

Project

Creighton Hall Omaha, Nebraska

Owner

Creighton University

Roofing Contractor

Boone Brothers Roofing Sioux City, Iowa

Roofing System

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

Project Size

19,500 square feet

Completed

September 2009

Décor Roof Protects Creighton University Landmark

Creighton University in Omaha is noteworthy for several reasons. First, it is consistently rated number one in the Midwest master's universities category by *U.S. News and World Report*. The Jesuit school also boasts such famous alums as Warren Buffet, Ralph Nader, and Clarence Thomas. And finally, its Creighton Hall (formerly known as the Administration Building), which was built in 1877 as one of the university's first structures and features a French mansard roof, is a distinctive landmark in the Omaha area.

Unfortunately, however, the original tin roof on the five-story building was failing. "There were parts of the original tin roof that were so thin that we couldn't keep rivets in it," said Fran Angeroth, director of contracts and project management at Creighton University. "Not only was the roof leaking in areas, but the giant original wood gutter system around the roof was also deteriorating."

Yet replacing the roof was not an easy undertaking. The university wanted to maintain the appearance of the original roof, but replacing it with a metal roof would

have been "more time-intensive and added extra weight to the building," stated Rodney Hughes, vice president of Boone Brothers Roofing of Sioux City, Iowa. "In addition, the original roof had asbestos-containing material (ACM) in the matrix of the roof's fibrated aluminum coating, which had been added as the roof began to fail."

Fortunately, Boone Brothers knew of a roofing system that would maintain the roof's original appearance, could encapsulate the ACM, and would add relatively little weight to the building. This roof was Sika Sarnafil's Décor Roof System, which 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. It is the only roofing system of this type that includes warranty coverage for the hot-air welded ribs.

"We looked at a number of different roofing systems, but when we saw that the Décor system had the benefits of a single-ply membrane with the look of metal, we realized there was no other way to approach this roof," Angeroth explained. "Plus, we had experience with the Sarnafil membrane and knew it was a high quality roofing membrane. It was a win-win for us."





Another benefit was that the lead grey membrane matched the color of the original roof. "The original roof had been covered with a silver spray to seal up cracks, but when we found a piece of the old roof we realized the lead grey membrane was true to the original color," Hughes said.

Safety First

After a delay of several weeks due to rain, Boones Brothers' first task on the roof was proper placement of safety equipment. "We were working five stories up on a slippery, steeply sloped roof, so all the crew members were properly trained on the use of safety harnesses, tie-off points, life lines," Hughes stated. "We had 100 percent tie-off at all times."

The safety of the clergy, students, staff and general public was also a concern. "We set up a temporary 'walk-through scaffolding' at the entrances to protect those coming and going from the building," Hughes explained.

"I was very impressed with Boone Brothers' safety procedures," Angeroth said. "They took safety very seriously, and I never had to worry about that."

Demolition Goes in the Gutter

As might be expected with a 132-year old building, there was quite a bit of demolition and repair/replacement that had to be done on the roof before the new Décor system could be installed. Eight abandoned chimneys had to be removed brick by brick. The building also had several skylights that had to be removed and/or repaired, including a skylight near the penthouse that had to be redesigned in order to separate the skylight from the penthouse. All of the firewalls also had to be modified on the horizontal and vertical surfaces to accommodate the new membrane installation.





But the most challenging aspect was dealing with the large original integral tin system on the perimeter of the roof. "When they started to take the roof apart there were parts of the gutter where you could literally see daylight through them," Angeroth said.

Added Hughes, "We thought we were going to have to replace 100 linear feet of the gutter system — mostly replacing rotted plywood. But we found that 770 linear feet had to be replaced, and the structural cornices also had to be rebuilt." Cormaci Construction was called in to rebuild the gutters and then Boone Brothers installed Sarnaclad metal lining in them. "This was very time-consuming because each piece had to be individually dimensioned, mapped, numbered, fabricated and then installed," Hughes explained.

Once the demo was complete and the gutters rebuilt, Boone Brothers got to work installing the Décor Roof System. New gypsum board was installed as a cover board, and the Sarnafil feltback membrane was adhered to that. Décor ribs were then installed to match the original standing seam appearance.

Traco, Incorporated of Omaha worked with Boone Brothers on caulking the skylights and pressure washing, scraping, and painting the cornices and other roof areas. "Boone Brothers is a very professional group – we got along with them very well," said Aaron

Bartek, vice president and general manager of Traco.

"Boone Brothers had the most wonderful crew – they were so focused and meticulous," Angeroth remarked. "They paid so much attention to the roof that you would think it was their own roof." It was this professionalism and attention to detail that won Boone Brothers Second Place in Sika Sarnafil's 2009 Project of the Year, Steep Slope Category.

Sika Sarnafil representatives also played an important role. "There was a Sika Sarnafil person to do inspections and be at job site meetings," Hughes said. "We partner well with Sika Sarnafil and kept an open dialogue with them."

Roof Garners Praise from Above

Today the roof is "performing beyond our expectations," Angeroth said. "We still get oohs and ahhs and wonderful compliments from people."

"This was a very difficult roof, but Boone Brothers did a professional job and it looks great," Bartek added.

The roof is even gathering praise from above. "One of the priest's penthouse looks down on the roof, and he constantly had people viewing the project as it was going on," Hughes said. "He said the roof looks beautiful, and that's a nice morale booster."





Sika Sarnafil

A Division of Sika Corporation 100 Dan Road Canton, MA 02021 Telephone: 1-800-451-2504 Telefax: 781-828-5365

Telefax: 781-828-5365 www.sikacorp.com

Sika Sarnafil

A Business Unit of Sika Canada Inc. 6820 Davand Drive, Unit 2 Mississauga, Ontario L5T 1J5 Telephone: 905-670-2222 Telefax: 905-670-5278

www.sika.ca