

# Project Profile



## Project

Dennis Malone Aquatic Center  
Bristol, Connecticut

## Owner

City of Bristol

## Architect

Quisenberry Arcari Architects LLC  
Farmington, Connecticut

## Roofing Contractor

Titan Roofing, Inc.  
Chicopee, Massachusetts

## Roofing System

Décor Roof System using  
Sarnafil® 60 mil G410  
membrane in lead grey color

## Project Size

20,150 square feet

## Completed

August 2007

## Décor Roof Performs Swimmingly for Dennis Malone Aquatic Center

Keeping swimmers dry might seem like an odd goal, but that was the task facing Quisenberry Arcari Architects of Farmington, CT when they were looking to replace the failing roof on the Dennis Malone Aquatic Center in Bristol, CT. It was acceptable for Bristol residents to get wet from the 10,000 gallon swimming pool, but not from a leaking roof. Thus, Quisenberry Arcari's criterion for the new roof was simple. "We wanted a roof that didn't leak," said Tom Arcari, principal partner at the firm.

The Dennis Malone Aquatic Center had a 10-year old combination asphalt and EPDM roof with a lot of "hot spots," Arcari said. "The roof had uneven snow melt, which led to ice damming and water infiltration," he explained. "We felt a PVC roof with heat-welded seams was the best solution because it would be like putting a seamless plastic bag over the roof. Even if there are hot spots there will be no moisture penetration."

Quisenberry Arcari decided to go with the Sika Sarnafil Décor Roof System,

which combines Sika Sarnafil's G410 thermoplastic single-ply roofing membrane with Décor profiles and/or battens to give the appearance of a standing seam metal roof. The Décor Roof System utilizes Sika Sarnafil's time-tested vinyl membrane. It is the only roofing system of this type that includes warranty coverage for the system's hot-air welded ribs that give the roof the metal appearance.

"The Décor system was a perfect fit for this application," Arcari stated. "The fact that it is a decorative roof means it could be used on the very visible high pitch areas. Yet it could also be seamlessly integrated with the flat portions of the roof, where we were replacing the EPDM system with conventional Sarnafil membrane."

## Steep Slope Proves Challenging

Titan Roofing, Inc. of Chicopee, MA was selected to install the new roof, and found it to be a very steep order, due to the roof's pitch of 9/12 in most places. "This pitch required that all workers — and all of their equipment — be fastened at all times to the structure via safety lines," said John O'Hare, project manager at Titan Roofing.

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"In addition, all materials, including large equipment and the hot-air welder, had to be attached to lines and lowered from above the building down to the work force using cranes, hoists, and tie-lines."

The installation began with the tear-off of the asphalt shingles, followed by removal of the plywood decking and insulation. This left wood decking which functioned as the interior ceiling over the pool area. Since this ceiling is visible to the swimmers below, the Center's owner did not want fasteners to be drilled through it — both for aesthetic reasons and due to condensation concerns.

"Everything had to be adhered because of concerns about fasteners rusting out due to the humidity surrounding the pool and condensation," O'Hare explained. "This just added to the difficulty of the roof installation."

#### On With the New

Titan Roofing began assembling the new roof by installing a Sarnafil Peel and Stick vapor barrier, followed by two layers of 1.5 inch Sarnatherm isocyanurate insulation. Gypsum roof board was installed next, with the roof board and insulation set in low-rise adhesive. Due to the steep slope of the roof, the adhesive was applied with hand rollers in some areas. "At these locations one man was needed to carry and hold the adhesive pails and another man used the roller, both on separate chicken ladders," O'Hare explained.

The lead grey colored Sika Sarnafil 60 mil feltback membrane was then adhered with Sika Sarnafil adhesive, and the Décor profile battens affixed at 25 inches on center.

Titan Roofing had never installed a Décor Roof System before, but as is customary, Sika Sarnafil representatives were on hand to give them all the support and guidance they needed.

"Sika Sarnafil representatives came down to the job site to provide us with some pointers," O'Hare said. "They are always



excellent to work with and we've always had a very good rapport with them."

Arcari also praised the input from the Sika Sarnafil representatives. "They were very cooperative and gave us guidance on details, such as helping us figure out how to provide an adequate base to deal with an uneven substrate on the recovery board," Arcari said.

In addition to working on a very steep slope with a lack of staging area, another challenge

Titan Roofing faced was dealing with the very wet conditions on the work site. "Not only did we have to deal with the humidity created by the swimming pool, but there was an onslaught of rain which constantly disrupted work and made the steep parts of the roof very slippery," O'Hare remarked.

"Titan Roofing did a spectacular job," said Arcari. "They were very professional and experienced."

#### Décor Roof Generates Praise

The Décor Roof System has been drawing accolades since it was installed in August of 2007. "The roof looks great and is very sound with no reported problems," Arcari said. "This was my first experience with the Décor Roof System and I think it is a very nice product. It is very aesthetically pleasing and is very flexible and can be used for a lot of different situations."

"The Dennis Malone Aquatic Center roof is both pleasing to the eye and will provide years of worry-free protection," O'Hare stated. "Titan Roofing was very proud to have played an important part in this endeavor, and I would absolutely use the Décor system again."

Sounds like the Sika Sarnafil Décor Roof System has made a splash in Bristol.



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