

# Carlisle Sure-Weld® TPO with OctaGuard XT™ Weathering Package

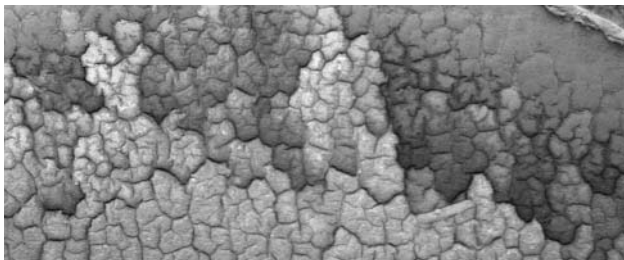
Carlisle has been at the forefront of TPO development for nearly 20 years and continues to lead the industry with its high-performance OctaGuard XT weathering package that is incorporated into all Sure-Weld membrane and accessories. OctaGuard XT weathering package technology is comprised of eight performance-enhancing ingredients, including three heat-stabilizing antioxidants and three UV light stabilizers as well as organic and inorganic UV absorbers. When combined, these eight ingredients provide a weathering package second to none in the TPO industry.

## THE TESTS

TPO membrane samples from four manufacturers, including Carlisle, were recently subjected to accelerated heat aging in a controlled, 275°F environment. Heat aging accelerates the impact that heat plays on TPO and evaluates its performance on the roof. Samples were removed when they showed signs of cracking, or were deemed not suitable to perform as a waterproofing membrane. Extreme Xenon Arc Weatherometer testing also reveals that Sure-Weld TPO can withstand twice the ASTM D6878 requirement of 10,080 kJ/m<sup>2</sup> without losing its desired physical properties.



Carlisle Sure-Weld TPO with OctaGuard XT



The Other Guys

45-mil TPO membrane at 50x magnification after extreme simulated UV exposure.



## HEAT AGING FOLLOWING ASTM D6878 PROTOCOL



Carlisle Sure-Weld TPO – 60 Weeks (No Failure)



“Competitor C” TPO – 37 Weeks

## THE RESULTS

Independent test results and a chemical analysis show that Sure-Weld TPO with OctaGuard XT contains more weather-protecting ingredients than any other TPO membrane tested, which means Carlisle’s TPO provides superior long-term protection against the dangers of heat and UV exposure.

With Carlisle’s Sure-Weld TPO, featuring the OctaGuard XT weathering package, you get a whiter, cleaner, more energy-efficient, longer-lasting, and weather-resistant TPO roofing system. Carlisle’s Sure-Weld TPO with OctaGuard XT weathering package technology has set a new standard in the thermoplastic single-ply industry.



## REFLECTIVITY WARRANTY

Carlisle backs their commitment to long-term performance and energy-efficiency with an industry-leading Reflectivity Warranty on all white TPO membranes. A warranty backed by a company with over 50 years of single-ply manufacturing experience.

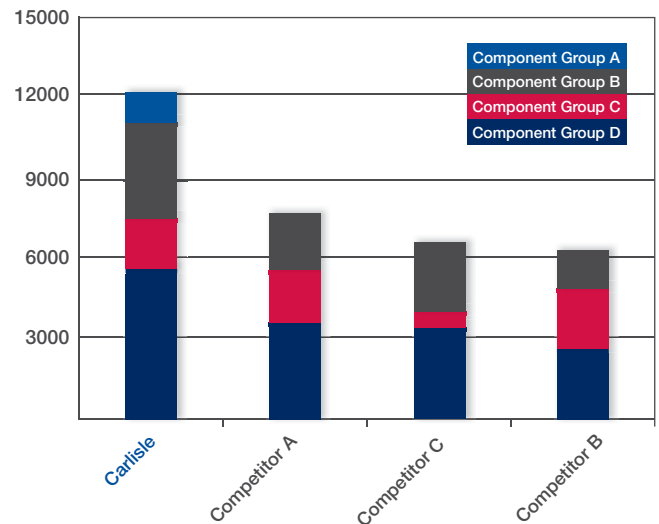
Benefits of a Carlisle Sure-Weld TPO roof system featuring the OctaGuard XT weathering package include:

- » Cleaner surface
- » Long-term energy efficiency in warm, southern climates
- » Greater weather resistance
- » Improved long-term performance
- » Heat and UV resistance

## WHITER, LONGER

As a white membrane collects dirt, the cost savings associated with having a reflective roof is severely reduced and the higher associated temperatures can accelerate aging. The time-tested Sure-Weld TPO compound, which includes OctaGuard XT along with Carlisle's state-of-the-art manufacturing process, produces one of the smoothest TPO sheets on the market. The extremely smooth top ply of Sure-Weld TPO reduces the ability of dirt, mold, bacteria and other contaminants to collect on the membrane, keeping it whiter longer and increasing the efficiency and potential lifespan of your TPO roof.

## WEATHERING PACKAGE CHEMICAL ANALYSIS



## Cool Roof Rating Council (CRR) Solar Reflectance Rating

	% of Sunlight Reflected	
	Initial	3-year Aged
Carlisle Sure-Weld TPO	.79	.70
Competitor A	.79	.68
Competitor B	.76	.68
Competitor C	.79	.68