GAF Project Profile

Trane Technologies Prepares for Very Severe Hail

About the Trane Technologies Manufacturing Facility

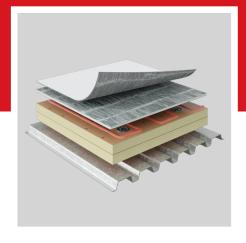
In Tyler, TX, Trane Technologies manufactures air conditioners and heat pumps, and maintains a sophisticated testing facility for their wide range of products. The plant facilities date to the '50s and '60s. Seeing that time and Texas weather had inevitably taken their toll, Trane selected Landmark Roofing & Sheet Metal — a GAF GoldEliteTM Commercial Roofing Contractor — for a complete 650 square reroof.

Landmark has worked with Trane Technologies before, so the rapport between the two quality-focused organizations helped keep the project running smoothly. "The folks at Trane are great to work with," said Annie Johnston, Head of Business Development for Landmark. "The communication is above par."

Thanks to that great relationship, Landmark completely understood Trane Technologies' priorities, and reached out to GAF to help deliver the roof they needed, precisely how they needed it.



Trane Technologies manufacturing facility, Tyler, TX. This EverGuard Extreme® TPO 60-mil roofing system is approved under FM 4470 - Very Severe Hail (Class 1-VSH).



Project Summary

- EverGuard Extreme® TPO 60-mil smooth membrane
- EverGuard® TPO Quick Spray Adhesive
- DensDeck® StormX[™] Prime Roof Board is FM Approved per Approval Standard 4470
- OlyBond500[™]
- EnergyGuard[™] Polyiso Insulation

Job Details

Location: Tyler, TX

■ Roof Size: 650 squares

Completion Date: June 2023

System Type: TPO

Building Type: Industrial



Project Profile

Challenges

The expansive Trane Technologies facility is insured by Factory Mutual, which is, of course, renowned for its standard-setting roof assembly requirements. To satisfy FM, Landmark Roofing and Sheet Metal worked with GAF Design Services to specify a system approved under FM 4470 - Very Severe Hail (Class 1-VSH) featuring GAF EverGuard Extreme® 60 mil TPO, DensDeck® StormX™ Prime Roof Board, and EnergyGuard™ Polyiso Insulation.

The original roof to be replaced comprised two systems — one section with BUR over perlite and wood fiber board, and another with 2-ply Mod Bit over perlite and polyiso. Both systems sat atop a metal deck so old that its profile is no longer available. Landmark identified a 22 gauge steel replacement that could be nested inside the existing — but discontinued — profile. The GAF Tapered Design Team also worked with Landmark to create a sophisticated tapered design including crickets that maximizes the existing roof drain system.

Another challenge was timing. The Trane Technologies facility runs two shifts — one from 6 AM to 3 PM and the second from 3 PM to midnight. In order to keep the line running, Landmark Roofing and Sheet Metal started work at 12:30 AM each morning, and had the roof closed up and cleaned up by 6 AM when the Trane crew arrived.

The Landmark crew adhered the EverGuard Extreme® TPO with GAF Quick Spray, which saved time and helped keep the work area cleaner and more organized. "This is a manufacturing facility, and if even one drop spills off that roof onto the floor, it's game-over," said Lee Todd, Operations Manager of Landmark Roofing and Sheet Metal. "Using Quick Spray was a no-brainer. It's cleaner than working with buckets, and it's way more efficient."



Trane Technologies manufacturing facility, Tyler, TX. EverGuard Extreme® TPO 60-mil roofing system.

Trane Technologies Manufacturing Facility

Clearly, working primarily at night has its specific demands — including specialty lighting rigs — but it also brought small unexpected benefits. "Areas where we had to address bad decking were much easier to see at night because the interior of the building was lit up," said Lee.

Solution:

As Tyler, TX, lies on the edge of FM Global's Very Severe Hail zone, Landmark Roofing and Sheet Metal installed a system approved under FM 4470 — Very Severe Hail (Class 1-VSH) — the most stringent roofing impact resistance standard. The system also has a 30-year Diamond Pledge™ NDL Roof Guarantee with a 5-year Well Roof Guarantee Extension based on a roof maintenance agreement.

This system includes GAF EverGuard Extreme® 60 mil TPO, which was proven through an independent TPO study to be the best performing TPO in accelerated aging per ASTM D573-13. With a high 3-year aged reflectance of 0.72, EverGuard Extreme® TPO may help reduce cooling costs.*

The TPO membrane is adhered with GAF Quick Spray Adhesive, and DensDeck® StormX™ Prime Roof Board is adhered with OlyBond500™ Roofing Adhesive. Two layers of 2.2" EnergyGuard™ Polyiso Insulation are mechanically attached to a 22 gauge steel deck.

About the Contractor:

Landmark Roofing and Sheetmetal

Landmark Roofing and Sheet Metal, a GAF GoldElite™ and CoatingsPro™ Liquid-Applied contractor, is a full service commercial and industrial roofing company, founded in 1990 and incorporated in 2013. Their experienced group of employees includes team members who have been with the company for more than 20 years. The company provides service to a wide area including Texas, Louisiana and southern Arkansas.





