Project Profile

A silicone fix for frequent leaks

Restorative solution allows TOA USA to avoid a reroof and operational losses

About TOA USA

As a leading supplier of car frames, TOA USA operates a 1 million sq. ft. facility in Mooresville, Indiana, which was built in 2000. The heavy machinery within the facility had caused a significant amount of internal movement, which had taken its toll on two sections of the building's metal roof, resulting in fastener issues which were causing frequent leaks. To avoid a costly and time-consuming reroof, a restorative solution was sought to resolve leak issues and accommodate the building's movement for the long-term.



Challenges

TOA USA is a highly automated facility with cranes that run up to near the roof line. This heavy machinery caused a lot of movement and racking. The constant stress impacted the roof panels' fasteners, resulting in up to 30 – 40 unique leaks per rainstorm. This leaking also created severe safety hazards due to water intrusion and slippery conditions inside the facility.

Approximately half of the entire metal roof was affected. To replace the metal panels and rusting fasteners would require shutting down TOA USA's operations, and the production losses would potentially end up costing more than the reroof project itself. Therefore, a restoration with a silicone coating application was the solution that made the most sense.

However, the project would require nearly 13,000 gallons of silicone, and moving that large volume of product and not touching the buckets twice presented logistical challenges. The roof was also outfitted with several skylights and penetrations, which posed additional obstacles.



Project Summary

- Roofing System: GAF High Solids Silicone Roof Coating
- Sealant: GAF Silicone Mastic
- Key Features: Liquid-applied, seamless silicone roof for long-term leak protection and elasticity to move with building
- Lifespan: 20 Year Diamond Pledge[™] NDL Roof Guarantee

Job Details

- Location: Mooresville, IN
- Roof Size: 4,610 squares
- Completion Date: September 2025
- System Type: Liquid-Applied Roofing
- Building Type: Industrial



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Solution

Alex Miller of Seamless Roofing, the project's roofing contractor, chose GAF High Solids Silicone Roof Coating as the restorative solution. The product's ability to be applied seamlessly over a variety of substrates, including metal, and its protection against leaks from ponding water made it ideal for this application.

A key advantage that attracted TOA USA to this solution, according to Alex, is that "We're not interrupting any of their internal operations," which allowed the facility's manufacturing to continue below the roof during installation.

Greg John, TOA USA Manager, Facilities Maintenance, said, "I had seen silicone used as a repair product, but never as a full roof solution. Everything about the install, product, and contractor sounded great and the total project cost was attractive."

GAF Silicone Mastic, a thick, high-build sealant with low odor, easy application, and enhanced adhesion, was applied to prep and seal the roof's failure points, including fasteners, lap seams, and penetrations. Its fast moisture cure was a key benefit.

GAF High Solids Silicone Roof Coating was then applied as the top coat, directly over the entire metal roof's surface. This moisture-cure coating protects against weather elements and UV rays. It was chosen for the TOA USA facility because, as Alex explains, "due to its elasticity, which accommodates the building's movement without damage."

Faced with the challenge of moving a substantial amount of product, buckets were staged onto the site. This method prevented the crew from having to move all 13,000 gallons — roughly 2,600 buckets — at once. To increase efficiency even more, Seamless Roofing had 30 crew members on the job, which is double what is typically needed for a job of this size, to ensure that the project was completed within the 8 to 10 week timeline.

GAF High Solids Silicone Roof Coating solved the facility's ample leak problems, eliminated the rust that was beginning to form, and its elasticity allowed movement with the building's heavy internal operations. It also enabled TOA USA to continue operations with minimal disruption, avoiding the production losses that could have come with a roof replacement.

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About the Contractor

Seamless Roofing — Indianapolis, IN

Established in 2017, Seamless Roofing, a GAF GoldElite™ and CoatingsPro+™ commercial contractor,* is a client-first roofing contractor. Seamless serves commercial properties throughout Indiana, Southeastern Illinois, Western Ohio, Southern Michigan, and the Louisville, KY Metro area, specializing in roof coatings and single-ply roofing projects.







