



Jack Taylor's Alexandria Toyota
Alexandria, Virginia

GE Enduris™ Liquid-Applied Roof Membrane restores leading car dealership

End-of-life decisions for TPO roof

Jack Taylor opened his Alexandria, VA, Toyota dealership 18 years ago. In that original installation, Pioneer Roofing laid a 60 mil white TPO roof over 4" of rigid insulation. This was considered state-of-the-art and, even today, is a good energy saving assembly.

Over the years, Pioneer maintained the roof but the roof was now frequently leaking. It was time for a change. Pioneer offered several options but the choice was clear. "At \$100k lower cost, or 35% less than a new single-ply membrane with the same warranty, Pioneer had our attention," says Mike Klakring, Facilities Manager for Alexandria Toyota. "I wanted to know more. The idea that we could write it off in a year - as a maintenance cost instead of capital equipment cost - was also important," says Mike.

Product Used:



GE Enduris seamless 100% silicone coating restores and can extend roof life expectancy with one-coat application.



PERFORMANCE COATINGS

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*Enduris is a trademark of Momentive Performance Materials Inc.

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Steve Wann – President of Pioneer Roofing

"Coatings is a dirty word"

Alexandria Toyota's Facilities Manager Mike Klakring clearly stated what many building owners feel; "Coatings is a dirty word." Acrylics have a reputation of low quality with many building owners; which is then generalized to all coatings. Acrylics came into the market to solve specific problems but also brought limitations. The "acrylic solution" is to make black roofs more energy efficient by turning them white. However, most - perhaps all - acrylics are not UV proof and ponding water proof - they required at least a 1/2-in-12 pitch. Even if a roof has a 5% pitch at installation, often gravity takes its effect over decades, ponds form and then the roof leaks.

"Because it was GE, we were willing to give it serious consideration. When we heard the value proposition, we were convinced," says Mike.

"The more I think about liquid-applied coatings, the more it makes sense for almost all of my customers," says Steve Wann, President of Pioneer Roofing. "If a white single-ply membrane is installed with good drainage, is properly welded and is maintained, the only remaining challenges to long life are UV degradation and heat. If the membrane is white, that solves the heat issue. Silicone solves that last remaining issue - UV. Silicone is UV insensitive, so the coating thickness doesn't change significantly over decades," says Steve.

No interruptions, No complaints

"Here at Pioneer Roofing, we install all types of roofing. On this job, with the car dealership humming in their normal business, it occurred to me that installing GE Enduris™ Liquid-Applied Roofing was incredibly non-intrusive. With a pump in the back of the dealership, the installation was almost completely silent, no materials were coming on or off the roof and the car business went on as normal," says Peter Wann, VP of Operations at Pioneer Roofing. "Unlike a tear-off or even a re-roof, we'd have gotten several complaints about noise throughout the project," mentions Peter. "Actually, it's much easier to install correctly and is more forgiving, by spray and/or roll, than other roofing solutions," notes Peter.

Because the GE Enduris system is liquid-applied and all components are made out of the same 100% silicone, there are no areas where dissimilar materials meet and no seams. This helps solve the risk of leakage because most leaks happen on failed seams or where dissimilar materials meet (because materials expand and contract at different rates). The white GE Enduris coating results in a much lower daily temperature fluctuation than a black or gray material. Less heat absorption can extend roof life and helps reduce summer cooling costs.

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