

Project Profile



Project

Mount Carmel Christian
School and Sanctuary
Stone Mountain, Georgia

Owner

Mount Carmel Christian Church

Building Envelope Consultant

Williamson & Associates, Inc.
Atlanta, Georgia

Roofing Contractor

Peach State Roofing, Inc.
Atlanta, Georgia

Roofing System

Décor Roof System using
60 mil Sarnafil® G410
feltback membranes in
copper brown and patina
green colors

Project Size

35,000 square feet

Completed

November 2008

Décor Roof System Gives Christian Church Peace of Mind

When the members of the Mount Carmel Christian Church in Stone Mountain, GA raise their eyes to the heavens, they no longer have to worry about being distracted by a leaking roof. "The original metal roof on the dome part of our sanctuary would leak when it rained, which not only was disruptive to parishioners but which also caused some unsightly stains in the interior of the church," explained Bob Sutton, administrator at Mount Carmel Christian Church. "We knew we couldn't correct the stains until we stopped the leaks, so the congregation voted to replace the metal roof with a new roof."

The church, whose sanctuary seats 2,700 people, retained building envelope consultants Williamson & Associates, Inc. of Atlanta to write the specifications for the 35,000 square-foot sanctuary roof and dome. "We considered a traditional metal reroof but determined it would be expensive, disruptive, and would open up the roof and expose the sanctuary to the elements," said Steve Gleason, senior associate at Williamson & Associates. "We've used the Décor system in the past and knew it offered several advantages over metal roofing. It is

less expensive, can be installed with minimal disruption, and at the end of the day you have a continuous monolithic system with no seams."

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

An Installation to Test the Patience of Job

Once the specification was written, Peach State Roofing, Inc. of Atlanta was selected to handle this very difficult installation. "We faced two major challenges with this installation," said Neil Krock, project manager for Peach State Roofing. "One was meeting the extreme OSHA safety requirements due to the severe slope of the dome. The other was the complexity of perfectly covering the dome to give the overall roof the appearance of a metal roof."

Steep sloped roofs always require a concerted commitment to safety from roofing

Sika®

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contractors and for Peach State, safety is a top priority. A solid perimeter railing system was built up around the base edge of the structure to provide fall protection. Once this system was in place, workers built wooden scaffold decking around certain sections of the dome's base. In addition, flat-arched wooden step ladders were built to aid in scaling up the severe slope. All workers had to be tied off in safety harnesses while working on the roof.

"Even though it took a while to set up the safety system it worked very well," Krock said. "Safety was our number one concern on this job."

The roof installation began with quarter-inch gypsum roof board field cut into "pie shapes" so the board could be smoothly contoured around the dome. Once the cover board was in place the Sika Sarnafil Décor membrane was also cut into pie shapes and then fully adhered to the roof board. "The unique shapes were chosen to create a 'no wrinkle' appearance of the membrane," Krock stated.

"One of the most difficult parts of the installation was attaching the pie shaped membranes together," Krock explained. "Welding membrane on a steep slope is much more challenging than on a flat surface."

After the membrane and battens were installed on the dome, it was time to tackle the base section. This was done by cutting 1 ½ inch polyisocyanurate board into 12 inch strips to fill between the panel ribs. Half-inch gypsum roof board was then applied over the polyisocyanurate board and mechanically fastened to give the lower roof sections a flat surface. The Décor membrane was then fully adhered and heat-welded, followed by the installation of the battens.

Both Gleason and Krock credit Sika Sarnafil representatives for being an important part of the roofing installation. "They were unbelievably helpful and very professional. We couldn't ask for more," Krock remarked.



The Mount Carmel Christian School is finally watertight, thanks to the Décor Roof System. In addition to performance, the Décor system delivered style, with the roof having the appearance of a metal roof with standing-seam profiles.

Gleason added, "Another important aspect of this project was how well all the parties — including the consultant, the contractor, the owner and the manufacturer — worked together as a team." He added that Peach State Roofing did an "exceptional" job.

Sutton also enthused about the "excellent" work done by Peach State Roofing. "I have never worked with anyone more dedicated to quality of work," he stated. "They were careful, considerate, and went above and beyond."

It was this dedication and professionalism that earned Peach State Roofing First Place in Sika Sarnafil's 2008 Project of the Year, Steep Slope Category.



A Match Made in Heaven

Today the roof is performing well and garnering accolades. "The roof looks great and the church is happy," Gleason said. "The Décor system solves a lot of problems with a lot of advantages, and we will specify it in the future."

Sutton said the church "looks great and is getting a lot of positive attention as one of the dominant structures in the area." He added that the church was so pleased with the roof and the work done by Peach State Roofing that they held a special "Roof Day" service one Sunday where members of Williamson & Associates and Peach State Roofing were recognized on stage during the service. "We are very pleased with the labor and the roofing system, and wouldn't hesitate to use them again."

"The roof looks wonderful and we've had numerous positive comments from both parishioners and people who just see the dome from the street," Krock said. "The Décor system is a beautiful system because it looks like a brand new metal roof but has the best qualities of a single-ply membrane roof."

You might say it is a match made in heaven.

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