

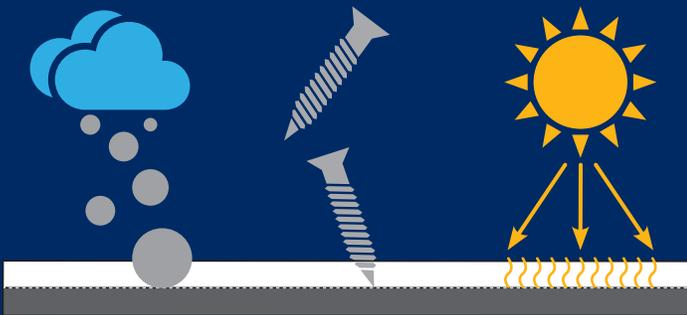
## Thicker is Better

### Selecting the Right TPO Membrane Thickness

Since its inception as a roofing membrane manufacturer, Carlisle SynTec Systems has led the industry in TPO research, development, and technology. Today, TPO is the largest and fastest-growing segment of the commercial roofing industry, and with such a wide variety of membranes on the market, it can be difficult to know which one to choose.

As the largest TPO supplier, Carlisle recognizes the importance of selecting a TPO membrane that will provide long-term protection for your building and its contents. While thinner membranes can be an attractive option due to their low installed costs, using a thicker membrane can be a simple and inexpensive way to extend your roof's service life and maximize return on investment.

#### 45-MIL MEMBRANE



THINNER MEMBRANE OFFERS LESS PROTECTION FROM THE ELEMENTS, ESPECIALLY IN THE CRITICAL TOP-PLY.



Hail

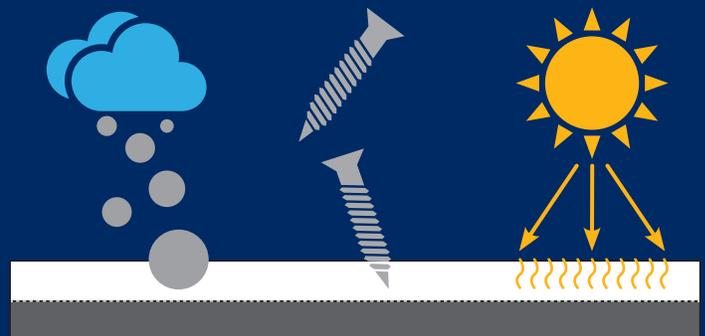


Puncture



Heat & UV Exposure

#### 60-MIL MEMBRANE



HAIL RESISTANCE IMPROVES

30%

45-mil to 60-mil

PUNCTURE RESISTANCE IMPROVES

34%

45-mil to 60-mil

WEATHERING RESISTANCE IMPROVES

34%

45-mil to 60-mil

4%  
INCREASE IN  
INSTALLED COST  
45-mil to 60-mil



33%  
INCREASE IN  
PERFORMANCE

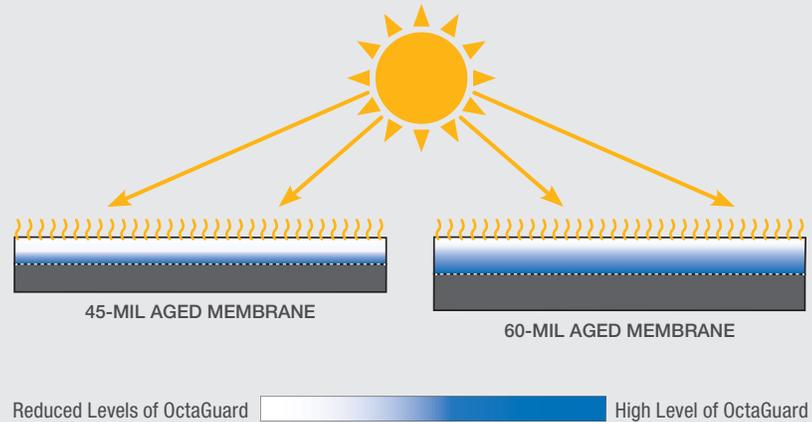
Protect your assets with a thicker, stronger, and longer-lasting TPO membrane!

#### A SMALL INVESTMENT NOW CAN EQUAL BIG DIVIDENDS LATER

How much more does it cost to go with a thicker membrane? Not as much as you may think: For as little as a 4% increase in total installed cost, membrane thickness can be significantly upgraded. Thicker membranes are also eligible for longer warranties with enhanced coverage. Selecting a thicker membrane is a minimal expenditure that delivers a significant payoff. Return on investment is substantially improved, as increasing membrane thickness can extend the roof's service life by as much as 33%.

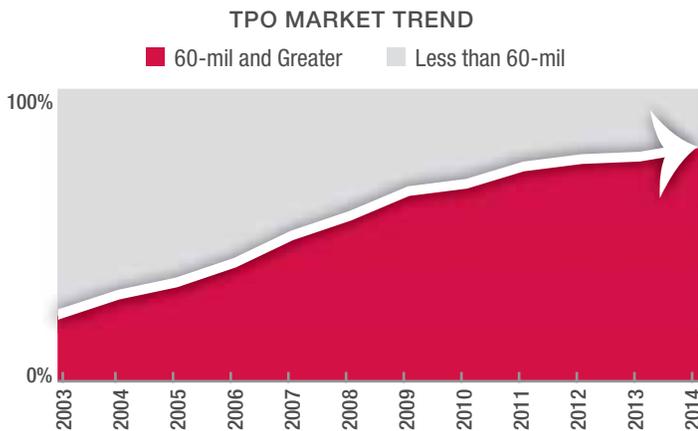
## THICKER MEMBRANES OFFER ENHANCED WEATHER RESISTANCE

All of Carlisle's Sure-Weld® TPO membranes are enhanced with the OctaGuard XT™ weathering package, a patented blend of eight performance-enhancing ingredients. As the sun beats down on a rooftop, the "reservoir" of weathering package protects the membrane's surface from UV degradation and helps it retain its smooth, reflective finish. Because thicker membranes contain more weathering package per unit of surface area, they will perform longer with no change in surface characteristics. With 33% more weathering package than 45-mil membrane, 60-mil Sure-Weld TPO provides excellent weather resistance and long-term performance for as little as a 4% increase in installed cost.



## WILL A THINNER MEMBRANE FATTEN YOUR BOTTOM LINE?

Sure, for now. But take a minute to think about why some of the world's most savvy, bottom-line-driven businesses have switched their roofing systems from 45-mil to 60-mil TPO. A roof is not a short-term investment; therefore, its cost must be analyzed in relation to its service life.



## THICKER TPO PROVIDES BETTER RESISTANCE TO HAIL AND PUNCTURES

The benefits associated with thicker membranes go far beyond enhanced warranty coverage. Thicker TPO also provides better resistance to hail and punctures during construction and rooftop maintenance activities. 80-mil TPO provides 50% greater puncture resistance than 45-mil TPO and 33% greater puncture resistance than 60-mil TPO membrane.

## BENEFITS OF THICKER MEMBRANES

- » Greater resistance to UV degradation – thicker membranes contain up to 77% more weathering package than thinner membranes
- » Enhanced protection against damage – increasing membrane thickness provides better resistance to punctures and hail and 25% greater seam strength
- » Stays smoother and glossier – because they contain more weathering package, thicker membranes maintain their high reflectivity and smooth surface longer than thinner membranes
- » Improved return on investment
- » Additional warranty coverage
- » Increased wind uplift performance on certain assemblies

## PROTECT YOUR INVESTMENT

Though thinner membranes may seem cost-effective upon first examination, they may not be the best long-term choice for your facility. When selecting a roofing system, it is important to consider not only the cost of the roofing materials, but also the value of the operations and assets that the roof will protect. Buildings are constantly under attack by the elements, and a rooftop is the first and most important line of defense. Selecting thicker membrane options can provide many extra years of performance and priceless peace of mind.