

Sure-White[®] EPDM
Roofing Systems



White EPDM Roofing Systems

Reflective • Efficient Installation • Proven Performance

Sure-White EPDM Roofing Systems

Highly reflective and monolithic pleasing, Carlisle's Sure-White membrane is the only white EPDM membrane with 25 years of proven field experience. Specially developed for Carlisle's fully adhered systems, the membrane offers superior performance including greater durability and puncture resistance. Environmentally friendly, the Sure-White roofing system can withstand enhanced wind uplifts and long-term weathering.

HISTORY OF CARLISLE

50 years ago, Carlisle pioneered single-ply roofing. Today, more than 15 billion square feet of membrane have been sold and installed. No other manufacturer has a comparable track record. EPDM's success is due to its many exceptional characteristics, including material longevity, weatherability and elasticity.

These non-reinforced membranes feature a full 60- or 90-mil thickness of weathering material with no internal scrim.

Sure-White EPDM non-reinforced membrane is available in 60-mil and 90-mil thicknesses, can be ordered in widths up to 20' (6m) and standard lengths of 100' (30m) for fast, economical installations.

ENERGY STAR®-QUALIFIED

Sure-White membranes are ENERGY STAR®-qualified, environmentally friendly and LEED® approved. The ENERGY STAR program recommends using the Roof Savings Calculator (rsc.ornl.gov) to determine if a white reflective roof will save or cost you money compared to a dark-colored roof depending on geographic climate conditions, building location, and other variables.

Caution: A heating penalty is associated with white roofs in central and northern climates and may be more prone to condensation accumulation.

SAVE TIME AND MONEY WITH FAT™ TECHNOLOGY

Installing a Sure-White EPDM roof system is easier and more efficient with the availability of Carlisle's innovative Factory-Applied Tape (FAT). Many Sure-White membranes are now offered with FAT seam technology, which has been proven to reduce seaming time by 75 percent and improve quality. FAT also delivers 30 percent greater peel strength and 32 percent greater shear strength, making Sure-White roof systems one of the strongest and most efficient reflective roofing options on the market.

INCREASE PRODUCTIVITY AND IMPROVE APPEARANCE WITH PRESSURE-SENSITIVE ACCESSORIES

The most time-consuming portion of a Sure-White installation is faster and easier with Carlisle's pressure-sensitive Elastoform flashing, a self-curing material that resists cracking and is easily formable around different shapes. Also available with the Sure-White system are pressure-sensitive walkway pads that are easily installed over top of the membrane, helping extend the service life of this premium roof system. As with its Sure-Seal® and Sure-Tough™ EPDM roof systems, Carlisle also offers its complete line of pressure-sensitive accessories for the Sure-White system, including pipe seals, curb wraps, cured cover strips and RUSS strips.





FEATURES AND BENEFITS

- » 25 years of proven performance
- » Industry leading UV resistance of 25,200 kJ/m² for white membranes
- » Reduces air conditioning costs
- » 540% elongation results in superior hail resistance
- » Lowest global warming potential, acid rain and smog impact according to a study using EPA's TRACI model
- » FleeceBACK option available
- » Zero (no growth) rating for fungal growth

WARRANTY

This system, properly installed and inspected on a commercial project, may receive:

- » A 10-, 15-, 20-, 25- or 30-year Golden Seal Total System Warranty may be requested when all materials used for the roofing installation are manufactured or marketed by Carlisle.
- » A maximum peak gust wind speed coverage of 55 miles per hour is standard. Additional coverage up to 120 mph is available.

Consult your Carlisle authorized applicator or manufacturer's representative/distributor for associated warranty changes and the full text of sample warranties

Typical Properties and Characteristics

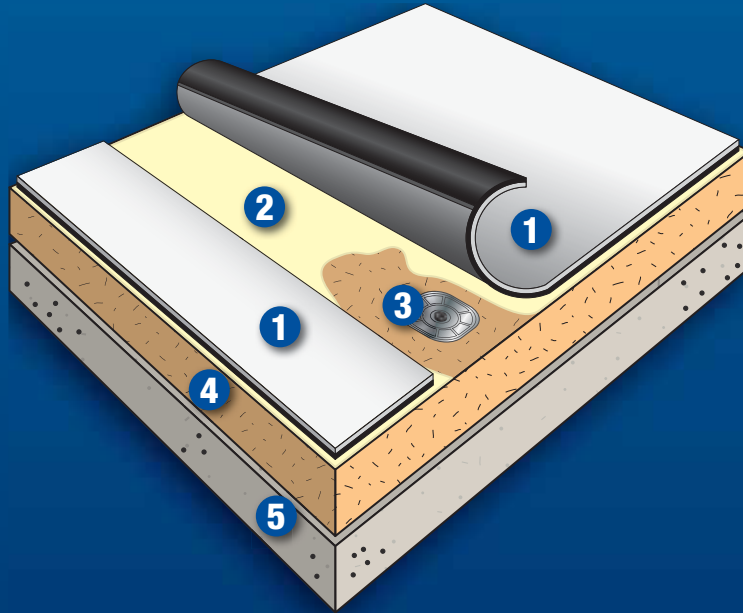
Property (Metric-SI Units)	Test Method	Specifications	Typical Properties
Tolerance on Nominal Thickness, %	ASTM D412	±10	±10
Tensile Strength, min, psi (MPa)	ASTM D412	1305 (9)	1465 (10.1)
Elongation, Ultimate, min, %	ASTM D412	300	480
Tearing Strength, min., lbf (kN/m)	ASTM D624 (Die C)	150 (26.3)	200 (35)
Factory Seam Strength, minimum	ASTM D816 Modified	Membrane Rupture	Membrane Rupture
Brittleness Point, max deg. °F (deg. °C)	ASTM D746	-49 (-45)	-67 (-55)
Resistance to Heat Aging* Sure-White aged 1 wk @ 240°F (116°C)	ASTM D573		
Tensile Strength, min, psi (mpa)	ASTM D412	1205 (8.3)	1345 (9.3)
Elongation, Ultimate, min, %	ASTM D412	200	280
Tear Strength, min, lbf/in. (kN/m)	ASTM D624 Die C	125 (21.9)	185 (32.4)
Linear Dimensional Change, max, %	ASTM D1204	±1.0	-0.5
Ozone Resistance* Condition after exposure to 100 pphm Ozone in air for 168 hours @ 104°F (40°C) Specimen wrapped around 3" mandrel	ASTM D1149	No Cracks	No Cracks
Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C) Change in mass, max, %	ASTM D471	+8 -2*	+3.6*
Water Vapor Permeance* Maximum, perms	ASTM E 96 (Proc. B or BW)	0.10	0.05
Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, total radiant exposure at 0.70 W/m ² irradiance, 80°C black panel temperature	ASTM D4637 Conditions	No Cracks No Cracking 7,560 kJ/m ²	No Cracks No Cracking 25,200 kJ/m ²

* Not a Quality Control Test due to the time required for the test or the complexity of the test. However, all tests are run on a statistical basis to ensure overall long-term performance of the sheeting.

¹ Approximately equivalent to 3000 hours exposure at 158°F black panel temperature, using xenon-arc apparatus operated at .07 W/m² irradiance.



EXPERIENCE THE CARLISLE DIFFERENCE



MEMBRANE OPTIONS

Color: White

Thickness (mils): 60 and 90

Standard width: 10', 16½' and 20'

Standard length: 100'

TYPICAL APPLICATION

1. Sure-White EPDM membrane with FAT
2. Carlisle bonding adhesive
3. Carlisle fasteners and plates
4. Acceptable insulation
5. Approved roof deck

SURE-WHITE WHITE EPDM ROOFING SYSTEMS

- » Carlisle manufactures all major components of the roofing system
 - Including Low VOC Bonding Adhesive and splice primers
- » EPDM is dimensionally stable in both hot and cold climates
- » FAT Seam Technology and Pressure-Sensitive Flashing enhance workmanship quality
- » 60-mil and 90-mil available in 10' widths
- » 60-mil also available in 16.5' and 20' widths
- » ENERGY STAR rated to reduce air conditioning costs in southern climates and can earn a LEED point for urban heat island mitigation. ENERGY STAR recommends periodic cleaning of white roofs. Caution: A heating penalty typically outweighs the cooling benefit in central and northern climates
- » Warranties up to 25 years with 60-mil and up to 30 years with 90-mil
- » Excellent protection from hail damage
- » Full 60- or 90-mil thickness of weathering material with no internal scrim



800-479-6832 | P.O. Box 7000 | Carlisle, PA 17013 | Fax: 717-245-7053 | www.carlisesyntec.com