WeatherBond PVC and KEE HP
Mechanically Attached Metal Retrofit

PVC and KEE HP Membranes
WeatherBond’s PVC and KEE HP are high-performance, heat-weldable, single-ply membranes that provide outstanding long-term performance in new construction and re-roofing applications. KEE HP membranes utilize the highest grade of DuPont™ Elvaloy® to ensure the membrane can withstand extreme climatic conditions.

PVC Accessories
WeatherBond also offers over a dozen prefabricated, in-stock accessories, and countless custom-order accessories. All carry a CFA (Certified Fabricated Accessory) stamp of approval, so you know they’ve been manufactured to the highest quality standards. Every WeatherBond CFA saves you time and money during installation.

Metal Retrofit Mechanically Attached Roofing System
PVC or KEE HP membrane is attached through the insulation (underlayment) to the purlins with WeatherBond approved fastener and induction welding plates. Adjoining membrane sheets are hot-air welded together using an approved welder.

System Features and Benefits
- Adds insulating value
- Heat-weldable seams
- Roofing membrane is CRRC rated, and can contribute to LEED® requirements
- Excellent wind uplift performance
- Industry-leading PVC and KEE HP membranes provide exceptional weatherability, durability, and long-term rooftop performance

Typical Application
1. WeatherBond PVC or KEE HP Reinforced Membrane
2. Induction Welding Plates
3. Acceptable Insulation
4. Flute Fill Insulation
5. Insulation Fasteners and Plates
6. Existing Metal Roof
7. Structural Purlin

Colors:
- PVC: White, Gray, Tan, Light Gray and Slate Gray
- KEE HP: White, Gray, Tan, and Light Gray

Standard Thicknesses: 50-, 60- and 80-mil
Standard Widths: 40.5", 5", 8", 10'
Standard Lengths: 50-mil – 100'
60-mil – 100'
80-mil – 75'

Typical Application Diagram:
1. WeatherBond PVC or KEE HP Reinforced Membrane
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Induction Welding Plates
Acceptable Insulation
Flute Fill Insulation
Insulation Fasteners and Plates
Existing Metal Roof
Structural Purlin
**Membrane and System Strengths**

- Economical to install over existing metal roofs
- Specially designed fastening system using induction welding plates anchors into the structural purlins (the strongest point of the roof) for optimum performance
- Easily installed over most aged metal roofs
- Heat-weldable seams provide a complete, monolithic membrane assembly
- PVC and KEE HP reinforced membranes are durable and puncture resistant

**Insulation**

**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.

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### Mechanically Attached

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<thead>
<tr>
<th>Flute Filler Attached By</th>
<th>Insulation is loose-laid into flutes</th>
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<tr>
<td>Approved insulation is then laid over Flute Filler</td>
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### Induction Welded

<table>
<thead>
<tr>
<th>Insulation Attached By</th>
<th>Insulation is mechanically fastened into existing metal with WeatherBond Insulation Fastener or HPWX Fasteners</th>
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<tbody>
<tr>
<td>Membrane Attached By</td>
<td>WeatherBond approved fastener and HPWX Plates are used to attach PVC or KEE HP membrane to existing purlins</td>
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