



SIKA AT WORK READING TERMINAL/ PENNSYLVANIA CONVENTION CENTER PHILADELPHIA, PENNSYLVANIA

ADHERED ROOF SYSTEM WITH G 410 72 MIL
FELTBACK MEMBRANE IN REFLECTIVE GRAY

Sarnafil

BUILDING TRUST



SARNAFIL ROOF KEEPS READING TERMINAL ON TRACK

As time rolls by like an army of steam locomotives, it is becoming more difficult to preserve our past. Years back, the historic Reading Terminal in Philadelphia, used for years as a train station, was under threat of demolition to make way for more modern amenities. Fortunately, the 126-year old building received National Historic Landmark status, and it is now part of the Pennsylvania Convention Center and home to exhibit halls, meeting rooms, and the renowned Reading Terminal Market.

A STRONG TRACK RECORD

When it came time to replace the aging Hypalon roof on the terminal, there were several considerations in selecting the new roofing system. One was the appearance. “The barrel shape of the roof makes it very visible from the street and from nearby buildings, and it had to fit historic requirements because the roof is considered a sixth elevation and was part of the historic designation of the building,” explained Jim Karmolinski, principal at Kelly Maiello Architects of Philadelphia, the architects on the project. “It was important to find a roof that would maintain the original color and stay clean.”

Steve McLaughlin, president of the Stephen McLaughlin Roofing Consultant Corp. of Somerdale, New Jersey, said that the new roof also had to offer longevity, meet FM requirements, and be a single-ply membrane due to weight issues. “We found that the Sarnafil roof system had a pretty impressive track record, as well as the best service record.”

Scott Spicher, superintendent at EDA Contractors, Inc. of Bensalem, PA, the roofing installers, added, “We’ve had fine experiences with Sarnafil. In fact, the more we use them the more we like them.”

CREATING A SAFE STAGING STATION

One of the first roadblocks EDA faced on the project was figuring out the staging. Because of the slope of the barrel roof and the location of the building in the heart of Philadelphia, “there was nowhere to stage or permanently put a crane,” said Spicher. With the help of a scaffolding contractor, a scaffolding system was designed to be built “on top of” the steepest portion of the roof barrel. This scaffolding was installed on each side of the barrel and ran the full length of the roof, and mast climbers, which met the ends of the roof scaffolding, were also installed at the east and west loading zones of the project. This allowed demoed material to be removed safely and new material to be brought to the work areas on a daily basis -- which was critical because material could not be staged on the roof overnight.

“Logistically the staging was a nightmare,” McLaughlin remarked. “The equipment had to be carried half a mile, raised to the roof, then carried across the roof. It was one of the biggest issues of the job.”

Because the roof is so steep, safety was also a big issue. Scaffolding at the bottom of the barrel roof was railed, and an engineered davit and stretch lines were installed. “There were no injuries on the job site, which was a huge win for everyone involved,” said Tim Killion, culture director at EDA.

LET IT SNOW

Another obstacle EDA had to deal with was the steel snow guards on the roof, which ran continuously in 50’ sections from one end of the barrel to the other and were spaced approximately 25’ from the base of the barrel to the top. There were 100 snow guards in total, each weighing approximately 1,000 pounds. Since much of the roof installation took place during the winter months, they could not remove all the

PROJECT

Reading Terminal/Pennsylvania Convention Center
Philadelphia, Pennsylvania

OWNER

Pennsylvania Convention Center Authority

ROOFING CONTRACTOR

EDA Contractors, Inc.
Bensalem, Pennsylvania

ROOFING CONSULTANT

Stephen McLaughlin Roofing Consultant Corp.
Somerdale, New Jersey

ARCHITECT

Kelly Maiello Architects
Philadelphia, Pennsylvania

ROOFING SYSTEM

Adhered Roof System with G 410 72 mil
feltback membrane in reflective gray

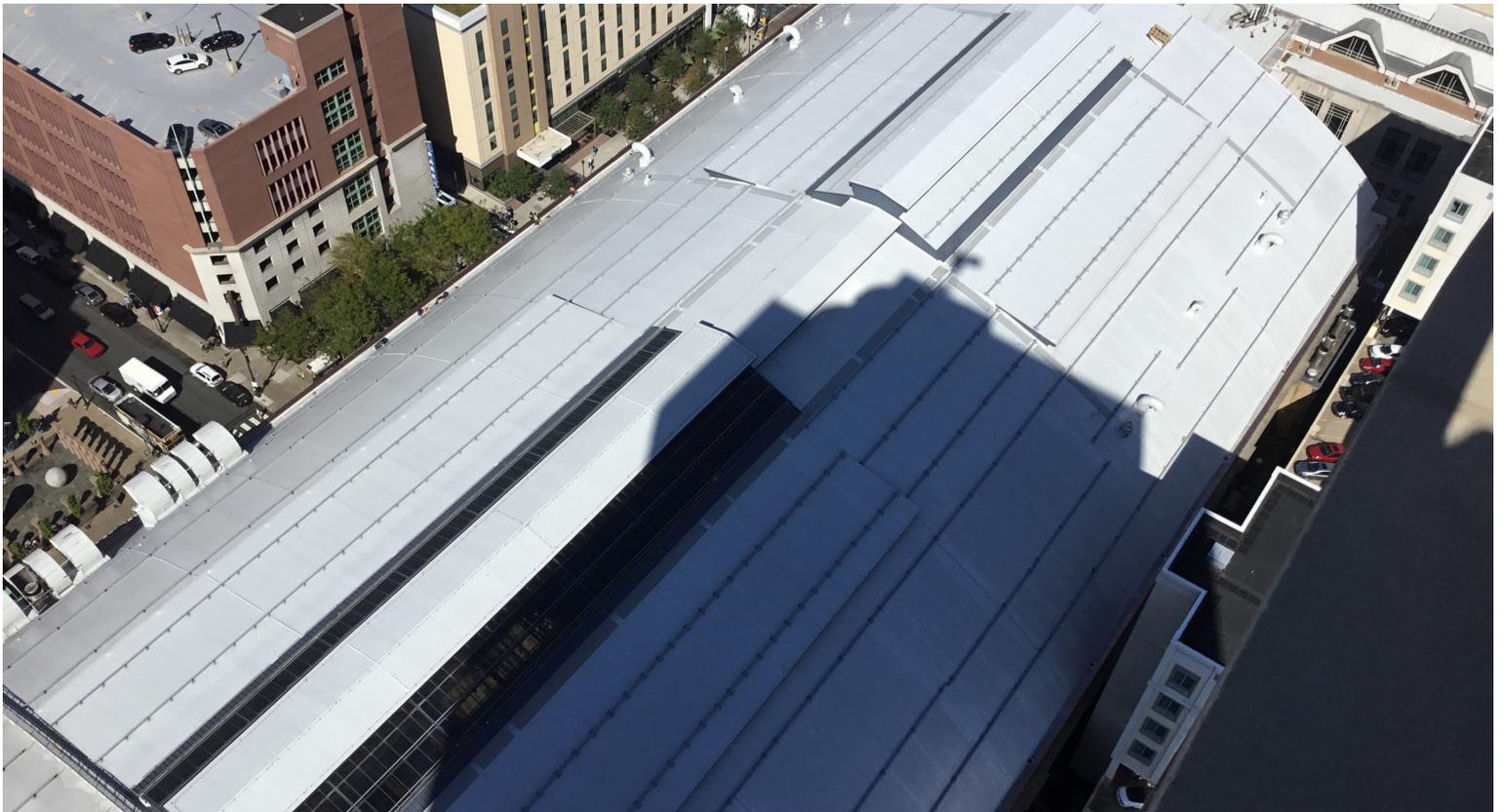
PROJECT SIZE

140,000 square feet

COMPLETED

September, 2017





snow guards at once since there would be no way to stop the snow from sliding off the roof onto the sidewalks below.

EDA's solution was to work with their engineering firm to design a rigging plan to lift the snow guards to a location just outside of the work area. "We used a pulley system with electric hoists and cables," Spicher explained. "We'd go on the roof, remove the snow guards on the work area, prep the roof, replace the framing, roof the area, and then put the snow guards back in place. The first snow guard we removed took us all day, but we were able to reduce that time to two hours off, two hours on."



STAYING WITH THE TIMETABLE

Another challenge EDA faced was coordinating everything with the Pennsylvania Convention Center to ensure that the roof installation did not interfere with any convention center activities. "It was well documented that there were a lot of restrictions on EDA's time, due to events at the Center like the Democratic Convention," said Robert Glick, an associate at Kelly Maiello Architects. "EDA put a lot of effort into making sure their work did not conflict with any events."

"The roof deck is the exposed ceiling of the Grand Hall so noise was a big issue," Spicher stated. "We had to fasten substrate boards before a show and the snow guard lagging could be heard throughout the entire building, so we had to schedule that for weekends or after hours."

It was this professionalism and attention to detail that earned EDA Contractors third place in the Steep Slope Category of Sika Sarnafil's 2017 Project of the Year competition.

ON BOARD WITH ROOF INSTALLATION

Today everyone seems onboard with the Sarnafil roof and EDA's installation. "The roof looks beautiful and clean and blends into the sky," Glick commented. "EDA did a great job, and Sika offered a lot of support on going through the FM approval process for the roof assembly."

"This was a tough job with a lot of logistics to work around," McLaughlin said. "EDA showed us quickly that they would get the work done."

"We were very pleased with the project and the Sarnafil system," stated Spicher. "The membrane was nice to work with and the Sika representatives were very helpful and open-minded."

Thanks to coordination and teamwork, EDA stayed on the tracks and was able to pull into the station on time with no setbacks.

READING TERMINAL/ PENNSYLVANIA CONVENTION CENTER



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
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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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