

FleeceBACK® TPO
Roofing Systems

CASE STUDY

Long-term Protection for Albany Non-Profit



JOB PROFILE

PROJECT LOCATIONS:
Albany, NY

ROOFING CONTRACTOR:
Monahan & Loughlin Inc.
Hudson Falls, NY

ARCHITECT:
Petersen Architecture PLLC
Stillwater, NY

ENGINEER:
Clough Harbour & Associates
Albany, NY

ROOFING SYSTEM:
115-Mil FleeceBACK TPO
Membrane, fully adhered with
FAST Adhesive

For millions in America with developmental and intellectual disabilities, the capacity for communication with others at the appropriate level is elusive. As strides are made toward understanding the profound fundamental differences between those without such disabilities and individuals who struggle with them, the programs to train and offer creative outlets for them are becoming more involved and intuitive. The Albany Chapter of the United States' largest non-profit serving those with intellectual disabilities offers one of the best learning centers in the nation. For more than sixty years, the facility has offered training, education, vocational training, and support for thousands of individuals.

By late 2009, it had become apparent to the facility's occupants that its roof, a ballasted EPDM system that had exceeded its expected performance range, was in need of repair or replacement. The unique needs of the facility necessitated a high level of support, from the design process through the installation of a new roofing membrane.



Nevertheless, the owner was dedicated to being as involved as possible. Clough Harbour & Associates (CHA), a multi-disciplinary engineering firm in Albany, New York with a longstanding relationship with the organization, was contracted to provide project management services for the roof replacement project. Petersen Architecture PLLC of Stillwater, New York was contracted by CHA to provide the new roofing design, which required secondary roof drainage to comply with new code requirements. In addition, CHA provided the engineering designs related to the new secondary roof drainage system.

When Rick Izykowski, project manager for Petersen Architecture PLLC, became involved, he was pleased with the level of attention to detail the owner had paid to the re-roofing project. “They were aware that their original ballasted roof was past its service life. They could not maintain temporary fixes and they knew without a doubt that they wanted a TPO roof to be installed,” he said. “They did a considerable amount of research on their own.”

Before beginning to write the specification for the 78,000-square-foot facility, Petersen Architecture PLLC contacted Carlisle SynTec representative Brian Gleason of Repco Systems Inc. to provide detailed input on Carlisle’s product offerings. Because of his long history using Carlisle materials, Izykowski knew he would get a full range of products to meet the facility owner’s unique needs, and that all components would be covered under a total system warranty.

“I’ve had a great, long-term relationship with Carlisle, and I have a deep affinity for their products,” Izykowski said. “I knew I could expect a level of support from them that other manufacturers simply couldn’t offer.” With Gleason’s input, Izykowski began developing a specification that not only met the needs of the facility, but one that he could stand behind professionally.



CASE STUDY

“They ended up with a high-quality system that we expect will be performing well into the future.”

—Rick Izykowski



“We developed the spec based on recommendations I made to the facility owner after soliciting his input,” said Izykowski. “We were able to ensure the specification of a roofing system that met everyone’s requirements for quality and longevity.”

The ¼ in-per-foot sloped roof required a base layer of four-inch, 25-psi polyisocyanurate insulation with a minimum R-value of 20, which was mechanically fastened with six-inch fasteners to the metal deck. The membrane, a robust 115-mil FleeceBACK TPO, would be adhered to the insulation using Carlisle’s VOC-free FAST™ Adhesive.

“Because the facility was occupied at the time, the FAST Adhesive was the best choice for the job,” said Gleason. Unlike standard bonding adhesives, Carlisle’s FAST Adhesive meets all current

state and regional VOC regulations including the most stringent SCAQMD Rule 1168. Additionally, FAST Adhesive is odor-free, making it desirable for use on occupied buildings. The low-rise, two-component adhesive also features insulating properties, complementing the polyiso insulation used in the project.

“The low odor was an issue of primary concern to the facility owner,” Izykowski said. “Everything we used on the project had to be low-odor—it was a primary selling point of the system we chose.”

Roofing contractor Monahan & Loughlin Inc. of Hudson Falls, New York, one of a select group of contractors to whom the job was bid out, ultimately won the contract to re-roof the facility. “We couldn’t have asked for a better contractor,” Izykowski said.

CASE STUDY

Crews faced the challenge of completing the job in sections at a time to accommodate the facility's occupants, who continued using the facility throughout the application. "One of the greatest complexities of the project was that we wound up having to complete it in a phase-type operation," said Izykowski. "The complications with scheduling affected the occupants as well, since they essentially had to change their day-to-day operations to suit the re-roofing job. It was a bit of give-and-take—we had to be very sensitive to one another's needs."

The roofing job was completed on December 15, 2010—weeks shy of the New Year in which the learning center would celebrate 60 years in operation. The 115-mil FleeceBACK membrane, which combines a strong 55-mil fleece backing with a 60-mil TPO sheet, will ensure puncture resistance and durability even in the most inclement weather conditions.

Wind uplift performance was further enhanced by Carlisle's SecurEdge 2000 metal edges. Carlisle's polyiso insulation offers facility occupants the highest level of comfort regardless of temperatures outside. Certified Fabricated Accessories (CFAs) were used on many details, from curb wrap corners to pipe boots, allowing labor savings to be passed on to the facility

owner and maintaining a uniform standard of quality on the roof. All components are covered under Carlisle's 20-year Total System Warranty.

"We were pleased that the system qualified for Carlisle's 20-year warranty," said Izykowski. "They ended up with a high-quality system that we expect will be performing well into the future."

"Everyone was pleased with this project when it was completed," said Gleason. "It really turned out beautifully."

A high-quality roofing system represents something greater for a facility that serves the developmentally disabled than the environmental and practical benefits so often touted by contractors, manufacturers, and representatives. Children and adults whose day-to-day progress requires a familiar routine, whose motivation often depends on not being disrupted by outside stimuli, whose strides in communication and relationships must be nurtured in a safe and caring environment, rely on the things others frequently take for granted. Something as simple as a roof that keeps the elements out—and keeps the building blocks for growth and development where they belong inside—is one of those things.