

*Sure-Weld TPO*

**CARLISLE**  
Carlisle SynTec

# Carlisle's Sure-Weld® TPO

*10 Reasons Why There is Still No Equal*



*After more than 15 years,  
there's Still No Equal*

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**Thermoplastic polyolefin (TPO) is the fastest-growing segment in the commercial roofing industry. To take advantage of this recent popularity, a growing number of companies have begun offering TPO single-ply membranes. Unfortunately, not all TPO is created equally. Your building deserves a TPO roofing system provided by the manufacturer that has been at the forefront of TPO research, development and technology since the inception of TPO as a roofing membrane: Carlisle SynTec.**

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*Sure-Weld TPO*

*10 Reasons Why There is Still No Equal*



## Here are 10 things to consider when investing in a TPO roofing system.

1

### Experience and Innovation:

*There is no substitute*

**Carlisle:** Over 45 years of single-ply manufacturing experience. Leading the industry in TPO research and development for more than 15 years. More than two billion square feet of Carlisle Sure-Weld TPO membrane has been installed on rooftops across the globe. That's more than any other manufacturer.

**The Other Guys:** As little as one year manufacturing experience in some cases.

**Protect Your Investment:** Require that your TPO membrane be manufactured by a company with at least 10 years of TPO manufacturing experience.

2

### Cool Roof Properties:

*Reducing your air conditioning consumption*

**Carlisle:** White Sure-Weld membrane features an initial ENERGY STAR® solar reflectance of .87 and emissivity of .95. Carlisle's tan TPO membranes are also ENERGY STAR-qualified, having met and exceeded the program's energy efficiency guidelines.

**The Other Guys:** Some manufacturers' TPO has not been on the market long enough to meet the three-year requirement for an ENERGY STAR qualification.

**Protect Your Investment:** Maximize the energy efficiency of your roof and require that the TPO installed on your building meets initial and three-year ENERGY STAR requirements.

# 3

## Weathering Package:

*Like sunblock for your roof*

**Carlisle:** Xenon arc and long-term heat aging shows that Carlisle's TPO membrane tests to the highest standards in the industry. That's because every Sure-Weld TPO membrane is enhanced with OctaGuard XT™ Weathering Package, a unique eight-component blend of antioxidants, UV absorbers, as well as light and heat stabilizers that results in the most dependable, long-term performance characteristics in the industry.

**The Other Guys:** Only meet the basic requirements established by ASTM.

**Protect Your Investment:** Ensure that your TPO roofing system will withstand the highest temperatures and UV exposures by investing in a membrane that can withstand over 60 days at 275°F and a minimum of 17,000 kj/m² xenon arc resistance at 80°C without cracking or showing signs of material failure.



Competitor A



Competitor C



Competitor D



Carlisle Sure-Weld TPO with OctaGuard XT

\*Carlisle's Sure-Weld TPO was tested as Product B.  
\*Samples subjected to 275°F heat aging.

# 4

## Smooth Surface:

*Keeping the roof clean*

**Carlisle:** A combination of our state-of-the-art manufacturing process and over 15 years of manufacturing experience creates a smoother top surface designed to resist dirt, debris, mildew and bacteria build-up. That means you get a cleaner, more solar reflective membrane throughout the life of your roof, and Carlisle will back it with an industry-leading reflectivity warranty.

**The Other Guys:** May have coarse, rough and uneven surfaces that hold dirt and reduce reflectivity.

**Protect Your Investment:** A smooth surface is the best way to maintain high reflectivity values, so stick with the TPO roof system that offers the best protection against dirt and debris.

# 5

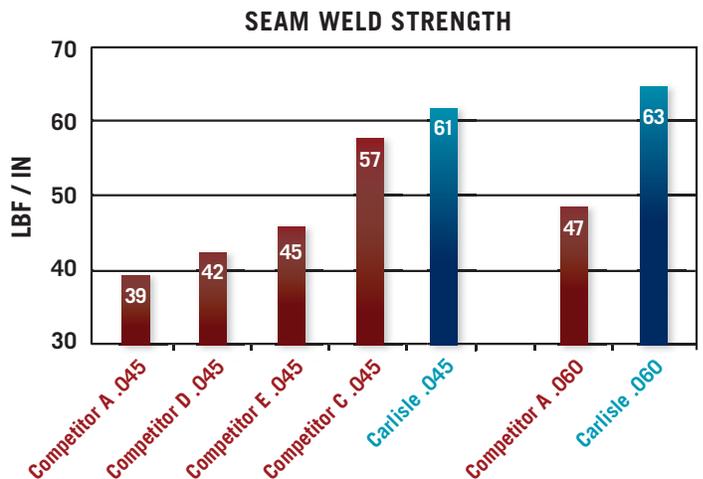
## Seam Strength:

*It is what it seams*

**Carlisle:** Independent tests conducted using ASTM methods consistently show that Carlisle's Sure-Weld TPO membrane exhibits far stronger seams than competing products. That means better wind uplift performance and fewer leaks and callbacks.

**The Other Guys:** May require cumbersome and expensive welding equipment to achieve adequate wind uplift and seam-strength performance, leading to increased labor costs and installation times.

**Protect Your Investment:** A strong seam is a vital part of any TPO roofing system. Consult an experienced roofing contractor to ensure the TPO membrane they install is easy to weld under various conditions.





# 6

## Weldability:

*Don't let weather get you down*

**Carlisle:** Sure-Weld TPO membranes can be welded at the widest temperature and humidity ranges without having to modify welder settings to compensate for changing climatic conditions. This leads to greater productivity and more reliable seams.

**The Other Guys:** For sheets with a narrow window of weldability, welder settings must be altered to account for changes in temperature and humidity, which can slow down installations and increase costs. Improper or “cold” welds may also occur, which may lead to leaks in your roofing system.

**Protect Your Investment:** Improper welds are the most common and costly mistakes made on a TPO roofing system, so choose a membrane that's user friendly and designed for ease of installation.

# 7

## Diversity and Versatility:

*No two roofing projects are ever the same*

**Carlisle:** Carlisle manufactures Sure-Weld TPO membranes with a wide range of thicknesses, widths, lengths and colors. Membrane thicknesses include 45, 60, 72 and 80 mils with sheets as wide as 12 feet. All variations of thickness and width are available in white, gray and tan, as well as 16 special colors. If 100-foot sheet lengths aren't the most efficient for your project, Sure-Weld TPO field membrane sheets can be manufactured in additional lengths.

**The Other Guys:** Limited in thickness, width and color and some only offer standard 100-foot length sheets. This condensed product offering restricts your ability to get the perfect TPO membrane for your roofing project.

**Protect Your Investment:** Ensure that you get the best roof for your money by giving your roofing contractor the choices he needs to save time and labor on your next TPO project.

# 8

## Thickness over Scrim:

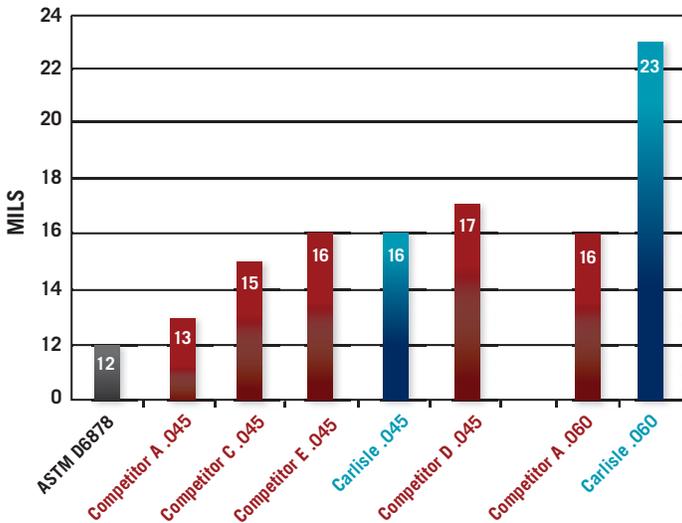
*Thicker is better*

**Carlisle:** 60-mil Sure-Weld TPO features a typical thickness over scrim of 23 mils. That's 11 mils over the required ASTM minimum. This thickness leads to greater weathering resistance with more OctaGuard XT Weathering Package for added protection against solar UV.

**The Other Guys:** Many TPO membranes narrowly exceed ASTM's minimum thickness over scrim requirement, which could mean a thinner top ply and less overall protection.

**Protect Your Investment:** The top ply of your TPO membrane is the first and best defense your building has against harmful solar UV and weather, so be certain that your next TPO roof system features an optimal thickness over scrim.

THICKNESS OVER SCRIM (WEATHERING SIDE)



# 9

## Warranties:

*Protection you can truly count on*

**Carlisle:** With Carlisle, you can rest assured that your building will have outstanding warranty protection. Carlisle's Total System warranties, as well as a large warranty reserve, reflect a commitment and ability to address any warranty issue.

**The Other Guys:** May not publish or provide information about their warranty reserve.

**Protect Your Investment:** Ensure that the company providing your warranty has a well-funded warranty reserve and "No Dollar Limit" Total System warranties.

# 10

## Prefabricated Accessories:

*Doing the hardest work for you*

**Carlisle:** Carlisle offers over a dozen prefabricated, in-stock, standard-order accessories and countless custom-order accessories. All carry a CFA (Certified Fabricated Accessory) stamp of approval, so you know they are manufactured to the highest standards. Every Carlisle CFA-approved accessory saves time and money during installation.

**The Other Guys:** Many manufacturers only offer a limited number of accessories, while others carry products that have not been certified for quality.

**Protect Your Investment:** A typical roof can have hundreds of penetrations. Ensure that these pipes, curbs and other obstructions are properly waterproofed with TPO accessories certified by the TPO membrane manufacturer issuing your warranty.





**Investing in Roofing Solutions for Over 45 Years**

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