

Versico and Stiles Roofing Deliver Economical Durability

JOB PROFILE



When the Lebanon, Missouri Mall needed a new roof, the building owner was looking for a durable, cost-effective system that would stand up to Missouri's harsh and sometimes unpredictable climate. Aesthetics were important, since the Lebanon Mall is close to both an airport and the interstate and is highly visible. Sustainability was a high priority as well; the new system had to be as eco-friendly and energy-efficient as possible.

The building owner contacted Stiles Roofing, Inc. to explore options. Since 1926, Stiles Roofing has provided customers with a wide range of high-quality services including planning, installation, maintenance, and repairs. The phrase "Quality and Integrity since 1926" is embodied by Stiles' use of proven materials, skilled craftsmen, and experienced, dependable project managers. Stiles' techniques and product offerings have evolved as technological advances offered improved solutions, and their top priority has always been to create satisfied customers.

The experts at Stiles Roofing, who have been installing Versico roofs since 1987, analyzed the owner's needs and recommended covering the mall's existing modified bitumen roof with VersiFleece® TPO membrane adhered with DASH™ Adhesive.

Adhering VersiFleece TPO membrane with DASH Adhesive is a simple, cost-effective way to re-cover existing granulated or smooth modified bitumen roofing systems. This system is ideal for occupied buildings, as the installation is quick and produces very little odor or noise that could disturb the facility's occupants. VersiFleece TPO's polyester-fleece backing enhances the roof's puncture resistance and provides a built-in separation layer between the old asphalt and the new roofing system. DASH Adhesive, a water-blown polyurethane insulating adhesive, provides excellent adhesion to aged SBS or APP modified bitumen roofs, resulting in a tenacious bond and providing a redundant waterproofing layer.

The VersiFleece/DASH system could be installed right on top of the existing roof, saving time and money by allowing the building owner to avoid a costly tear-off. This type of selective demolition is beneficial to the environment as well as the building owner.

Job Name: The Mall – Lebanon, Missouri
Square Footage: 107,000 square feet on one roof level
Contractor: Stiles Roofing, Inc.
Roofing System: 115-mil gray VersiFleece TPO, adhered with DASH Bag-in-a-Box over an existing Modified Bitumen roof
Duration of Project: 2 months



Versico and Stiles Roofing Deliver Economical Durability

JOB PROFILE



According to the EPA, building-related construction and demolition debris accounts for nearly 26 percent of total non-industrial waste generation in the United States, but selective demolition methods prevent large amounts of materials from ending up in landfills.

VersiFleece TPO membrane was an ideal choice for the mall project due to its ability to withstand the hot summers and severe hailstorms that are common in Missouri. VersiFleece TPO features the OctaGuard XT weathering package, an eight-component blend that includes UV absorbers, antioxidants, and light and heat stabilizers, ensuring long-term performance and dependability. The membrane's fleece backing increases the roofing assembly's puncture resistance by 30–40 percent for excellent resistance to hail damage, and the bond between the fleece and adhesive contributes to superior wind uplift performance.

The VersiFleece/DASH system also has cold-weather benefits for Missouri's harsh winters; each layer of DASH Adhesive expands to between 1/8" and 1/4"-thick, providing an additional R-value of 0.20 to 0.50 per layer.

With a system selected, the project began in March 2014. Since the existing roof was not being removed, Stiles Roofing performed an infrared thermal scan to identify any preexisting wet roof areas. Those areas were removed and replaced, and the old scuppers were replaced with new VersiWeld® TPO Coated Metal scuppers.

Next, the contractor spray-applied DASH Bag-in-a-Box and installed the 12-foot-wide 115-mil VersiFleece sheets directly on top of the existing modified bitumen roof system. Versico's 12' sheets reduce the frequency of field seams by as much as 75 percent, when compared to 3'-wide rolls of modified bitumen. Larger sheets are also quicker to install, reducing labor costs.

Because the mall's roof included 31 HVAC units, 22 fans, and 3 air intakes, Stiles Roofing recommended the use of Versico's pre-fabricated accessories to help keep the job's timeline on track. Pre-fabricated accessories provide a uniform, aesthetically pleasing look to the roof, but more importantly, they reduce labor costs for the



building owner and save time for the contractor. Over 1,500 VersiWeld TPO T-Joint covers, 400-plus TPO Corners, and more than 60 TPO Pourable Sealer Pockets were used on the project.

After the membrane was in place, Stiles Roofing used traditional VersiWeld TPO Bonding Adhesive to fully adhere 60-mil TPO wall flashings. After new wood nailers were installed atop the cinderblock wall, the applicators ran the TPO flashing up and over the wood nailers. Stiles Roofing then installed new cleat metal, followed by new 24-gauge steel cap metal, and the job was complete. After the roof was inspected, a 10-year warranty was issued, providing the building owner with complete peace of mind.

Heath Barber, Project Manager for Stiles Roofing, states, "The VersiFleece/DASH roof system was ideal for this project. Along with being cost-effective for the owner, the roof could be installed in marginal spring weather, which included precipitation and cool temperatures." He added, "By spray-applying DASH Adhesive, it was easy to lay many squares of roof per day using minimal men, with almost no disruption to building occupants. Multiple stores at the mall remained open during the entire roofing project, and we did not receive any complaints or negative feedback from any of the tenants or the owner. Everything went very smoothly, and the gray VersiFleece TPO made for a great finished look."



A SINGLE SOURCE FOR SINGLE-PLY ROOFING

Versico, PO Box 1289, Carlisle, PA 17013
Tel: **800.992.7663** Fax: 717.960.4036 Web: www.versico.com