

Project Pacific County Courthouse South Bend, Washington

Owner Pacific County

Roofing Contractor Roof Toppers, Inc.

Vancouver, Washington

Roofing System

Décor Roof System, using 60 mil Sarnafil[®] G410 feltback membrane in lead grey

Project Size 10,000 square feet

Completed August 2009

Décor Roof System Preserves Elegance of Pacific County Courthouse

When the Pacific County Courthouse in South Bend, Washington was built in 1911, it was dubbed "The Gilded Palace of Extravagance" because of its high costs and lavish details. The building featured a Tiffany-style glass dome, stately columns, and a standing seam copper roof. These exterior features were so expensive that plans for interior marble and other costly materials were eliminated. To make up for these missing luxuries, in the 1940s the Commissioners assigned a county jail inmate – who happened to be an artist – the task of painting the cement columns on the second floor of the rotunda to look like marble.

When the 20-year old, replacement copper roof of the courthouse started to fail, the Pacific County Public Works Department had to be equally as frugal and creative as the Commissioners of the 1940s. Because the Courthouse is a registered national historic site, the Pacific County Historical Society – the group partially responsible for funding the cost of the new roof – wanted to replace the old roof with another copper roof to preserve the original appearance of the building. However, a new copper roof would've cost more than four million dollars, and was "way over budget," said Don Larsen, who was the director of Pacific County Public Works at the time. (He has since retired.) "Plus, it is difficult to find people who still work in the coppersmith trade," Larsen added.

Décor System A Cost-Effective Solution

Larsen decided to research other roofing systems, and came across the Sika Sarnafil Décor System. The Décor System combines the Sarnafil G410 thermoplastic single-ply roofing membrane with Décor profiles and/or battens to give the appearance of a standing seam metal roof. It is the only roofing system of this type that includes warranty coverage for the hot-air welded ribs.

"This was definitely a less expensive option compared to a copper roof, yet the lead grey Décor System would still replicate the look of the original roof," Larsen explained. He said he also liked that the Décor time-tested membrane has been proven to endure weather extremes in all climates around the world. "We get some very heavy rains and some storms with 60-70 mile per hour winds here, so we needed a system that can withstand this type of weather," he said.

Precious Details Provide Challenges

Installing a new roof on such a historic building posed several challenges.





According to Karl Schlecht, project manager of Roof Toppers, Inc. of Vancouver, one big challenge was dealing with the building's intricate and beloved glass dome. "The dome had a unique shape to it, and we had to lay out the Décor battens so they tapered up to the top of the dome," he explained. "In addition, the main portion of the roof had a 5/12 slope, which also made installing the battens a bit of a challenge."

The lantern which sits atop the dome had to be removed so it could be restored, and that caused some concerns as well. Roof Toppers was worried that tools, materials or debris might fall on the dome during the lantern removal process, so they protected the glass dome by constructing a wooden framed structure over and around the glass for protection, Schlecht said. He added that the absence of the lantern left the top of the roof exposed, so "we framed in the opening with lumber and plywood sheathing. Then we installed a Sika Sarnafil membrane to serve as temporary weather protection," he explained.

Larsen agreed that working around the dome and in cornices was difficult. "Roof Toppers had to do quite a bit of work in those areas to mold everything and make sure it was weatherproof," he remarked. "They did a great job and showed good workmanship."

Another issue was the coastal location. "Weather was always a concern, because on the coast the weather can change pretty quickly," Schlecht said. "Some mornings there would be a very heavy, damp air – we call it marine air – which would affect the drying of adhesives. As a result, we often had to adjust our work hours to accommodate the changing weather patterns."

To keep the building watertight during the variable weather, Roof Toppers had to work in segments – tearing off part of the old roof, installing a temporary Sika Sarnafil roofing membrane, and then finally installing the permanent Décor roofing system assembly.



In addition to installing the roof, Roof Toppers also had to rebuild part of a parapet wall that had been compromised during World War II. "The speculation is that the copper balustrades were removed from the top of the parapet wall so that the copper could be used for the war effort," Schlecht remarked. "So we had to rebuild the parapet wall by framing a new wall on top of the old wall, install new balustrades, and put a stucco finish on the top and the Sika Sarnafil membrane on the back."

Sika Sarnafil representatives also played a role in the successful installation of the Décor system. "The representative was great," Larsen said. "He had a thorough knowledge of the product and responded well to any guestions we had."

New Roof Gives Historic Appearance

Today the new Décor roof is getting praise for its performance and appearance. "The roof is performing great!" Schlecht said. "We will definitely use this system again."

Larsen pointed out that the new roof performed very well during one of the wettest springs on record. "I would definitely recommend this system again, especially in this area and for this type of application," he stated. "We now have a good roof system and we got it for a reasonable price – and that's important to the government."

Sounds like something the Commissioners of the 1940s would approve of.



1 C

100 Dan Road Canton, MA 02021 Telephone: 1-800-451-2504 Telefax: 781-828-5365 www.sikacorp.com

A Division of Sika Corporation

Sika Sarnafil

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



