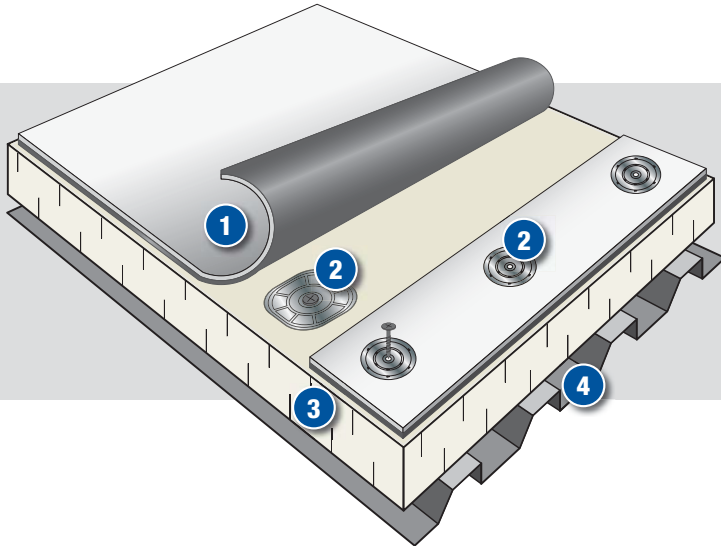


Sure-Flex™ PVC

Mechanically Fastened Roofing Systems



Typical Applications

- 1 Sure-Flex Reinforced PVC Membrane
- 2 Carlisle Fasteners and Plates
- 3 Acceptable Carlisle Insulation
- 4 Approved Roof Deck

Sure-Flex Membrane for Mechanically Fastened Roofing Systems is available in the following:

Color	White, Gray, Tan
Thicknesses (mils)	50, 60 and 80
Standard Widths	Membrane: 120" and 81" Perimeter Sheets: 60" and 40.5"
Standard Lengths	50-mil: 100', 60-mil: 100', 80-mil: 75'

System Features & Benefits:

- » ENERGY STAR®*-qualified membranes
- » Heat-weldable membranes
- » UL/FM codes and approvals
- » Highly solar reflective "cool" membrane saves on air conditioning costs
- » Enhanced physical property characteristics for long-term weatherability
- » Excellent chemical resistance to acids, bases, restaurant oils, greases, and jet fuel fall-out

Existing or New Deck Type	New Construction						Re-roofing		
	Steel	Plywood or OSB	Lt. Wt. Concrete	Structural Concrete	Wood Planks	Gypsum & Fibrous Cement	Smooth Surface BUR	Gravel Surfaced BUR	Existing Single-Ply
Deck Overlayment Required	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recommended Insulations	Carlisle Polyiso, Carlisle HP Recovery Board, DensDeck®, or Approved Insulation over Carlisle Polystyrene						← Refer to New Construction		
Insulation Attached By	Carlisle Fasteners and Plates						← Refer to New Construction		
Membrane Attached By	HP-X Fasteners™/ Piranha Plates™; HP-XTRA Fast/Piranha XTRA Plate	HP-X Fasteners/ Piranha Plates; HP-XTRA Fast/Piranha XTRA Plate	Lt. Wt. Deck Fasteners/ Plates	CD-10/ Piranha Plates; HD 14-10 Fasteners/ Piranha Plates	HP-X Fasteners/ Piranha Plates	Lt. Wt. Deck Fasteners/ Plates	← Refer to New Construction		

FOR TEAR OFF OPTIONS REFER TO NEW CONSTRUCTION ABOVE.

For current code approvals and warranties, visit Carlisle's web site or contact a design analyst.

* Refer to Carlisle's Sure-Weld Design Criteria Portion of the Current Specification.

Sure-Flex PVC

Mechanically Fastened Roofing Systems

Installation

Carlisle's Sure-Flex Mechanically Fastened Roofing System utilizes white, gray, and tan membranes in standard 50-mil, 60-mil or 80-mil thicknesses.

Insulation is mechanically fastened to an acceptable roof deck. Sure-Flex membrane sheets are mechanically fastened through the insulation to the deck with Carlisle HP-X or HP-Xtra Fasteners and appropriate Piranha or Barbed Oval Plates. Adjoining sheets are overlapped and joined together with a minimum 1½"-wide hot-air weld.

The above information represents a typical Carlisle Sure-Flex Mechanically Fastened Roofing System. Refer to Carlisle's published specifications and details for more complete information.

Certified Fabricated Accessories

Certified Fabricated Accessories (CFAs) are the only factory-fabricated PVC accessories that meet the stringent quality tolerances required to be included in a warranted Carlisle PVC roofing system.

Membrane and System Strengths

- » Sure-Flex membranes come in 81"- and 120"-wide sheets in 50-, 60- and 80-mil thicknesses
- » Available in highly reflective white, as well as gray and tan
- » Incorporates a strong polyester reinforcement giving the membrane excellent tear, breaking, and puncture resistance
- » Excellent chemical resistance to acids, bases, restaurant oils, greases, and jet fuel fall-out
- » Sure-Flex KEE HP membranes enhanced with Elvaloy are available
- » Wide window of weldability affords easy membrane seaming
- » Hot-air-welded seams enhance ease of installation
- » High solar reflectivity "cool" roof saves on air conditioning costs

System Codes

UL Class A, B, and Unlimited Slope ratings are available over standard roof deck types. FM uplift values of up to 165 psf can be achieved. For code specifics, refer to Carlisle's Code Approval Guide.

Quality Assurance

Carlisle Authorized Applicators have been trained to install Carlisle's Sure-Flex Roofing Systems.

Inspection

Upon installation completion, and prior to the issuance of a membrane system warranty, an inspection will be conducted by a Carlisle Field Service Representative.

Warranty

Consult your Authorized Applicator or Carlisle Manufacturer's Representative/Distributor for associated warranty charges.

Provided all materials are manufactured or marketed by Carlisle, this system properly installed and inspected on a commercial project may receive:

- » A 30-year Golden Seal warranty is available using 80-mil Sure-Flex KEE HP membrane when all materials used for the roofer's installation are manufactured or marketed by Carlisle.

Warranty Options

	Sure-Flex PVC Membranes					Sure-Flex KEE HP Membranes				
	10-Year	15-Year	20-Year	25-Year	30-Year	10-Year	15-Year	20-Year	25-Year	30-Year
50-Mil	X	X				X	X	X		
60-Mil	X	X	X			X	X	X	X	
80-Mil	X	X	X	X		X	X	X	X	X

For more specifics or for international warranty programs, contact Carlisle.

Typical Properties and Characteristics

	Test Method	White PVC	Tan PVC	Gray PVC
ENERGY STAR® initial solar reflectance	Solar Spectrum Reflectometer	0.87	N/A	N/A
ENERGY STAR solar reflectance after 3 years	Solar Spectrum Reflectometer (uncleaned)	0.61	N/A	N/A
CRRC initial solar reflectance	ASTM C1549	0.87	0.45	0.39
CRRC solar reflectance after 3 years	ASTM C1549 (uncleaned)	0.61	Pending	Pending
CRRC initial thermal emittance	ASTM C1371	0.95	0.86	0.87
CRRC thermal emittance after 3 years	ASTM C1371 (uncleaned)	0.86	Pending	Pending
LEED® thermal emittance	ASTM E408	0.94	0.94	0.94
SRI (Solar Reflectance Index)	ASTM E1980	110	49	42

