

Project Profile



Project

Olympia Medical Center
Olympia, Washington

Owner

Group Health Cooperative

Roofing Contractor

Commercial Industrial Roofing, Inc.
Lynnwood, Washington

Roofing Consultant

Westcoast Roof Consulting
Costa Mesa, California

Owner's Representative

CBRE
Tukwila, Washington

Roofing System

Adhered EnergySmart Roof using
72 mil Sarnafil® G410 membrane
in white

Project Size

75,000 square feet

Completed

October 2011

Sika Sarnafil System Keeps Medical Center Up to Snuff

The old ballasted EPDM roof on the Olympia (Washington) Medical Center was experiencing serious problems. Not only was it leaking and unsightly, but it also smelled. "The insulation and fireproofing were saturated, resulting in a strong odor," explained Tanya Farmer, assistant project manager at CBRE of Tukwila, Washington, the facility managers for the building. Any kind of smell would be unacceptable, of course, because it interferes with the comfort of the patients.

Westcoast Roof Consulting, Inc. of Costa Mesa, California was brought in to help the Olympia Medical Center select a new roofing system, and the firm took into consideration how the system would be installed as well as how it would perform. "We had to be very sensitive to the occupants of the building – we were looking for a system that could be installed without open flames or fumes like those involved with hot asphalt," said Mark Curry, president of Westcoast. "And, of course, we wanted a roofing system that would be watertight." Added Farmer, "We also wanted a roof that would be easy to maintain and that would offer energy savings."

Sika Sarnafil Fits the Bill

One system which met all of these criteria was the adhered Sika Sarnafil EnergySmart Roof in white. This single-ply system can be installed using a water based adhesive with a low VOC content, and the light color of the membrane reflects the sun's rays, keeping the interior of the building cooler and reducing air-conditioning costs. "Sika Sarnafil has a long track record in the area, so we felt confident recommending this system," Curry stated.

One of Sika Sarnafil's first tasks was to help Olympia Medical Center obtain wind-uplift approval from Factory Mutual, the building's insurer. "The Sika Sarnafil people did such a great job helping us with the specs that when FM reviewed them they didn't make a single change," Curry remarked.

A Constricted Installation

Commercial Industrial Roofing (CIR) of Lynnwood, Washington was awarded the roofing installation contract. Their first priority was the comfort of the patients and employees of the two-story specialty center offering urgent care services. "The old roof was going to be completely torn-off, so we had to consider the smell of the wet insulation and other materials," said CIR



general manager Glen Anderson. "We also had to factor in the noise involved with taking off the 500 tons of ballast on the roof."

Normally a vacuum truck would be used to remove the ballast, but Anderson said that would be disruptive not only to the building occupants but also to the medical center's neighbors. "Instead of using a vacuum we shoveled the ballast into carts, rolled the carts across the roof, poured the ballast down a chute into boxes, and then shipped the ballast to a concrete plant to be recycled," he explained.

"It was pretty amazing how quickly they removed the ballast and with minimal disruption," Farmer said. "They really handled it well."

Sarnavap and Sarnatherm Installed

After the old roof was removed, Sika Sarnafil's Sarnavap air / vapor retarder was installed. CIR then put down and fastened two layers of polyisocyanurate Sarnatherm, ¼ inch of gypsum board, and then the feltback membrane. "For the most part, the roof of this building was well suited for this roofing application in regards to the slope of the deck and the tenant concerns," Curry said.

There were, however, a few areas where the roof installation was very challenging – especially under the three, 50-foot air handlers with sleepers (risers or curbs that elevated the air handlers off the roof) that were 30-feet long and eight-feet wide. "When we installed the new roof we increased the insulation thickness, which made it a real challenge to install the new roofing system under the air handlers," Anderson stated. "In some places we only had three to four inches of clearance between the top of the sleeper and the roof."

One option was to temporarily lift the large air handlers via crane, but this would be expensive and also interrupt the air-conditioning service during the summer, adversely affecting the building's occupants. Instead, CIR came up with a much more



effective solution: they jacked up the air handlers just enough to remove the sleeper covers and old roofing system and install the vapor barrier and insulation; and then they took one 10-foot-wide sheet of the Sika Sarnafil membrane and slid it up and over the sleepers at each of the air handlers. This way the edges of the sheets could be welded to the outside edges, eliminating any welding underneath the air handlers.

A chemotherapy vent extending approximately 25' above the main roof deck and attached to a large penthouse roof for stability also posed some problems. "When we began planning the removal and replacement of that particular penthouse roof it occurred to us that perhaps some precautions needed to be taken due to the vent's proximity," Anderson stated. "We ended up putting a 90 degree elbow in the



vent pipe just at the level of the penthouse roof and extending the vent horizontally approximately 20' away from the area of the work, making it safe for everyone."

"CIR did such a great job on the entire installation," Farmer said. "The workers were unobtrusive and they really came up with some great ways to meet the challenges posed by the ballast and the air-handlers."

"I was very impressed with the work done by CIR," remarked Curry. "The people at the medical center were still smiling at the end of the project and were very pleased. The contractor was the hero here."

A Watertight, Odorless Cure

Today the roof is performing up to snuff with no leaks or odors – even after several weeks of very heavy rains. "I would definitely use the Sika Sarnafil system again," Farmer said. "It looks great, it corrected the leaking problem, and everyone involved has only good things to say about it."

"Sika Sarnafil makes great products, and this was a very good experience working with them," Anderson added. "The roof looks great and is watertight."

"This roof is meeting all expectations," Curry said. "It was not obtrusive to install, is very clean, easily maintained, and has a positive track record. It is a real problem solver."

Sika Sarnafil

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

Sika Sarnafil

A Business Unit of Sika Canada Inc.
6915 Davand Drive
Mississauga, Ontario L5T 1L5
Telephone: 905-795-3188, x4483
Telefax: 905-795-3192
can.sika.com