

# Project Profile



## **Project**

Discovery Center at BackCountry  
Highlands Ranch, CO

## **Owner**

Shea Homes LLC

## **Architect**

Modus Architecture LLC  
Denver, CO

## **General Contractor**

Fransen Pittman General Contractors  
Englewood, CO

## **Roofing Contractor**

Roof Check, Inc.  
Longmont, CO

## **Roofing System**

Décor Roof System, Adhered,  
using custom bronze, 60 mil feltback  
membrane

## **Project Size**

4,280 square feet

## **Completed**

October 2007

## **Sika Sarnafil's Décor Roof System Saves the Day at Discovery Center**

The Discovery Center at the BackCountry functions as a Sales and Marketing Center, and is the integration of nature, spirit and history of the area. Jen Nieman, principal of Modus Architecture in Denver, CO, had a vision of celebrating both the values of this site and of the surrounding community. The BackCountry development, provided by Shea Homes, abuts an 8,200 acre BackCountry Wilderness Area and features 1,400 residences surrounded by trails and open space.

"The shape of the Discovery Center evolved from the entry orientation towards Mt. Evans and the 'spine' directed towards Longs Peak. The use of natural elements: earth, fire, water and natural materials such as stone and wood have been infused throughout the building. The overlying concept was for the exterior materials to transcend through the interior of the building and continue on into the wild," Nieman explained.

## **An 11th Hour Problem**

To complement the natural look of the building, Nieman specified a pre-finished, T-Panel metal roof. However, after

construction had started on the building a problem arose. "The shop drawings had been reviewed, the roof manufacturer had been consulted on several occasions during the design phases with regards to the low slope and custom edge condition; and then at the 11th hour, the metal roofing company decided they would not provide a watertight warranty on this roof," Nieman said.

Jim Andrews, vice president of operations at Fransen Pittman General Contractors of Englewood, CO said, "At this point the building was pretty much finished with a temporary roof to cover the building. We had to find something that would provide the look the architect wanted, but which could be installed quickly and ultimately deliver a watertight warranty to fulfill specification requirements."

Fortunately, the Sika Sarnafil Décor Roof System met all of the above needs. The Décor system is made up of Sika Sarnafil's G410 thermoplastic single-ply roofing membrane, with Décor Profiles and / or Battens made from the same product formula as the membrane. Profiles and Battens are connected and permanently fused to the Sarnafil® membrane with a hot-air welder to provide the look of a standing seam metal roof.

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## A Quick and Effective Solution

Roof Check, Inc. of Longmont, CO worked with Sika Sarnafil and Modus Architecture to draw up plans for a Décor system that would provide the look that Nieman wanted, with a price and warranty that the building owners would approve.

Bryan Slaymaker, vice president of operations at Roof Check, was pleased with the decision to go with the Décor system. "I knew that a metal roof would have a problem with such a low slope and that water would go back up the seams," he explained. "The Sika Sarnafil system wouldn't have this problem and would also give them the look they wanted."

In addition, Sika Sarnafil could respond quickly to the situation at hand. "We sent the Sika Sarnafil representative the roof details along with the approved shop drawings for the metal roofing system and discussed our design intent, limited budget, and schedule," Nieman explained. "He picked up the reins and made it happen."

Andrews agreed that the Sika Sarnafil representatives did a great job moving things along. "Sika Sarnafil had to scramble to get us the custom color as quickly as they were able to do it, and they did a really stand-up job at that. They helped us meet our deadline."

The installation began with a plywood deck, followed by one inch of ISO and ½ inch OSB board that was mechanically attached to the deck. This was followed by an ice and water shield, a ¼ inch gypsum board mechanically attached to the deck, and then the fully adhered Sarnafil 60 mil feltback membrane. Sarnaclad-coated metal was installed at all the eaves and rakes, and the Décor ribs were installed at 12 inches on center. Pre-finished gutters and downspouts color-coated to match were also installed.

The natural elements that Nieman spoke of earlier posed some "unnatural" installation challenges. "They filled the pond before we finished the roof, so we had to use



Multi-levels of the Décor Roof System, in a custom-colored bronze, handsomely finish off the Discovery Center at BackCountry. The Décor Profiles, and the larger Battens used in other Décor installations, give a roof the look of standing-seam metal.

paddle boats to drop the gutters off the side," Slaymaker explained. "The installers had to pull up the paddle boats and tie them off, and then stand on the paddle boats to get close to the building."

The crews also had to be tied off when working on the edges of the multiple levels of the roof. But it was the installation of the Décor ribs that perhaps was the biggest concern. "The men on the crew were perfectionists when it came to the ribs and worked very hard to lay out the ribs to get the precise alignment with no more than a 16th of an inch difference," Slaymaker said. "The

detail of workmanship that was put into this was unbelievable." It was this attention to detail that resulted in Roof Check receiving serious consideration for Sika Sarnafil's 2007 Project of the Year in the Low Slope category.

### "My Favorite Product!"

The finished Décor roof is garnering rave reviews. "I've never seen a nicer looking roof," Slaymaker said. "This has become an exceptionally nice showpiece for our company and something that we will refer to for years to come. I'm sure we'll get more jobs from this."

Andrews said he is also happy with the roof and the installation. "This was our first experience with the Décor Roof System and I think it is a great option for this type of application. I would absolutely recommend this again."

"This is one of my favorite products right now!" Nieman exclaimed. "The Décor Roof System is very flexible and provides minimal design restraint. Sika Sarnafil did a remarkable job in a bad situation and maintained the original design intent. I'm very excited about it — it is a great product."



A Sarnamatic hot-air welder fuses the Décor Profile "ribs" to the membrane. Ribs are produced from the same material as the membrane, ensuring consistency of color.

### Sika Sarnafil

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

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