



SIKA AT WORK

ST. DEMETRIOS GREEK ORTHODOX CHURCH WESTON, MASSACHUSETTS

Sarnafil® Décor Roof System USING 60 MIL G410
FELTBACK MEMBRANE IN PATINA GREEN AND
80 MIL G410 FELTBACK MEMBRANE IN LIGHT GRAY

Sarnafil

BUILDING TRUST



CHURCH'S DÉCOR ROOF SURVIVES HISTORIC WINTER

It seems appropriate that a church roof would survive an "Act of God."

In 2014-2015, Massachusetts suffered what the Massachusetts Emergency Management Agency (MEMA) called an "unprecedented, unrelenting, and devastating" winter. According to the National Weather Service, a record-breaking 108.5 inches of snow – more than eight feet – fell that winter, 94.4 inches of which arrived in a 30-day period. MEMA reports that February was also the second coldest in history, with an average high of 27.8 degrees Fahrenheit. In addition to preventing much snowmelt, this cold weather also created lots of ice.

The severe weather took its toll on area roofs. According to the Boston Globe, there were 210 roof collapses in Massachusetts that winter, and an extremely high percentage of roofs had damage from ice dams.

One roof that withstood the winter hazards without issues was the Sarnafil Décor Roof System on the St. Demetrios Greek Orthodox Church in Weston, Massachusetts. "As amazing as it sounds, we had no problems with the roof that winter," said Tom Gatzunis, chair of the church's building committee. "Going through an historic winter like that was just phenomenal."

The Décor Roofing System combines Sika's G410 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.

BEAUTY AND PERFORMANCE

The Décor system was selected not only for its performance, but also for its aesthetic appeal. The St. Demetrios Church underwent a major remodel and expansion project from 2011-13, which included an 18,000-square-foot roof with four full domes, two half domes, three barrel roofs, more than 50 steeply sloped areas, and two flat areas. "The roof is our signature feature," Gatzunis remarked. "Its appearance was very important to us."

Yervant Nahikian, AIA, of Y. Nahikian Associates Architects, LLC in Hooksett, New Hampshire, said, "The building is a unique example of Greek Byzantine architecture and with all of its different shapes there weren't too many roofing options that would fulfill the waterproofing requirements." He added that copper is the traditional choice for roofs of this type, but "copper is expensive and doesn't age well." Nahikian also stated that in addition to price, "The Décor system was a good choice because of its hot-air welded seams, which creates a seamless roof system."

The Décor Roof System was recommended by Paul Rowland, president of Rowland Roofing & Cladding, LLC of Boston. "I had used the Décor system on another project and was very impressed with it," he commented. "It is available in a Patina Green color which makes it look like aged copper, and the PVC membrane is very pliable and can be used on three dimensional shapes with ease. It is very contractor friendly."

PROJECT

St. Demetrios Greek Orthodox Church
Weston, Massachusetts

OWNER

St. Demetrios Greek Orthodox Church

ROOFING CONTRACTOR

Rowland Roofing & Cladding, LLC
Boston, Massachusetts

ROOF CONSULTANT

Y. Nahikian Associates Architect, LLC
Hooksett, New Hampshire

ROOFING SYSTEM

Sarnafil Décor Roof System using 60 mil G410 feltback membrane in Patina Green and 80 mil membrane in Light Gray

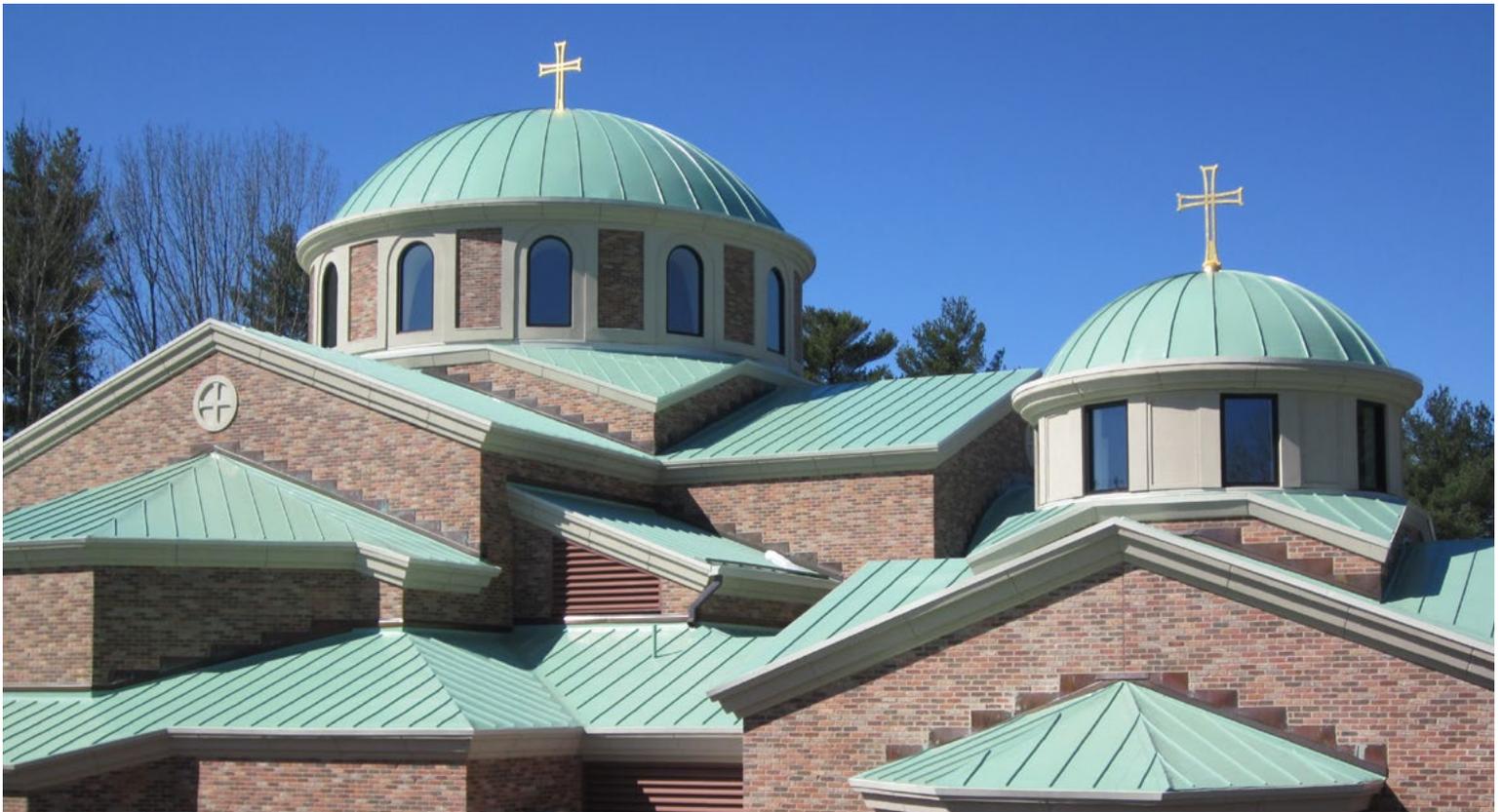
PROJECT SIZE

18,000 square feet

COMPLETED

February, 2013





A TRYING INSTALLATION

The installation of the new roof was much like a design-build project with many specific details being worked out between the architect, Sika technical staff, and Rowland Roofing. "Aside from the logistical challenges of working with other trades and working on a very steep roof in winter, we also had to develop a practical way to mechanically fasten the rigid insulation and gypsum cover board and then adhere the PVC membrane to hemispherical surfaces," Rowland explained. "We approached the project as we would with a sheet metal application, creating pattern layouts of all the assembly elements and building mock assemblies of the domes before construction." These mock-ups were then submitted to the architect and building owner for approval prior to construction.

"The whole project was very complex," added Nahikian. "To install the membrane on the domes they had to cut it into pie shapes so it would take the shape of the roof, then put the Décor profiles over the seams, install the flashing, which then had to flow into flashing from another roof." More than 8,000 linear feet of the Décor profile was used on this project.

Another challenge was keeping the workers safe as they worked on these sloped areas in the winter months. "We kept in full compliance with OSHA, with full harness and fall protection, and unique staging constructed for the barrel and dome roofs," Rowland explained.

"Rowland Roofing did a very good job on the installation and lived up to their solid reputation," Nahikian said. "Sika also was very helpful with the details - their support team is excellent."

"This was a very difficult job but we were lucky to have a great team - including the representatives from Sika," Rowland said. "Working with a local roofing manufacturer was a huge advantage."

Gatzunis was also pleased with the installation. "Rowland did a great job and in fact we continue to use them for preventative maintenance."

It was this professionalism and quality work that earned Rowland Roofing first place in the Steep Slope Category of Sika Sarnafil's 2013 Project of the Year competition.

A MATCH MADE IN HEAVEN

Nahikian said everyone is very happy with the look and the performance of the roof. "I would definitely use the Décor Roof System again," he stated.

"Everyone who sees it loves the look of the roof," Gatzunis added. The roof's performance has also garnered notice. Gatzunis said that he has been approached by several other communities that are looking to repair or replace roofs that have failed, and have asked him what roof system he used and if he would recommend it again.

"I have no hesitation in recommending the Décor system to them," he said. "I like its flexibility, the way it looks, and of course, its track record from the recent historic winter. I would absolutely use the Décor system and Rowland Roofing again."



ST. DEMETRIOS GREEK ORTHODOX CHURCH



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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