



SIKA AT WORK

FRANCIS SCOTT KEY MALL

FREDERICK, MARYLAND

RHINOBOND® ROOF SYSTEM USING 80 MIL SARNAFIL® S 327
ENERGYSMART® ROOF MEMBRANE IN WHITE

Sarnafil

BUILDING TRUST



MALL FINDS SARNAFIL RHINOBOND® ROOF TO BE A GOOD DEAL

When the owners of the Francis Scott Key mall in Frederick, Maryland decided to install solar panels on the roof, their shopping list for a new roof to go underneath the panels included “a solid and tested product with a good warranty and which is cost-efficient,” according to Bill DeTora, general manager at Francis Scott Key Mall. One roof which met that criteria was the Sarnafil RhinoBond roofing system.

The Sarnafil RhinoBond system uses Sarnafil’s proven PVC roof membrane, which is attached using RhinoBond’s advanced induction welding technology. RhinoBond secures the membrane directly to specially coated plates that are used to secure the insulation to the deck, all without penetrating the roofing membrane. The result is a roofing system with improved wind performance that requires 25 to 50 percent fewer fasteners and plates.

In addition, since the fastening points are spread out across the roof deck in a grid pattern rather than concentrated in the seams of the membrane, the wind uplift load is distributed more evenly. The result is less point loading on each fastener, enabling the system to achieve higher wind ratings with fewer fasteners.

DeTora had used the Sarnafil roofing membrane for seven years and felt it was a system that met their needs. Joe Marcelli, project manager/consultant at Sharp Roofing Associates, Inc. of Ironia, New Jersey, added, “the Sarnafil membrane is very durable, reliable, and consistent. And I love RhinoBond -- it gives you a more monolithic system and you can use wider sheets, making it less labor intensive. We use it on projects all the time.”

MANY CHALLENGES IN STORE

The scope of the work on this 373,651-square-foot roof included removing wet ISO; tearing off the existing APP modified roof membrane at all roof drains down to the deck and installing 16’ by 16’ drain sumps; tearing off roofing at all penetrations, base flashings, curbs and pipes; and installing one layer of Sarnatherm HD cover board, followed by the Sarnafil membrane. There were 2,600 linear feet of new expansion joints, 9,000 linear feet of peel stops, 300 pipe boots, 8,000 square feet of G-459 utilized upside at all grease vents, 120 rolls of walkway pads, 4,000 linear feet of Edge Grip, 135 HVAC units and 17 various sized roof and rectangular skylights.

The roof installation had to be completed in 90 days, because the solar panels were going to be installed right after the membrane was completed. “There were 16 different roof areas that had to be 100 percent completed and inspected by a Sika Roofing representative before the solar company could start,” said Don Bergamy, president of Nations Roof Mid Atlantic of Glen Burnie, Maryland. “They wanted a minimum of 100,000 square feet to start. Fortunately the RhinoBond system goes down very quickly, and you can get the roof laid out and watertight a lot faster,” Bergamy stated. “This is an extremely busy mall, so keeping it watertight was very important.” Marcelli added, “With the RhinoBond system if the insulation is already fastened and there are rain clouds on the horizon the crew can put field sheets out, weld all the seams and tack it in place with induction welding.”

There were other challenges in store for Nations Roof, like customer safety and convenience. “The mall comes alive at 9:00 a.m. with a large volume of vehicular and pedestrian traffic,” Bergamy explained. “We

PROJECT

Francis Scott Key Mall
Frederick, Maryland

OWNER

PREIT Services, LLC

ROOFING CONTRACTOR

Nations Roof Mid Atlantic,
Glen Burnie, Maryland

ROOFING CONSULTANT

Sharp Roofing Associates
Ironia, New Jersey

ROOFING SYSTEM

RhinoBond® Roof System using 80 mil
Sarnafil® S 327 EnergySmart® Roof
membrane in white

PROJECT SIZE

373,651 square feet

COMPLETED

JULY 2017





had to load the roof at 2:00 a.m. and complete our work by 8:30 a.m.”

Another regular visitor to the mall is OSHA, so safety was also very important, especially since the roof had a 2/12 slope. “We had to be on our A-game at all times,” Bergamy remarked. To that end, Nations installed 1,500 linear feet of perimeter ZIP rail fall restraint system.

Another factor was making sure everything met FM approval, since the mall is FM insured. Fortunately Sharp Roofing Associates and Sika Sarnafil were very helpful with that and other tasks.

A SUCCESSFUL TRANSITION

Despite all these factors, Nations Roof was able to complete the work in 90 days with no injuries, roof leaks, or liability claims. “Nations Roof pulled off one heck of a show down there,” Marcelli commented. “They did about 260 squares a day without cutting corners and while paying close attention to the details. If there was one weak link in the chain the project wouldn’t have worked. But with the Sika technical representatives, and Nations’ talented crew the project ended up being a credit to their professionalism.”

It was this professionalism that earned Nations Roof third place in the Sustainability Category of Sika Sarnafil’s 2017 Project of the Year competition.

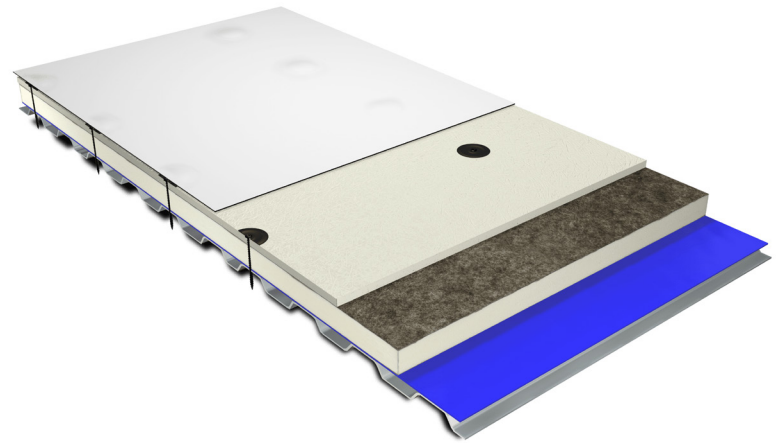
A SATISFIED CUSTOMER

Today the roof is performing well and keeping shoppers protected from the elements. “As expected there have been no issues with the roof,” DeTora said.

“The roof is beautiful and everything worked out well,” Marcelli added. “The job went smoothly and there are no issues with the roof.”

“I would absolutely use the Sarnafil RhinoBond system again,” Bergamy stated. “I really like working with Sika and the Sarnafil membrane is a premium product that is great to work with. And I’m a big fan of the RhinoBond system because it makes installation faster and easier.”

Another satisfied customer of the Sarnafil RhinoBond system.



RHINOBOND SYSTEM STEP DOWN

Products Involved:

1. Vapor Retarder PE 10
2. Sarnatherm® ISO Insulation
3. DensDeck®
4. Sarnadisc® RhinoBond
5. Sarnafastner #12
6. Sarnafil® S327-60 EnergySmart

FRANCIS SCOTT KEY MALL



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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