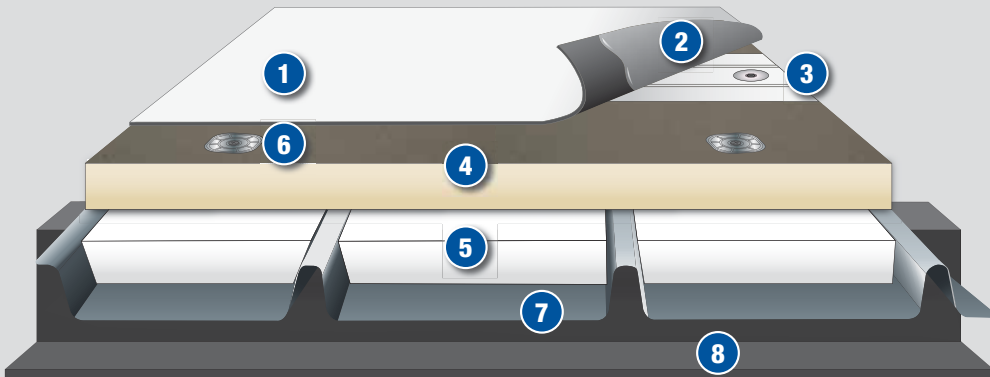


Sure-Weld[®] TPO

Mechanically Fastened Metal Retrofit



- 1 Sure-Weld TPO Reinforced Membrane
- 2 10"-wide RUS (Reinforced Universal Securement Strip)
- 3 Induction Welding Plates or 10"-wide RUSs with Piranha Plates and HP Purlin Fasteners
- 4 Acceptable Insulation
- 5 Flute Fill Insulation
- 6 Insulation Screws and Plates
- 7 Existing Metal Roof
- 8 Structural Purlin

Sure-Weld TPO Membrane for Metal Retrofit Systems is available in the following:

Color	White, Gray, Tan, Medium Bronze, Rock Brown, Slate Gray, Terra Cotta and Patina Green
Thicknesses (mils)	45, 60, and 80-mil
Standard Widths	4', 6', 8', 10', and 12'
Standard Lengths	100'

System Features & Benefits:

- » 45-, 60-, and 80-mil membrane thicknesses
- » White, gray, and tan colors available, in addition to 5 special colors
- » Adds additional insulating value
- » Heat-weldable seams
- » Roofing membrane is ENERGY STAR[®]* qualified, CRRC rated and can contribute to LEED[®] requirements
- » High wind uplift performance
- » Industry-leading OctaGuard XT[™] Weathering Package provides improved weatherability, durability, and long-term rooftop performance

	Mechanically Fastened	Induction Welded
	Flutes of Existing Metal Roof are filled with an Acceptable Insulation	
Flute Filler Attached By	Insulation is loose-laid into flutes	
	Approved insulation is then laid over Flute Filler	
Insulation Attached By	Insulation is mechanically fastened into existing metal with HP Insulfast or HP-X Fasteners [™]	
Membrane Attached By	HP Purlin Fasteners and Piranha Plates used to attach 10" TPO Pressure-Sensitive RUS Strip into existing purlins	HP Purlin Fasteners and Induction Welding Plates

For current Code Approvals and Warranties, visit Carlisle's website, or contact a design analyst.

**Refer to Carlisle's Sure-Weld Design Criteria Portion of the current specification.

Sure-Weld® TPO

Mechanically Fastened Metal Retrofit

Sure-Weld TPO Membrane

Carlisle's Sure-Weld TPO is a premium, heat-weldable, single-ply thermoplastic polyolefin membrane, engineered to provide outstanding long-term performance in new roof construction and re-roofing applications. All Sure-Weld TPO membranes utilize the patented OctaGuard XT weathering package technology, which is able to withstand extreme durability testing intended to simulate exposure to several climates.

Sure-Weld TPO Accessories

Carlisle also 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.



Metal Retrofit Mechanically Attached Roofing System Installation

Flute-Fill Insulation:

A key component of a metal retrofit system is the addition of custom-fit insulation between the standing seams of the metal roof panels. Carlisle offers both EPS (expanded polystyrene) and Polyiso flute-fill insulation that can be factory cut to fit between each metal panel. This insulation layer also adds R-value and can be loose-laid or adhered.

Additional Insulation:

Once flute-fill insulation has been installed, additional insulation ranging from a ¼-inch cover board to several inches of polyiso insulation can be installed to create a smooth flat substrate for the membrane. Adding polyiso insulation and cover boards can add additional R-value to the system. Using a high-compressive strength polyiso cover board or gypsum cover board can also enhance impact resistance and fire resistance.

Sure-Weld TPO Membrane:

10" wide TPO Pressure-Sensitive RUSS strips are attached through the insulation (underlayment) to the purlins with Carlisle Purlin Fasteners. Sure-Weld TPO membrane is primed and then adhered to the RUSS strips. Adjoining membrane sheets are hot-air welded together using an approved auto hot-air welder. Purlin Fasteners can be used in place of RUSS and primer.

Membrane and System Strengths

- » Economically installed over existing metal roofs
- » Specially designed fastening system using induction welding plates or Carlisle's RUSS strips anchored into the structural purlins (the strongest point of the roof) provides optimum performance
- » Installs easily over most aged metal roofs
- » Heat-weldable seams provide a complete and monolithic membrane assembly
- » Sure-Weld TPO reinforced membranes are durable, highly puncture resistant, and ENERGY STAR qualified for a cool roof design

System Codes

- » UL Class A, B, and Unlimited Slope ratings are available
- » Meets FM Loss Prevention Data Sheet 1-31

For specific code approvals, refer to Carlisle's Code Approval Guide.

Warranty

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

Carlisle's metal retrofit roof systems are backed by our industry leading Total System Warranty. Five to twenty year total system warranties are available with optional hail, puncture and reflectivity warranties available upon request.

