WeatherBond TPO

Metal Retrofit Roofing System

System Features And 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

WeatherBond TPO Membrane
WeatherBond’s 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 WeatherBond 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.

WeatherBond TPO Accessories
WeatherBond 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 WeatherBond CFA-approved accessory saves time and money during installation.

Colors:
- White, Gray, Tan, Medium Bronze, Rock Brown, Slate Gray, Terra Cotta and Patina Green

Standard Thicknesses:
- 45-, 60-, and 80-mil

Standard Widths:
- 4', 6', 8', 10', and 12'

Standard Lengths:
- 100'

Typical Application
1. WeatherBond TPO Membrane
2. TPO 10"-wide RUSS (Reinforced Universal Securement Strip)
3. Approved Purlin Fasteners
4. HPW or HPWX Fasteners
5. Acceptable Insulation
6. Flute Fill Insulation
7. Existing Metal Roof
8. Structural Purlin
## 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. WeatherBond 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.

### WeatherBond TPO Membrane:
10” wide TPO Pressure-Sensitive RUSS strips are attached through the insulation (underlayment) to the purlins with WeatherBond Purlin Fasteners. WeatherBond 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.

<table>
<thead>
<tr>
<th>Mechanically Attached</th>
<th>Induction Welded</th>
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<tbody>
<tr>
<td><strong>Flutes of existing metal roof are filled with an acceptable insulation</strong></td>
<td><strong>Insulation is loose-laid into flutes</strong></td>
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<tr>
<td><strong>Flute Filler Attached By</strong></td>
<td><strong>Approved insulation is then laid over flute filler</strong></td>
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<tr>
<td><strong>Insulation Attached By</strong></td>
<td><strong>Insulation attached by insulation is mechanically attached into existing metal with insulation fasteners, HPW or HPWX Fasteners</strong></td>
</tr>
<tr>
<td><strong>Membrane Attached By</strong></td>
<td><strong>WeatherBond approved Purlin Fasteners and Induction Welding Plates</strong></td>
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<tr>
<td><strong>Purlin Fasteners and HPWX Plates used to attach 10” TPO Pressure-Sensitive RUSS Strip into existing purlins</strong></td>
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