

Sure-Weld® TPO

Roofing Systems



After More Than 20 years, There's Still No Equal
TPO VS. ASPHALT EDITION

Touting over 20 years of experience and 10 billion sq. ft. installed, thermoplastic polyolefin (TPO) has become the fastest-growing segment in the commercial roofing industry, and for good reason. When choosing between TPO, asphaltic built-up, and coated roof systems, there's **Still No Equal to Carlisle SynTec Systems' Sure-Weld TPO.**

ENERGY EFFICIENCY

Carlisle: Carlisle's white and tan Sure-Weld TPO membranes are ENERGY STAR®* qualified, Cool Roof Rating Council (CRRC) certified and Title 24 approved right out of the package. Carlisle's white TPO membrane features an initial ENERGY STAR* and CRRC solar reflectance of 0.79, thermal emissivity of 0.90 and an SRI (Solar Reflective Index) of 99. Plus every white TPO membrane comes with a 10-year reflectivity warranty.

Asphalt Systems: Carlisle's TPO roofing systems provide energy efficiency and reflectivity without the need for special coatings, which must be used on some asphaltic systems to achieve ENERGY STAR qualification. These coatings often need to be reapplied every few years to maintain reflectivity.

RETURN ON INVESTMENT

Carlisle: Carlisle's TPO formulation, utilizing the OctaGuard XT™ weathering package, provides a time-tested, longer-lasting TPO roofing system, with warranties up to 30 years. In warm, southern climates, building owners can save significantly on both energy and maintenance costs, while improving the overall efficiency of their facilities.

Asphalt Systems: Conversely, some asphalt roofs average a lifecycle of less than 15 years before requiring considerable maintenance or replacement, and some coatings must be reapplied every few years.

WARRANTIES

Carlisle: Since Carlisle offers Total System Warranties with terms up to 30 years that cover both material and workmanship, building owners can rest assured that their facilities will have outstanding protection. Additional coverage can be provided for hail, accidental puncture and extended wind speeds.

Asphalt Systems: Often shorter in duration and with additional exclusions, built-up and modified system warranties typically provide less coverage.

WEATHERING PACKAGE

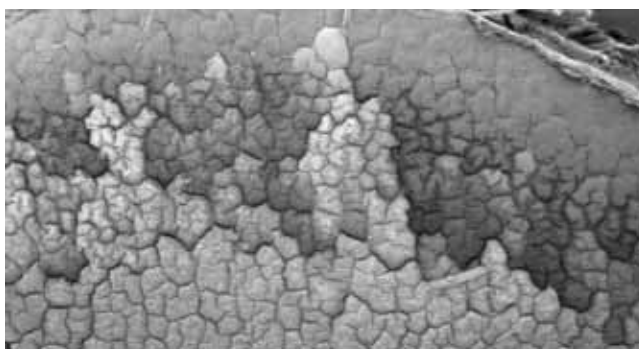


Carlisle: Xenon arc and long-term heat aging tests show that Carlisle TPO membrane exceeds the highest standards in the industry. Every TPO membrane is enhanced with the OctaGuard XT Weathering Package, a unique eight-component blend of antioxidants, UV absorbers, and light and heat stabilizers. These ingredients combine to provide Carlisle's TPO with some of the most dependable, long-term performance characteristics on the market.

Asphalt Systems: With asphalt-based roof systems, UV exposure can break down and extract oils and bitumen from asphalt. Over time, the aging process can craze the surface and it can eventually become brittle enough to crack.



Carlisle TPO with OctaGuard XT



The Other Guys

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



EASE OF INSTALLATION

Carlisle: Single-ply roofs typically require less time to install than asphalt-based systems, minimizing the inconvenience to building occupants. Options such as Self-Adhering Technology (SAT™) TPO with factory-applied adhesive eliminate the odor associated with traditional adhesive and greatly reduce labor costs.

Asphalt Systems: Built-up and modified roofing systems are generally heavy and labor intensive and their fumes can prove to be unacceptable to building occupants.

CONVENIENCE

Carlisle: TPO installation can be accomplished with little or no disturbance to building occupants. Odor-free options are available and TPO installation never requires the use of torches or hot asphalt.

Asphalt Systems: Often require the use of torches or hot asphalt which can be dangerous to installers and building occupants. The odors associated with the installation of these systems is often disturbing to people occupying the building during installation.

PREFABRICATED ACCESSORIES

Carlisle: Offers a variety of prefabricated in-stock accessories, as well as countless custom-order accessories. All carry a Certified Fabricated Accessory (CFA) stamp of approval, ensuring that they are manufactured to the highest standards and meet the stringent quality tolerances required to be included in a Carlisle warranted roofing system. Every Carlisle CFA-approved accessory saves time, labor and money during installation.



Asphalt Systems: Flashing roof penetrations by hand as is customary with asphaltic systems, is time consuming and substantially increases the probability of human error.

FLEXIBILITY

Carlisle: The flexibility of TPO makes it highly resistant to tears, impacts, and punctures, in addition to allowing for building movement. The membrane remains flexible in hot and cold temperatures for maximum durability and long-term performance.

Asphalt Systems: Built-up and modified roofing systems have limited flexibility and should only be used on roof decks that have minimal movement. The compression due to cold temperatures or stretching due to hot temperatures often takes a toll on these roofs.

RE-COVERS

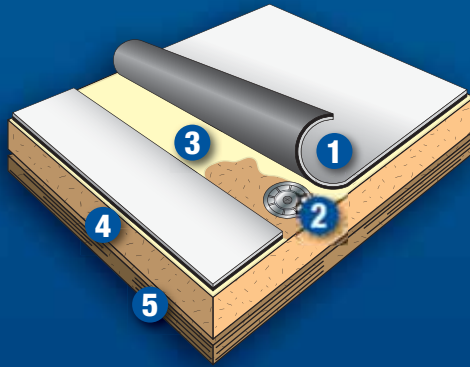
Carlisle: TPO membranes are an ideal choice for re-cover applications because they are lightweight and can re-cover almost any roof type, which eliminates disposal costs and keeps aging roofing materials out of landfills. Carlisle provides multiple re-cover options with 10- to 15-year warranty coverage.

Asphalt Systems: Built-up roofs are heavier than many roof systems, making them difficult to use in re-cover applications, and often excludes them from re-cover projects altogether.

*ENERGY STAR recommends that using the Roof Savings Calculator (rsc.ornl.gov), which factors in both heating and cooling costs, to determine whether a cool roof will be an energy efficient choice for your geographic climate and building type.

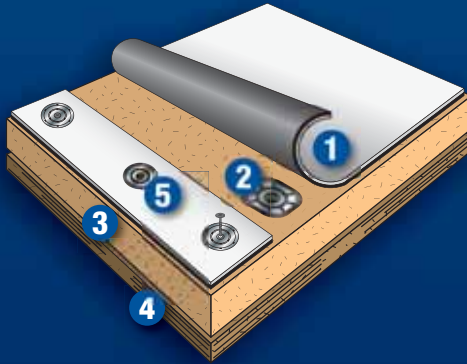
EXPERIENCE THE CARLISLE DIFFERENCE

FULLY ADHERED TPO ROOFING SYSTEM



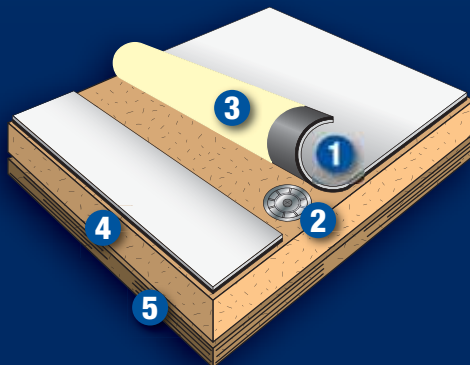
1. Sure-Weld TPO Membrane
2. Carlisle Insulation Fasteners and Plates
3. Sure-Weld TPO Bonding Adhesive
4. Acceptable Insulation
5. Approved Roof Deck

MECHANICALLY FASTENED TPO ROOFING SYSTEM



1. Sure-Weld TPO Membrane
2. Carlisle Insulation Fasteners and Plates
3. Acceptable Insulation
4. Approved Roof Deck
5. Membrane Fasteners and Plates

SELF-ADHERING TPO ROOFING SYSTEM



1. SAT TPO Membrane
2. Carlisle Insulation Fasteners and Plates
3. Pre-Applied Adhesive
4. Acceptable Insulation
5. Approved Roof Deck



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