

Project Munson Medical Center Traverse City, Michigan

Owner Munson Medical Center

Roofing Contractor Bloxsom Roofing & Siding Company Traverse City, Michigan

Roofing System

Adhered EnergySmart[®] Roof using 80 mil Sarnafil[®] G410 membrane

Project Size 2,974 square feet

Completed September 2008



Usually when roofing contractors perform installations on nonresidential roofs they have a wide, expansive area in which to work. Not so with the Munson Medical Center in Traverse City, MI. When Bloxsom Roofing & Siding Company of Traverse City went to replace the leaky roof over Munson Medical's Patient Care Area, not only did they have to work under an HVAC unit suspended over most of the 2,974 squarefoot roof, but they also had to work around a screen wall used for soundproofing as well as numerous stairs and suspended walkways.

A Crowded Landscape

Interestingly enough, Bloxsom Roofing had done a reroofing project (using another single-ply membrane) on the same roof in 1990. However, that roof had a totally different landscape, said Craig Bloxsom, vice president at Bloxsom Roofing. "Since we completed that roof they added the large HVAC unit, which then required the soundproofing wall. Stairs and the suspended walkways were also added for servicing the unit as well as doing occasional power washing, cramping the space even more," he explained.

The existing roof started to deteriorate, due in part to the extra servicing/foot traffic

Sarnafil®

the unit required, as well as to damage caused by tools being dropped on the roof. "The roof insulation started breaking down, fasteners started to poke through the roof, and the membrane started getting brittle," stated Jerry Boros, manager of plant engineering at Munson Medical Center.

"There were a lot of leaks and saturation. In fact, we found out the whole substrate was wet and would need to be replaced."

Sarnafil Membrane Gets the Nod

The decision to go with the Sika Sarnafil adhered roofing system was an easy one. "We've been using the Sika Sarnafil system since 1994 and have it installed on many roofs throughout the hospital," Boros said. "It is a good product and performs well, which is why it is our roofing system of choice."

"We like Sika Sarnafil because of its white, reflective color, the fact that it is heatwelded, and also because it has a proven track record," Bloxsom stated. "We wanted something we were familiar with and had confidence in."

Bloxsom added that the adhered system was selected because it would be quieter to install, an important consideration for a hospital; and also because there would be no fasteners to push through the membrane, thereby avoiding the problem suffered by the previous membrane due to roof traffic. In addition. non-VOC adhesives could be used for both the insulation and the membrane. which meant occupants would not be disturbed with the odors and fumes that accompany some other adhesives.

Not Child's Play

The tight quarters and other issues made this an extremely challenging reroofing project. "Before we began removing or replacing anything we first had to address the staging, noise control and safety," Bloxsom said. "One challenge was dealing with the logistical problems of getting materials to and from the roof — which required going up and across another roof. We had a crane delivering materials on the closest elevation (approximately 50 feet) and then both new materials and roof tear-off debris had to be passed around a corner."

Bloxsom said that under this work area there were also a series of saw-toothed skylights, and below this was a covered entrance. "Since we didn't want anything to fall on these vulnerable areas we devised a wood platform to catch any falling items," he explained.

Working around the HVAC unit and its associated webbing of cross members and support beams was also very difficult. "It looked like someone took an erector set and dropped it on the roof," Bloxsom stated. "At times we were working in clearance areas of only 18 inches or so, which required the crew to lie on their stomachs."

When the roofing membrane, insulation and substrate were finally removed from the confined space, the debris then had to travel over the wood protection, across 60 feet of roof and then down 50 feet (with a crane) to a waiting dump truck. "Of course, when we brought in new materials, the trip was reversed," Bloxsom said.

Eliminating Standing Water

Work on the new roof included installation of the tapered insulation, "which when engineered, removed the water ponding the added walls created" Bloxsom explained. "So before we added the membrane, we noted the areas where walkways were needed and to prevent compression of the roof insulation, we reduced the 1 $\frac{1}{2}$



A look "inside" the massive HVAC unit suspended just above the roof at the Munson Medical Center. Bloxsom Roofing had to contend with the unit's stairways, suspended walkways and wall built for soundproofing.

inch insulation to 1 inch and added 1/2 inch oriented strand board (OSB)." After that the roof membrane was adhered and the walkways were installed.

Fortunately, the flexibility of the Sika Sarnafil membrane made Bloxsom Roofing's task a bit easier in the close quarters. "The detail work around corners, pitch pans and other areas where the membrane needed to be wrapped or make a transition was easier with the Sika Sarnafil membrane, because it conformed to various shapes and remained 'as one'," Bloxsom stated.

Silence is Golden

Since Bloxsom Roofing does all roofing installations for the Munson Medical Center, they knew how important it was to control noise while installing the new roof. "Because noise and hospitals do not get along, we decided to adhere both the insulation and the



Close quarters forced Bloxsom Roofing workers to complete much of the work while lying on their stomachs.

membrane," Bloxsom said. They also had to secure a pressure bar because of some of the flashing, which required hammer drills on the peel stop. "We saved that to the last and coordinated it with the hospital because of the noise the hammer drills create," he added.

"Anytime I've worked with Bloxsom I have found them to be very understanding of the issues of working with a hospital." Boros remarked, "I couldn't ask for a better roofing company. "

He added, "This installation also went very well. Bloxsom Roofing was very good about coordinating their work around the front entranceway and they were also sensitive to the fact they were working over patient care. We didn't have a single complaint."

It was this professionalism and attention to detail that earned Bloxsom Roofing & Siding Company Third Place in Sika Sarnafil's 2008 Project of the Year, Low Slope Category.

A Good Fit

Today the roof is performing well, despite undergoing a difficult Michigan winter. "We wanted to avoid the problems the roof had before, and it looks like we accomplished that because the roof is doing great," Bloxsom said. Apparently when it comes to dealing with a tight situation, the Sika Sarnafil roofing system is a fitting solution.

Sika Sarnafil

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