

Project

SuperTarget Store Olathe, Kansas

Owner

Target Corporation Minneapolis, Minnesota

Roofing Contractor

Imperial Roof Systems Company West Union, Iowa

Roofing System

RhinoBond® Roof System using 45 mil Sikaplan® membrane in white

Project Size

175,000 square feet

Completed

April 2012

Sika Sarnafil Contractor Focuses on Recycling at Olathe SuperTarget

Target® is known for its commitment to value, quality, and community involvement. One way Target strives to help communities is by protecting the environment through the use of sustainable design and waste reduction practices in its stores. This was certainly the case when it came time to replace the 175,000-square-foot roof on its SuperTarget store in Olathe, Kansas. This roof was a good candidate for Target's membrane recycling partnership with Sika Sarnafil, and there was little doubt which roofing manufacturer Target would choose for the new roof.

A Sustainable Partnership

Target and Sika Sarnafil have worked together since 2007 to recycle mechanically attached PVC roofs. Sika Sarnafil uses state-of-the-art processing equipment that allows for the large scale recycling of vinyl membranes back into roofing membrane products. Considering that most roofs on Target stores represent 75 percent of the building envelope, the capability to recycle that material meshed nicely with Target's goal of becoming a *zero waste* company.

"Target has been using the Sarnafil roof system for more than 20 years," said Ryan Hoey, Project Superintendent for Imperial Roof Systems of West Union, Iowa.

"The product has proven to be a strong performer time and time again. It is an easy product to work with."

Hoey added that Imperial Roof Systems is very familiar with Sika Sarnafil's recycling program. "I'd estimate that we have recycled approximately 2.5 million square feet of Sika Sarnafil membranes over the past two or three years, and we've probably done 20 or more recycling projects for Target," Hoey remarked. "Sika Sarnafil has been very aggressive about recycling and, in fact, is the only roofing manufacturer that I deal with that recycles."

Recycling Roof Routine

"The existing roof on the Olathe SuperTarget was a Sika Sarnafil PVC mechanically attached membrane that we installed," Hoey stated. "The roof did fabulously, especially considering the building is an area that experiences hard storms and hail."

Instead of removing the old membrane and throwing it into a dumpster as in a typical





roof tear-off, Imperial Roof Systems cut the membrane into 2 foot by 30 foot strips, then rolled the strips up and put them in Gaylord boxes. "We stored the boxed material on pallets on the roof, and then about once a week we used a crane to off-load the containers from the roof," Hoey explained. "Sika Sarnafil was very good about picking up the material to be recycled when we told them it was ready."

"Yes, there are extra steps involved in recycling, but is very much worth the extra time and labor," Hoey said. "Most of our guys are proud that they are helping the environment and saving space in landfills. In this instance we were able to recycle 100 percent of the membrane of this very large roof."

The slight additional labor cost involved for contractors to remove, consolidate and prepare the old vinyl roof surface for shipping can be offset by the reduction in dumpster and disposal costs. Sika Sarnafil does not charge the customer for recycling. There are no fees to move the material and Sika Sarnafil will recycle competitive PVC roofs, in addition to Sarnafil® membranes.

The recycling activities at the Olathe store did not end with the removal of the old roof. Imperial Roof Systems gathered up excess membrane trimmings that resulted from the installation of the new roof membrane and placed them in plastic bags supplied by Sika Sarnafil. These vinyl scraps, rather than ending up in a landfill, were shipped to Sika Sarnafil for recycling, too. Sika Sarnafil accepts installation trimmings free of adhesives and asphalt as part of its Recycling Program, and Imperial Roof Systems recycles these materials every time they install a vinyl roof — even when the old roof is not being recycled.

A Relatively Smooth Transaction

After the old membrane was removed a new ½-inch high density recovery board was installed over the existing insulation, and then a RhinoBond Sikaplan system was installed.

The RhinoBond system from OMG Roofing Products of Agawam, Massachusetts is based



on electromagnetic induction welding, and uses the same fastener and plate to secure both the insulation and the membrane to the roof deck without penetrating the roofing cover. This creates a roofing system with improved wind performance that requires 25 to 50 percent fewer fasteners and plates than a roof mechanically attached at the membrane seams.

"I find the RhinoBond system to be very easy to work with," said Hoey. "In fact, we've probably installed three to four million square feet of RhinoBond systems."



A gaylord filled with old vinyl membrane from the SuperTarget in Olathe is readied for shipment to Sika Sarnafil for recycling.

The installation was not without challenges, however. One was the weather. "We did this project in late winter/early spring, so we did have some snow and ice storms we had to contend with," Hoey explained.

Target was renovating the entire store at the same time the roof was being replaced, so Imperial Roof System also had to do a lot of coordinating with other trades. The store remained open during this process, so they had to be mindful of not causing any disruptions to store customers.

Fortunately, Imperial Roof Systems was able to do all of this to Target's satisfaction. They are one of Target's Preferred Tier One contractors. Because of their professionalism and dedication to quality, Imperial Roof Systems was awarded Sika Sarnafil's 2012 Recycling Project of the Year.

A Team Effort

The new roof is doing well, and Imperial's Ryan Hoey feels especially good about the recycling. "Sika Sarnafil and Target have been great partners to work with when it comes to recycling. This activity benefits everyone. All of our guys are proud to be doing what we can to help reduce the waste being sent to landfills."





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