TPO Metal Retrofit Systems
A WeatherBond TPO Metal Retrofit System offers the following features and benefits:

**Convenience:**
- Installs directly over the existing metal roof eliminating costly and disruptive removal and replacement.
- Multiple membrane and insulation options to meet a variety of performance, budget, and efficiency needs.

**Performance:**
- TPO's proven history of long-term performance provides a lasting solution compared to coatings and spray-applied restoration products.

**Value:**
- Highly reflective TPO membranes offer additional energy savings.
- Improves R-value and energy efficiency of the building while reducing noise for occupants.

Metal buildings are often chosen because of their cost-effective design and speed of construction. However, when the metal roof begins to leak and deteriorate replacement can be very costly. With decades of experience in single-ply roofing, WeatherBond has a wide range of metal retrofit options.

WeatherBond’s TPO can be installed over an existing standing seam metal roof to offer proven, long-lasting protection while increasing the energy efficiency of the building. This solution can be more cost effective than replacing the metal roof while proving to be a much longer-term solution compared to coatings.

**Why Choose a WeatherBond TPO Metal Retrofit System?**
Membrane Options

WeatherBond TPO membranes use advanced polymerization technology that combines the flexibility of ethylene-propylene (EP) rubber with the heat weldability of polypropylene. All WeatherBond TPO membranes include OctaGuard XT ™, a blend of industry-leading weathering ingredients to enable WeatherBond TPO to stand the test of time.

WeatherBond TPO membranes are available in highly reflective white, tan, and gray colors, in both 45-mil and 60-mil thicknesses. 80-mil WeatherBond TPO is also offered in white, gray, and tan colors, in addition to 5 special colors. Additionally, WeatherBond offers Fleece TPO in 100, 115, and 135-mil thicknesses for added puncture resistance and uplift performance.

WeatherBond TPO Colors In Stock

- White
- Gray
- Tan

WeatherBond TPO Special Colors

- Medium Bronze
- Rock Brown
- Slate Gray
- Terra Cotta
- Patina Green

Installing a TPO Metal Retrofit System

1. **Existing Standing Seam Metal Roof**
2. **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 – shown) 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.
3. **Additional insulation:** once flute-fill 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 thicker 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.
4. **Attachment:** the WeatherBond TPO membrane can be mechanically attached using fasteners and plates, attached using induction welding plates, or fully adhered using a TPO bonding adhesive. See the back cover for more information on each attachment method.
5. **WeatherBond TPO Membrane:** the adjoining TPO membrane sheets are hot-air welded together using an approved hot-air welder.
**System Types**

**Mechanically Attached**
- Membrane is loose laid and attached to structural purlins using plates and fasteners
- Low installed cost with moderate wind uplift performance
- No fumes or odors from adhesives

**Fully Adhered**
- Insulation is attached using fasteners and plates. Membrane is adhered using TPO bonding adhesive or CAV-GRIP® III Adhesive
- Excellent wind uplift performance and appearance
- Allows for the use of membrane sheets up to 12' wide for fewer seams

**Induction Welded**
- Specially coated plates are fastened to structural purlins and bonded to the membrane using an induction welding tool to secure the membrane
- Similar installed cost and performance to a mechanically attached system
- Allows for the use of membrane sheets up to 12' wide for fewer seams

**Non-Penetrating Fleece Application**
- Insulation and Fleece-backed TPO membrane installed using Flexible DASH urethane adhesive
- Non-penetrating design and low odor Flexible DASH adhesive provide minimal disruption and noise to occupants during installation
- Superior wind uplift performance
- Highly resistant to impacts and punctures