Then a 16-by-16 grid system of lightweight concrete was installed to encapsulate the sprinkler’s water pipes. “This saved us from cutting insulation to fit the grid,” Williams stated. Eberhard Roofing installed Sarnavap polyethelene sheeting prior to the lightweight concrete installation to prevent it from dripping through the holes for the sprinklers.

Fortunately, Eberhard Roofing was able to overcome all of these challenges and install a cost-effective, aesthetically pleasing roof without any major issues. TJ Mills, project engineer at Hamilton Construction commented, “Eberhard Roofing did a fantastic job. They were very familiar with the product and had a great crew. I was surprised with how quickly they were able to install the Sarnafil system.”

It was this professionalism that earned Eberhard Roofing third place in the Sustainability Category of Sika Sarnafil’s 2014 Project of the Year competition.

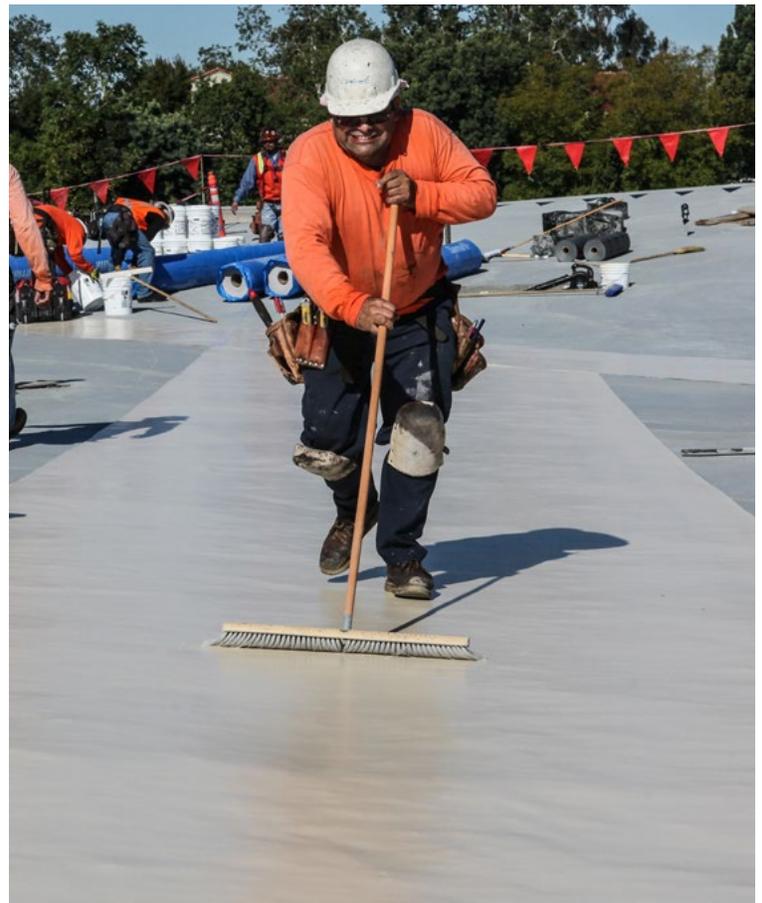
A WORK OF ART

The completed roof is gathering rave reviews. “The Sarnafil roof is beautiful, fantastic!” stated Hawkey. “It was easy to work with and I would recommend Eberhard Roofing and the Sarnafil system again. In fact, I’d put it on my own house if I could.”

“Sarnafil has been our go-to system on our most demanding and complicated projects because we know the product has great long-term performance,” commented Vanderslice. “It is very

accommodating to very complicated architectural geometries like this one.”

“We get a lot of positive comments about the Studio Art Hall roof and interest in the Sarnafil roof system has increased 10 fold since we did this installation,” Williams said. “This roof has become a showpiece for Pomona College.”



POMONA COLLEGE STUDIO ART HALL



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

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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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