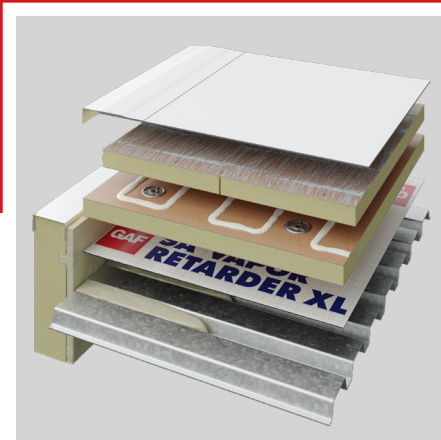


GAF Project Profile

Protecting cheese and (computer) chips
from Wisconsin weather

About Saputo Cheese USA Inc.

Saputo Cheese USA Inc, one of the top ten dairy processors in the world, produces, markets, and distributes a wide array of high-quality dairy products including cheese, fluid milk, extended shelf-life milk and cream products, cultured products, and dairy ingredients. Their new facility — a 310,500-square-foot warehouse in Caledonia, Wisconsin leased from the Zilber Property Group — houses a unique combination of temperature-sensitive dairy products as well as highly sophisticated AI-assisted warehouse management electronics. Contractor M.M. Schranz Roofing was tasked with providing a cold storage roof that would protect the facility and its delicious contents from temperature and moisture fluctuation.



Project Summary

- EverGuard® TPO Roof Membrane 60 mil — Adhered
- 2 layers 2.6" EnergyGuard™ Polyiso Insulation
- Drill-Tec™ fasteners and plates to secure first layer of insulation to deck
- GAF LRF Adhesive M between insulation layers
- SA Vapor Retarder XL over a metal deck

Job Details

- Location: Caledonia, WI
- Roof Size: 3,100 Squares
- Completion Date: March 2025
- System Type: TPO
- Building Type: Cold Storage

We protect what matters most™

GAF

Challenges

Wisconsin weather — The coolers in the new Saputo Cheese facility are built to keep product at a steady 37°F to 39°F. Ordinarily that suits the purpose of a cold storage building: to keep the heat out. But that mission can flip in frigid Wisconsin winters, when outdoor temps often drop to 6°F or below. Then it becomes important to ensure the internal temperature does not drop below the mid-thirties into the freezing range. Those frigid temperature swings also create the potential for intra-roof condensation — a potential threat to the sophisticated electronic equipment that runs the warehouse.

Aggressive winter installation schedule — In order to meet Saputo's deployment schedule, M.M. Schranz Roofing worked from November 2024 through March 2025. With average high temperatures in the low 30s (°F) and average lows in the mid 20s (Source: NOAA), roofing products needed to be kept warm both on the roof and in nearby storage locations.

Precision equipment — Sophisticated inventory management tools in use at the Saputo warehouse demanded the utmost construction precision, including laser-leveled floors, and insulated metal panel walls.

Evolving specifications — In collaboration with Zilber Property Group and GAF Cold Storage expert Kristin Westover, contractors M.M. Schranz Roofing revisited the original specifications to address the potential for intra-roof condensation by including a vapor barrier at the deck level.

Solution:

Effective partnership — GAF Commercial PlatinumElite™ and Chairman's Circle Contractors* M.M. Schranz Roofing partnered with GAF, including conducting extensive calls with GAF Cold Storage expert Kristin Westover, as soon as the bid was published. "Your team put us in a different class. We had video calls together for six months when no one else was going that extra mile," said Russell Zupan, M.M. Schranz Project Manager. "So when Zilber chose us to build this roof, we basically sold you guys — and your cold storage team — to them as well, by getting on the phone and going through details."

One of those discussed details was whether to include a vapor barrier. While the extra layer would add expense, Westover made the compelling argument that Wisconsin winters dip into the negative numbers, effectively flipping the mission of the cold storage building to one of keeping out cold air instead of warm. The resulting potential condensation in the roof deck could pose a problem for the electronic systems that run the warehouse, and both Westover and the architects agreed that a quality vapor barrier can moderate that threat.

"Kristin's a wizard.," said Zupan. "Whenever we had a disagreement or question she would just say, 'I'm going to share my screen,' and calmly get everyone back on the same page."

Innovative product — "This was our first time working with your GAF SA Vapor Retarder XL," said Zupan. "Kudos to you. You've really got the size of that sheet dialed in. It's got more coverage than the competition's vapor barrier so we were able to lay down more sheets per day. And you figured out how to line it up with the deckflutes so there's not a lot of waste. On other sheets, losing two or three inches on a thousand foot run adds up quickly. But you guys have figured that out. Line it up on top of the flutes and start the next sheet right over the top. Having the wider sheet is huge for production."

Zupan also had praise for the EverGuard® TPO his team installed. "We have experience with the big name TPO manufacturers," he said. "We like how easy your membrane is to weld. That's why we chose this product, why we keep going back to GAF."

Keeping the heat on — In addition to using on-roof heat boxes and storing materials locally in facilities maintained between 75°F and 80°F, M.M. Schranz Roofing also utilized heated canister wraps provided by GAF for both GAF Quick Spray and Low Rise Foam adhesives.

An integrated cold storage solution — The complete system starts with GAF SA Vapor Retarder XL directly applied to a structurally pitched metal deck (obviating the need for a tapered polyiso design). One 2.6" layer of EnergyGuard™ Polyiso is mechanically attached to the metal deck, covered by a second layer of 2.6" Iso adhered with GAF LRF Adhesive M, sandwiching the fastener heads below the second layer of Iso, which should eliminate thermal bridging. The roof is finished with GAF Quick Spray-adhered 60 mil EverGuard® TPO. Sumps and saddles were added around the drains, and the EverGuard™ TPO Split Vent Boot was chosen for fast and easy sealing of penetrations.

"Ultimately," said Zupan, "the biggest challenge on this project was Mother Nature herself." And when you're up against Mother Nature, it's pretty handy to have your own wizard.

About the Contractor:

Founded in 1907, M.M. Schranz Roofing, Inc. has been delivering the highest level of roofing craftsmanship, quality and reliability for 115 years. Through the decades, including the Great Depression and two pandemics, the company's core values have reflected the attitude of their founder, Mathias M. Schranz: "Do what's right, do it consistently, and do it exceptionally well." Today, as a GAF Commercial PlatinumElite™ and Chairman's Circle Contractor, M.M. Schranz Roofing, Inc. is one of the oldest continuously family-owned businesses in Wisconsin.

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