



CARLISLE'S

# ROOFING SYSTEMS

EPDM • TPO • PVC • FLEECEBACK • ROOF GARDEN



**CARLISLE**  
SYNTEC SYSTEMS

## Put 50 Years of Experience to Work for You

For nearly half a century, Carlisle SynTec has been the trusted provider of the most dependable and longest-lasting single-ply membranes in the commercial roofing industry. With over 15 billion square feet of roofing materials sold, Carlisle continues to lead the industry by providing its valued customers with the most innovative products, services and warranties on the market. Whatever your roofing needs, Carlisle SynTec has a system— and an answer— for you.



## Picking the Best Roofing System for Your Building

Determining which Carlisle system to install depends on a variety of conditions, but few are more important than your local climate. While all Carlisle roof systems perform admirably in virtually all weather conditions, certain systems are better equipped than others for specific climates. Offering the widest variety of roofing systems, Carlisle SynTec can provide a roofing solution that will meet your needs as the best system for your building.

## Warranted Peace of Mind

With Carlisle, you can rest assured that you will have the best warranty protection possible. With warranties covering the repair of leaks from a variety of causes (including hail up to two inches and wind of up to 120 mph) and offering terms of up to 30 years, you can feel confident that your building is protected long term against an unlikely failure. You may even choose warranty options that protect against accidental puncture. The warranty process begins with a comprehensive inspection by a Carlisle field service representative, providing the building owner with even greater confidence that the roof was installed flawlessly.

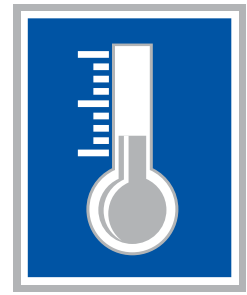


## EPDM Roofing Systems

Carlisle's signature roof system, Sure-Seal® EPDM, has established 50 years of excellence. Its reputation of low maintenance and top-notch weathering characteristics makes it the ideal roofing option for many climates. In northern climates especially, the original black color of our Sure-Seal membrane attracts the sun's solar energy, leading to significant reductions in heating costs during the winter months. The EPDM membrane may also help melt snow that can pile up on your roof and lead to potential structural damage if not removed in a timely manner.

Sure-White™ EPDM roof systems combine the consistent high performance of Carlisle's EPDM with the numerous benefits of reflective roofing membranes.\* Substantial savings in air conditioning costs is one of the many reasons Sure-White EPDM roof systems deliver an exceptional choice for buildings in southern climates.

Sure-Seal EPDM roof systems offer easy installation and require no special tools or complex equipment. With innovations such as Factory-Applied Tape™ (FAT), where seam tape is applied to the membrane in the factory, and pressure-sensitive accessories, the installation of a Sure-Seal EPDM system has never been easier and more efficient.



**EPDM roofing systems are recommended in regions with mild to extreme cold temperature conditions and have excellent cold weather flexibility and hail resistance.**

\*As the industry's first EPDM with an ENERGY STAR® qualification, Sure-White EPDM has a 20-year track record of proven performance.



## Energy-Efficient Roofing

It is often misconstrued within the industry that white roofs are the lone option in attaining an energy-efficient roof system. This misconception is driven by manufacturers that produce only white roofings products and is simply not true. Although there are undeniable benefits to reflective roofing materials, these advantages are seen primarily in warmer climates. In colder climates white roofs increase heating costs, increase snow and ice load and increase potential for condensation problems. Dark colored membranes are more energy efficient in colder climates where building owners typically spend 5 times more money heating their building than cooling. With an unparalleled 50 years of experience in the industry, Carlisle has proven through time that reflective membranes are not the best solution for everyone and in fact can create problems in colder climates if not designed properly.



**TPO and PVC roofing systems are recommended in regions with mild to extremely hot temperature conditions due to their reflective cool roof qualities.**

## **TPO Roofing Systems**

Thermoplastic polyolefin, or TPO, is the fastest-growing segment of the commercial roofing industry, and Carlisle is the leading supplier of this type of roofing. Fueling this growth is the increased use of TPO in southern climates where cooling costs significantly outweigh heating costs. Carlisle's Sure-Weld TPO membranes are ENERGY STAR®-qualified and CRRC (Cool Roof Rating Council) certified and have been directly attributed to a reduction in a building's energy consumption by greatly diminishing the cost of air conditioning.

In addition to Sure-Weld TPO, Carlisle offers Spectro-Weld™, the industry's most reflective single-ply membrane designed for installation in conjunction with PV applications, as well as any project that benefits from long-term reductions in cooling costs. Spectro-Weld's industry-leading reflectivity and extremely smooth top surface enables the membrane to provide a whiter, more reflective appearance for years to come.

## **PVC Roofing Systems**

Polyvinyl Chloride (PVC) is a trusted membrane that has been performing admirably for decades in the European and North American markets. Another option for reflective roofing, Carlisle's Sure-Flex™ PVC membranes are ENERGY STAR qualified and CRRC certified and offer building owners the potential for decreased cooling costs. Sure-Flex PVC also offers excellent resistance to rooftop chemical attacks including acids, oils and greases.



## FleeceBACK® Roofing Systems

Carlisle's FleeceBACK membranes are the ideal choice for buildings that require superior rooftop protection and long-term durability. FleeceBACK membranes feature 45-, 60- or 90-mil EPDM or 45-, 60- or 80-mil TPO membranes joined with a strong 55-mil fleece. The combination of fleece and Carlisle's proven membranes create a rooftop that can withstand extreme weather conditions. Often used with the FleeceBACK systems, FAST™ Adhesive is a two-component, low-rise insulating adhesive that offers superior staying power and adds to the rooftop R-value. A FleeceBACK-FAST system provides a bond that offers superior strength and wind uplift resistance for up to 120 miles per hour. Carlisle's new Flexible FAST Adhesive offers elongation of 150% and added puncture resistance. FleeceBACK and Flexible FAST are recommended for Roof Garden terrace or solar PV installations due to added strength and durability.

For HotMopped and ColdApplied FleeceBACK systems, Carlisle offers its patented AFX fleece. AFX offers additional protection against hot asphalt saturation, ensuring that it does not bleed through and discolor the TPO or EPDM membrane.

## Insulation

The importance of a properly insulated building cannot be overstated. In fact, a building that incorporates insulation into its overall roof design can substantially lower energy costs throughout the life of the roof. Because of its superior R-value and excellent energy-efficient properties, polyisocyanurate foam (polyiso) has become the industry's premier roofing insulation. Polyiso can be attached to appropriate decking materials with a variety of plates and fasteners or Carlisle's FAST 100 adhesive and is compatible with all Carlisle roof systems.

Carlisle manufactures its own polyiso in a number of production facilities strategically located throughout the United States, giving us the ability to fully satisfy the need for this increasingly popular material. Carlisle also manufactures tapered polyiso to accommodate specific designs that require additional slope to rooftop drains. In addition to polyiso, Carlisle offers a full line of other insulations, including extruded and expanded polystyrene, fiberboard, gypsum and high-density half-inch polyiso cover boards to meet any roofing need.



## Did You Know?

Every day above 64°F is considered a cooling-degree day, while every day below 64°F is considered a heating-degree day. This temperature defines when building owners have to rely on expensive utilities to control the climate within their buildings. Knowing your climate is of paramount importance when deciding which roof system would be the most energy-efficient option. Let Carlisle's 50 years of history and experience help you choose the most appropriate roof system for your building, no matter where you are.

## Roofing System Options

Choosing the appropriate membrane is only half of the roofing selection process. It is equally important to select the proper installation method. Much the same way that climatic conditions play a role in membrane selection, environmental factors such as wind and building height are important when choosing an installation method. Carlisle's roof systems are installed using three quality methods, each with its own specific benefits depending on your building's location and climate.

**Trust our experience.**  
**Trust Carlisle.**

### Ballasted

Because of their fast and easy installation, ballasted roof systems are an extremely economical choice for large, wide-open rooftops. A popular choice for large-scale retail stores and warehouses, ballasted systems feature a loose-laid membrane that is covered and held in place by stone or pavers. The ballast helps to shield the membrane from inclement weather and extend the life of the roof. Recent research also indicates that ballasted roof systems may offer energy efficiency similar to light-colored membranes and therefore help building owners reduce their cooling costs.

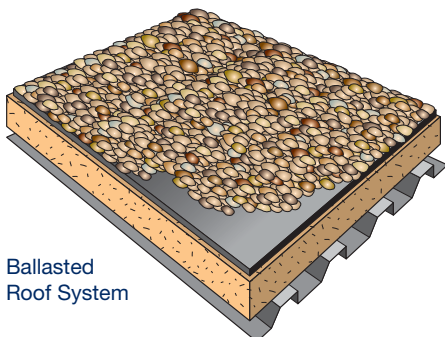
ASHRAE, the California Energy Commission (CEC) and the City of Chicago have all updated their "cool roofing" standards to accept certain ballasted assemblies as alternatives to reflective roofing systems. Drainage components can be incorporated to facilitate stormwater retention and contribute toward LEED® credits.

### Mechanically Fastened

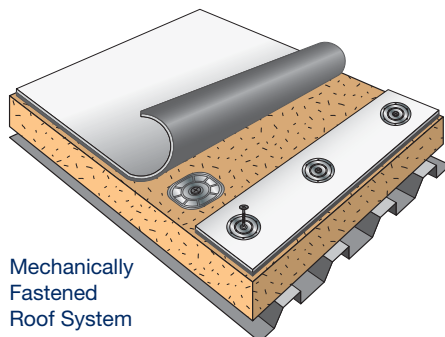
Providing a lightweight, easy-to-maintain option, mechanically fastened roof systems are seen within the roofing industry as an upgrade from ballasted systems. Carlisle offers a full line of pre-assembled plates and fasteners that dramatically improve the installation speed of a mechanically fastened roofing system. Mechanically fastened systems are held in place by the plates and fasteners that are secured through the membrane and into the deck. The most widely installed roofs in the commercial roofing industry, mechanically fastened systems are an ideal choice for areas that experience moderate winds.

### Fully Adhered

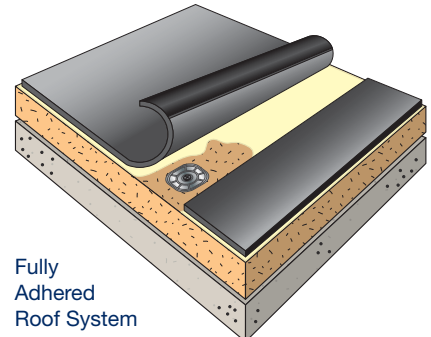
Fully adhered roof systems offer the highest degree of stability and uplift protection and are essential for high elevations or hurricane-prone areas where wind is a constant concern. Carlisle offers a full line of adhesives that are suitable for use in high-wind areas, including bonding adhesive, low-voc, water-based, asphalt-based products, cold-applied and FAST Adhesive, a unique, two-part, low-rise adhesive that offers the industry's highest wind uplift ratings and adds thermal efficiency.



Ballasted  
Roof System



Mechanically  
Fastened  
Roof System



Fully  
Adhered  
Roof System



# EPDM

## ROOFING SYSTEMS



### Sure-Seal EPDM

- Fully adhered and mechanically fastened EPDM systems
- Ballasted roofing systems
- No special equipment required for installation
- Over 13 billion square feet installed
- Over 45 years of proven performance



### Factory-Applied Tape

- Patented seam technology
- Added quality control
- Stronger seams
- Improved aesthetics



### Sure-White EPDM

- The only white EPDM with 20 years of proven performance
- Meets ENERGY STAR guidelines to reduce air conditioning costs in warm climates
- CRRC certified and can contribute toward LEED credit requirements
- 20-year warranty available

### Accessories

Full line of laborsaving pressure-sensitive accessories available for both black and white systems.



### Sure-Tough EPDM

- Reinforced membrane offers excellent fatigue, tear and puncture resistance
- Warranty coverage for accidental punctures







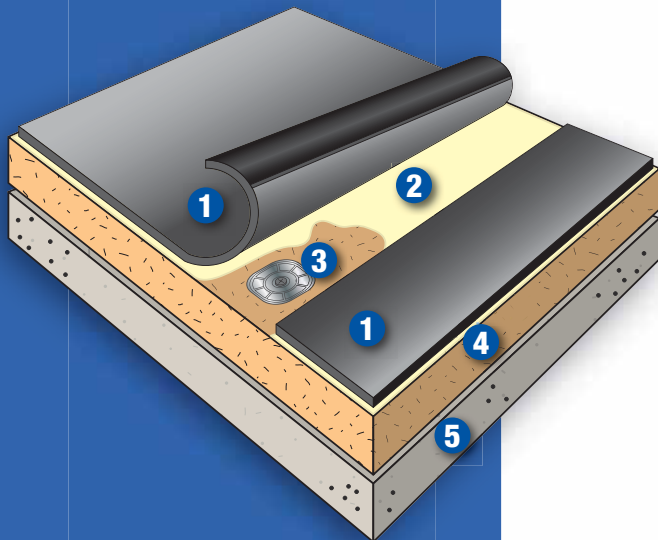
# CARLISLE'S SURE-SEAL®

## Membrane Options

Color: Black  
 Thicknesses (mils): 45, 60 and 90  
 Standard widths: 10' - 30'  
 Standard lengths: 50' and 100'

## Typical Application

1. Sure-Seal EPDM Classic membrane with Factory-Applied Tape (FAT)
2. Carlisle bonding adhesive
3. Carlisle fasteners and plates
4. Acceptable insulation
5. Approved roof deck



## Sure-Seal EPDM Roofing System

Sure-Seal fully adhered roofing systems are ideal for low- and steep-sloped roof designs and for a variety of decks.

## Features and Benefits

- Steeply pitched and flat roof applications—no slope restrictions
- Industry leading UV resistance of 41,580 kJ/m<sup>2</sup>
- Dimensionally stable in both hot and cold climates
- 465% elongation adds hail resistance
- Lightweight requirements
- Variety of decks
- Factory-Applied Tape seam technology
- Warranty terms of up to 30 years
- Low global warming potential, acid rain and smog impact





# CARLISLE'S SURE-TOUGH™



## Membrane Options

Color: Black  
Thicknesses (mils): 45, 60 and 75  
Standard widths: 8' and 10'  
Standard length: 100'

## Typical Application

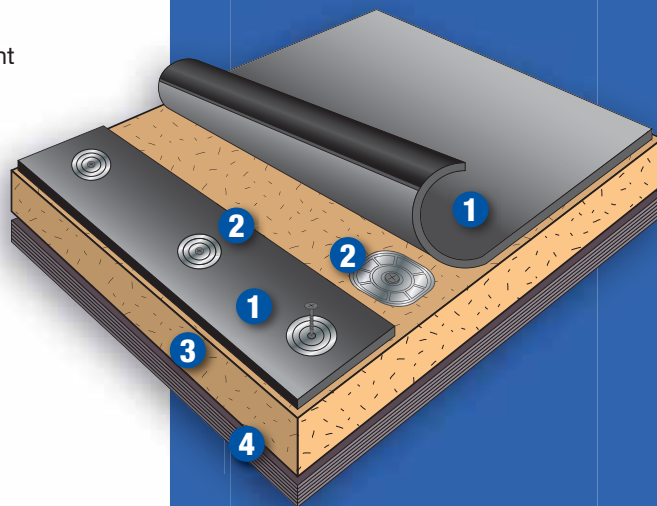
1. Sure-Tough EPDM Classic reinforced membrane with FAT
2. Carlisle fasteners and plates
3. Acceptable insulation
4. Approved roof deck

## Sure-Tough EPDM Roofing System

Sure-Tough consists of a tough polyester reinforcement sandwiched between two strong EPDM membrane plies, offering great installation versatility.

## Features and Benefits

- Steeply pitched and flat roof applications—no slope restrictions
- Excellent UV resistance of 35,320 kJ/m<sup>2</sup>
- Warranty coverage for accidental punctures
- Superior durability and hail resistant
- Dimensionally stable in hot and cold climates
- Factory-Applied Tape seam technology
- Mechanically fastened and fully adhered options available
- Recyclable in mechanically fastened applications
- Low global warming potential, acid rain and smog impact





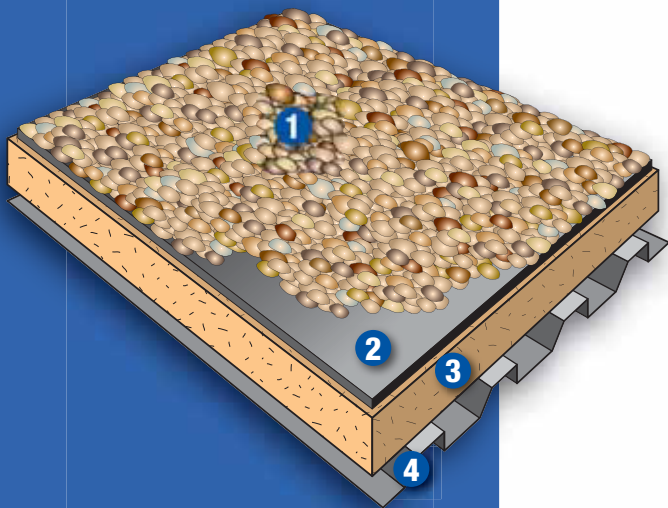
# CARLISLE'S SURE-SEAL®

## Membrane Options

Color: Black  
 Thicknesses (mils): 45 and 60  
 Standard widths: 10' - 50'  
 Standard lengths: 100' - 200'

## Typical Application

1. Ballast
2. Sure-Seal EPDM  
Classic membrane
3. Acceptable insulation
4. Approved roof deck



## Sure-Seal Ballasted Roofing System

Sure-Seal ballasted roofing systems are economical and ideal for low-slope installations (not to exceed 2":12").

## Features and Benefits

- Excellent fire protection for insulation and deck
- Industry leading UV resistance of 41,580 kJ/m<sup>2</sup>
- Factory-Applied Tape seam technology
- Accepted as an energy-efficient, cool roof alternative by ASHRAE, California Energy Commission and the City of Chicago
- Low lifecycle costs and great hail resistance
- Recyclable
- Stormwater retention options
- Low global warming potential, acid rain and smog impact





# CARLISLE'S **SURE-WHITE®**



## Sure-White EPDM Roofing System

Sure-White, the industry's only white EPDM roofing system with more than 20 years of proven performance, is environmentally friendly.

## Features and Benefits

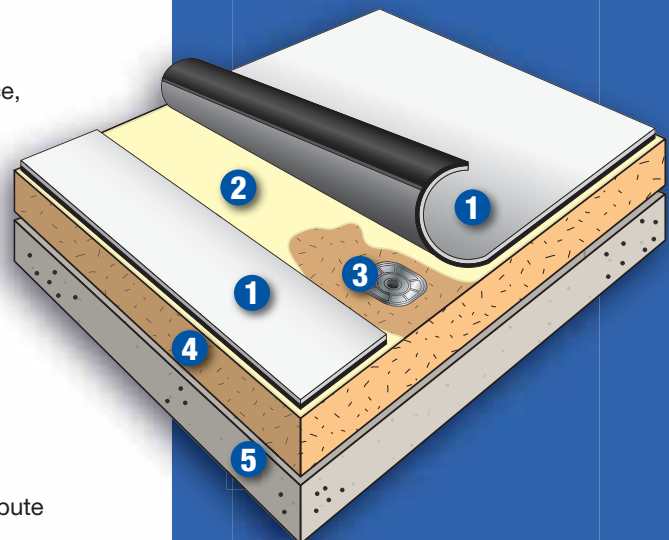
- Wider-width membranes for improved labor and material savings
- Fully adhered for maximum design flexibility
- Dimensionally stable in hot and cold climates
- FleeceBACK option available
- Factory-Applied Tape seam technology
- Meets ENERGY STAR guidelines, is CRRC (Cool Roof Rating Council) certified and can contribute toward LEED credit requirements to reduce air conditioning costs in southern climates
- Low global warming potential, acid rain and smog impact

## Membrane Options

Color: White
Thickness (mils): 60
Standard width: 10', 16½' and 20'
Standard length: 100'

## Typical Application

1. Sure-White 60-mil EPDM Classic membrane with FAT
2. Carlisle bonding adhesive
3. Carlisle fasteners and plates
4. Acceptable insulation
5. Approved roof deck



SURE-WHITE FULLY ADHERED



# TPO

## ROOFING SYSTEMS



### Sure-Weld TPO

- Mechanically fastened and fully adhered TPO roofing systems
- Contractor-friendly, heat-weldable membrane
- Colors: white, gray and tan (special colors available)
- Compliant with California's Title 24
- Can contribute toward LEED credit requirements
- Meets ENERGY STAR guidelines
- Over 3 billion square feet installed



### Self-Adhering TPO

- Sure-Weld TPO with pre-applied adhesive
- No fumes, odors or VOCs
- Provides tremendous labor savings over traditional bonding adhesive



### Certified Fabricated Accessories

Full line of laborsaving and quality-certified accessories available



### SPECTRO-WELD™

- Solar reflectance of 0.88 (ASTM C1549), higher than any competitive TPO
- Improves efficiency of certain PV systems
- Exceptional resistance to UV, ozone and oxidation
- 100% recyclable



### OCTAGUARD XT™ WEATHERING PACKAGE

- Industry's highest performing TPO weathering package
- Improved long-term performance
- Heat and UV resistance





# CARLISLE'S **SURE-WELD®**



SURE-WELD FULLY ADHERED

## Membrane Options

Colors: White, gray, tan  
(special colors available)

Thicknesses (mils): 45, 60, 72 and 80

Standard widths: 4', 6', 8', 10' and 12'

Standard length: 100'

## Typical Application

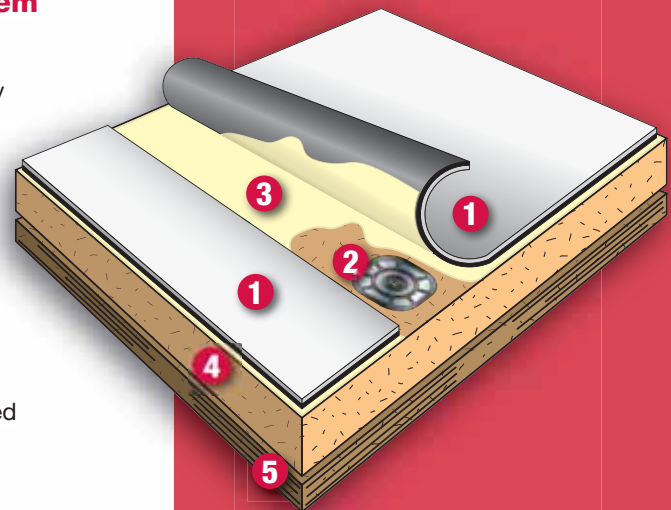
1. Sure-Weld reinforced membrane
2. Carlisle fasteners and plates
3. Sure-Weld, Low-VOC or Aqua Base 120 Bonding Adhesive
4. Acceptable insulation
5. Approved roof deck

## Sure-Weld TPO Fully Adhered Roofing System

Sure-Weld fully adhered roofing systems are ideal for both low- and steep-sloped designs. The aesthetically pleasing white membrane is ideal in climates where a reduction in cooling cost is desired.

## Features and Benefits

- Heat-weldable membranes
- High wind uplift performance
- Hail and puncture resistance
- Thicker top ply membrane thickness adds improved long-term weatherability and durability
- Sure-Weld white and tan membranes meet ENERGY STAR guidelines and are CRRC (Cool Roof Rating Council) certified



**OCTAGUARD XT™**  
WEATHERING PACKAGE





# CARLISLE'S SURE-WELD®

## Membrane Options

Colors: White, gray, tan  
(special colors available)

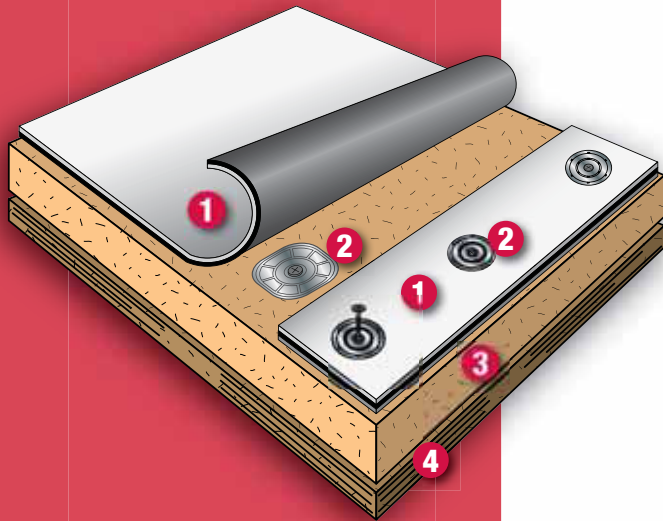
Thicknesses (mils): 45, 60, 72 and 80

Standard widths: 4', 6', 8', 10' and 12'

Standard length: 100'

## Typical Application

1. Sure-Weld reinforced membrane
2. Carlisle fasteners and plates
3. Acceptable insulation
4. Approved roof deck



## Sure-Weld TPO Mechanically Fastened Roofing System

Sure-Weld mechanically fastened roofing systems are designed for both low- and high-slope applications. Heat-welded seams create a monolithic membrane that provides long-term rooftop performance.

## Features and Benefits

- Heat-weldable membranes
- High wind uplift performance
- Hail and puncture resistant
- Top ply membrane thickness adds improved long-term weatherability and durability
- Sure-Weld white and tan membranes meet ENERGY STAR guidelines and are CRRC (Cool Roof Rating Council) certified



**OCTAGUARD XT**  
WEATHERING PACKAGE







# PVC ROOFING SYSTEMS



## Sure-Flex PVC

- Mechanically fastened and fully adhered PVC roofing systems
- Contractor-friendly, heat-weldable membranes
- Meets ENERGY STAR guidelines, is CA Title 24 compliant, CRRRC (Cool Roof Rating Council) certified and can contribute toward LEED credit requirements
- Enhanced property characteristics for long-term weatherability
- Excellent chemical resistance ideal for restaurant and airport applications
- Membrane compounded for maximum flexibility
- Available in bright white, gray and tan



## Sure-Flex PVC KEE

- Sure-Flex PVC enhanced with Elvaloy KEE
- Enhanced property characteristics for long-term weatherability
- Optimum balance of PVC and Elvaloy KEE provides excellent welding characteristics



## Certified Fabricated Accessories

Full line of laborsaving and quality-certified accessories available





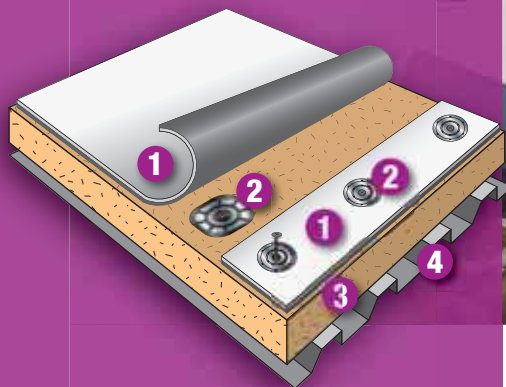
# CARLISLE'S SURE-FLEX™

## Membrane Options

Colors: White, gray and tan  
 Thicknesses (mils): 50, 60, and 80  
 Standard widths:  
 40½", 60", 81" and 120"  
 Standard lengths:  
 50-mil-100', 60-mil-80' and 80-mil-65'

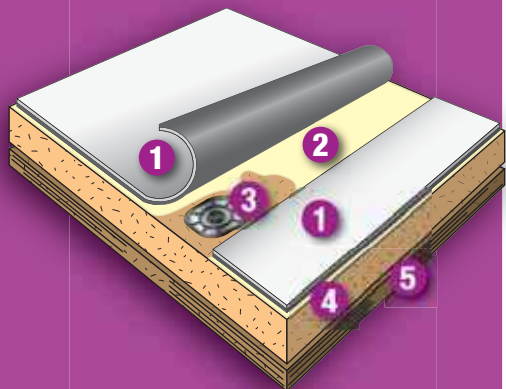
## Mechanically Fastened Typical Application

1. Sure-Flex reinforced membrane
2. Carlisle fasteners and plates
3. Acceptable insulation
4. Approved roof deck



## Fully Adhered Typical Application

1. Sure-Flex reinforced membrane
2. Bonding Adhesive
3. Carlisle fasteners and plates
4. Acceptable insulation
5. Approved roof deck



## Sure-Flex PVC Roofing System

Sure-Flex roofing systems are designed for low- and high-sloped roof designs. Sure-Flex also offers excellent resistance to rooftop chemical attacks including acids, oils and greases.

## Features and Benefits

- UL/FM codes and approvals
- High solar reflective cool membrane
- Excellent chemical resistance to acids, bases, restaurant oils and greases
- Mechanically fastened and fully adhered systems available
- Available with polyester or fiberglass reinforcing scrim
- Meets ENERGY STAR guidelines and is CRRC certified
- 10-foot wide membranes







# FLEECEBACK<sup>®</sup> ROOFING SYSTEMS



## FleeceBACK

- Fleece adds significant toughness and durability
- Superior wind uplift resistance due to adhesive/fleece bond
- Industry-leading resistance to hail damage
- 67-75% fewer seams than mod-bit
- Flexible FAST offers 150% elongation and 33-50% greater puncture resistance
- Insulating FAST Adhesive adds thermal efficiency
- VOC-free adhesive options
- ENERGY STAR qualified systems available to reduce air conditioning costs in southern climates
- HotMopped and ColdApplied systems also available
- Spectro-Weld FleeceBACK designed for solar PV installations
- FleeceBACK 145-mil EPDM is ideal for RoofGarden and plaza/terrace projects



CARLISLE'S

# FLEECEBACK® SURE-SEAL® SURE-WHITE®

## Membrane Options

Color: Black, white

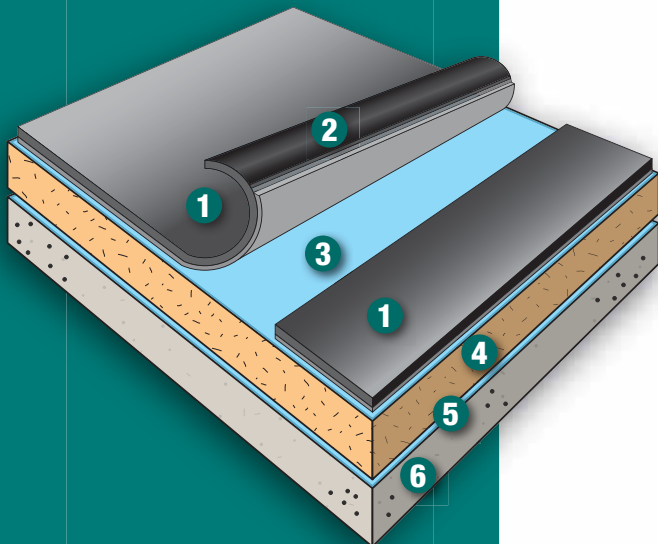
Thicknesses (mils): EPDM + Fleece:  
100, 115 and 145

Standard widths: 5' and 10'

Standard lengths: 40', 50' and 100'

## Typical Application

1. FleeceBACK membrane with Factory-Applied Tape
2. Factory-Applied Tape
3. Flexible FAST Adhesive
4. Acceptable ISO insulation
5. Insulating FAST Adhesive
6. Structural deck



## FleeceBACK Sure-Seal Roofing System

The FleeceBACK Sure-Seal roofing system offers extra toughness and durability, superior wind uplift and hail resistance, non-penetrating options, Factory-Applied Tape and additional R-Value from the insulating FAST Adhesive.

## Features and Benefits

- Very little noise or odor during installation
- Unique impact-resistant Flexible FAST Adhesive improves puncture resistance
- Flexible FAST Adhesive adds R-Value
- Can be installed on non-nailable decks
- Superior membrane is puncture, tear and hail resistant
- Factory-Applied Tape seam technology
- Ideal for RoofGarden and terrace applications
- Sure-White membrane meets ENERGY STAR guidelines to reduce air conditioning costs







CARLISLE'S

# FLEECEBACK<sup>®</sup> SURE-WELD<sup>®</sup>



## Membrane Options

Colors: White, gray, tan

Thicknesses (mils): TPO + Fleece:  
100, 115 and 135

Standard widths: 6' and 12'

Standard lengths: 50', 75' and 100'

## Typical Application

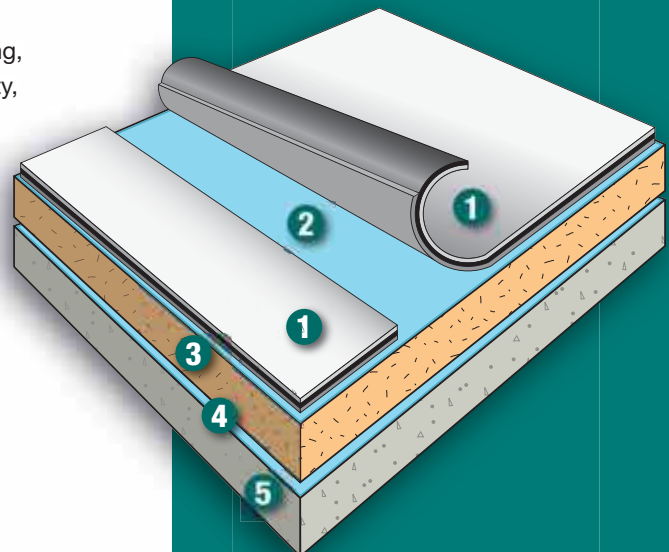
1. FleeceBACK Sure-Weld reinforced membrane
2. Flexible FAST Adhesive
3. Acceptable insulation
4. Insulating Flexible FAST Adhesive
5. Approved roof deck

## FleeceBACK Sure-Weld Roofing System

The FleeceBACK Sure-Weld is an aesthetically pleasing, reflective membrane that provides impressive durability, superior hail resistance and wind uplift ratings.

## Features and Benefits

- Very little noise or odor during installation
- Unique elongating Flexible FAST Adhesive eliminates VOC concerns
- Flexible FAST Adhesive adds R-value
- Can be installed on non-nailable decks
- Superior membrane is puncture and tear resistant
- Excellent hail damage resistance
- New Spectro-Weld FleeceBACK is ideal for solar PV applications
- Sure-Weld membrane meets ENERGY STAR guidelines for southern climates



FLEECEBACK SURE-WELD FULLY ADHERED



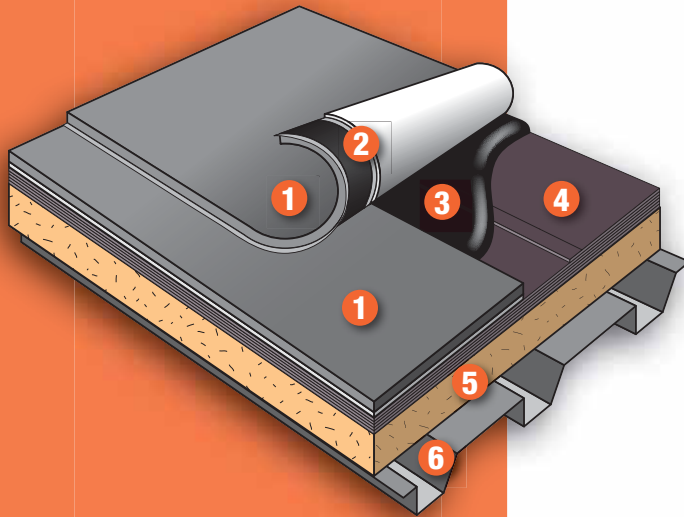
# CARLISLE'S HotMOPPED

## Membrane Options

Colors: Black EPDM or white TPO  
 Thicknesses (mils):  
 EPDM + Fleece: 90 and 105  
 TPO + Fleece: 120, 135 and 155  
 Standard widths: 4.5' or 10' EPDM  
 and 6' or 12' TPO  
 Standard lengths: 50', 75' and 100'

## Typical Application

1. AFX membrane
2. 3" or 6" Factory-Applied Tape (EPDM)  
2.5" selfedge edge (TPO)
3. Type III, IV or modified asphalt
4. Existing primed smooth or mineral-surfaced built-up, or modified-bitumen systems
5. Existing insulation
6. Metal deck



## HotMopped Roofing System

HotMopped fully adhered roofing systems are one of the most cost-effective recover solutions for smooth, BUR, mineral-surfaced cap sheet or modified-bitumen systems.

## Features and Benefits

- Recover applications can receive total system warranty coverage for up to 20 years
- Hail and accidental puncture warranties available
- No ponded water exclusions
- No torches or open flames required
- Compatible with existing asphalt roofs
- Factory-Applied Tape seam technology
- Available with EPDM and TPO
- Sure-Weld membrane meets ENERGY STAR guidelines







# CARLISLE'S **ColdApplied**



COLDAPPLIED FULLY ADHERED

## Membrane Options

Colors: Black EPDM or white TPO

Thicknesses (mils):

EPDM + Fleece: 90 and 105

TPO + Fleece: 120, 135 and 155

Standard widths: 4.5' or 10' EPDM  
and 6' or 12' TPO

Standard lengths: 50', 75' and 100'

## Typical Application

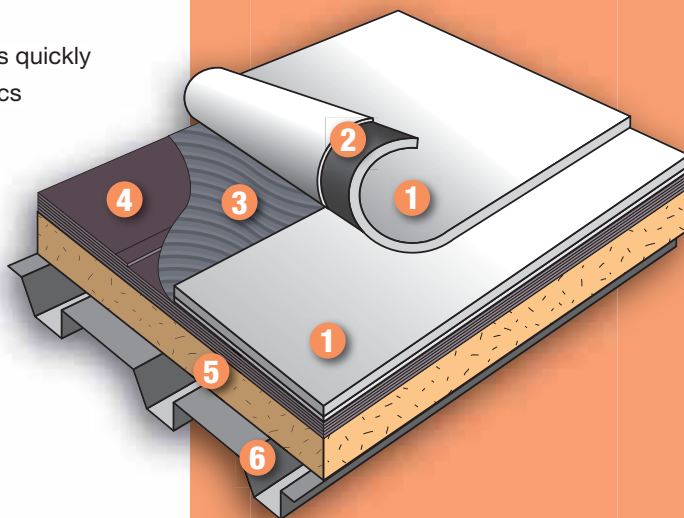
1. AFX membrane
2. 2.5" selvedge edge (TPO)  
3" or 6" Factory-Applied  
Tape (EPDM)
3. Carlisle ColdApplied adhesive
4. Existing primed smooth or  
mineral-surfaced built-up, or  
modified-bitumen systems
5. Existing insulation
6. Metal deck

## ColdApplied Roofing System

The ColdApplied fully adhered roofing system installs quickly and is ideal for applications where time or the logistics of setting up a hot asphalt kettle is not practical, or where asphalt odor is not desirable.

## Features and Benefits

- Eliminates hot kettles, odors and possible rooftop safety issues
- Low odor and a quiet, less disruptive installation
- ColdApplied adhesive has zero VOCs
- ColdApplied adhesive is a thick, mastic-grade product with elastomeric properties
- No dangerous torches or open flames
- Available with EPDM and TPO
- Sure-Weld membrane meets ENERGY STAR guidelines





CARLISLE'S

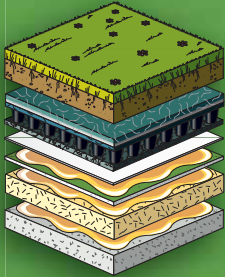
# Roof GARDEN

## Shallow Assembly

Soil depth: 2½" to 4"

Weight: 12-26 lbs./sq. ft.

Vegetation: Sedum and groundcovers

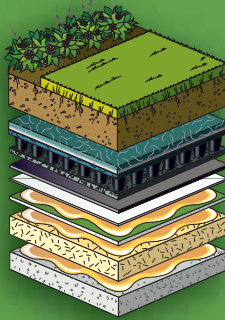


## Medium Assembly

Soil depth: 5" to 8"

Weight: 30-50 lbs./sq. ft.

Vegetation: Grasses and groundcovers

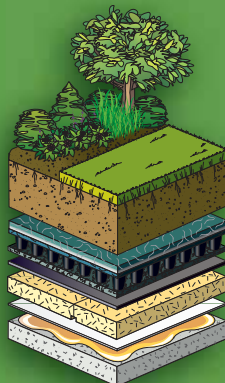


## Deep Assembly

Soil depth: 8" +

Weight: 50+ lbs./sq. ft.

Vegetation: Shrubs and small trees



## Roof Garden Systems

Carlisle's Roof Garden systems provide building owners, architects and applicators several options.

## Features and Benefits

- Aids in stormwater management
- Air and water purification
- Sound insulation
- Greatly extend roof life expectancy
- Adds aesthetic value
- Helps reduce urban heat-island effect
- Reduced cooling costs
- Options for full vegetative coverage on day of installation
- Single-source warranty including overburden removal





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# Roof GARDEN GREENGRID®

ROOF GARDEN GREENGRID



## GreenGrid Tray Options

4" depth available in:  
2' x 2', 2' x 4', 40" x 40"  
and 2' x 2' triangle  
8" depth available in: 2' x 4'

## Typical Application

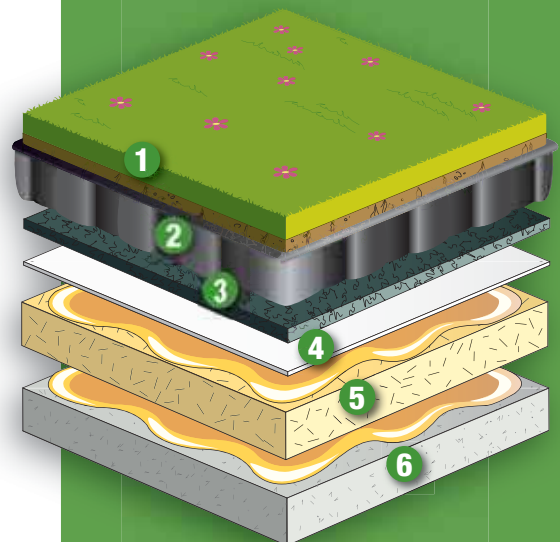
1. Growth media
2. GreenGrid tray system
3. Protection fabric
4. Sure-Seal EPDM or Sure-Weld TPO fully adhered membrane
5. Approved insulation
6. Substrate

## Roof Garden GreenGrid System

Carlisle's Roof Garden GreenGrid system offers distinct advantages over more complex systems with its simplicity in design, pre-planted modules and movable modular features.

## Features and Benefits

- Single-source responsibility—roofing contractors can install both the waterproofing and the roof garden system in one installation
- No planting on the roof—trays are pre-planted before arriving at the jobsite including the root barrier, soil media and plants
- The trays can be easily removed for any reason
- Building owners obtain single-source warranty coverage including overburden removal



# Trust our experience. Trust Carlisle.



## Nationwide Stocking Locations

1. Montgomery, NY: Polyiso Insulation
2. Carlisle, PA: EPDM, TPO and PVC
3. Smithfield, PA: Polyiso Insulation
4. Lake City, FL: Polyiso Insulation
5. Lakeland, FL: EPS Insulation
6. Franklin Park, IL: Polyiso Insulation
7. Greenville, IL: EPDM & TPO
8. Senatobia, MS: TPO & PVC
9. Mead, NE: EPS Insulation

10. Terrell, TX: Polyiso Insulation
11. Tooele, UT: TPO, PVC, EPDM, EPS, and Polyiso Insulation
12. Phoenix, AZ: EPS and Polyiso Insulation
13. Puyallup, WA: EPS and Polyiso Insulation
14. Dixon, CA: EPS Insulation
15. Chino, CA: EPS Insulation
16. Anchorage, AK: EPS Insulation

800-479-6832 • P.O. Box 7000 • Carlisle, PA 17013 • Fax: 717-245-7053 • [www.carlisesyntec.com](http://www.carlisesyntec.com)

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