



ASTEC #900 System  
Metal Roof with Horizontal  
and Vertical Seams

5/4/04

ALL GENERAL REQUIREMENTS  
AND ARCHITECTURAL DETAILS ARE  
PART OF THIS SPECIFICATION

1. **PRESSURE WASH** to achieve a clean, dry surface free of primer and any other contaminants. Some surfaces may require multiple passes of pressure washing to ensure adhesion of the **ASTEC Coating System**. Treat new metal with TSP and mildew areas with bleach solution and rinse.
2. **FASTENERS**, screws and fastening devices are first tightened or replaced so that all metal sections are firmly held and all joining sections closed. Then rusted fasteners are primed with **ASTEC B-16-71 Metal Primer**.
3. **RUST PRIME** all corroded surfaces. Scaling rust is first removed by scraping or by mechanical wire brush. Follow with a minimum two-coat application of **ASTEC B-16-71 Metal Primer** applied to the roof surface at an minimum average coverage rate of 300 sf/gal per coat over the rusted areas.
4. **Apply ASTEC #4000 Surface Conditioner** at a rate of 200 sq/ft per cut gallon over entire areas of previously coated, painted, factory applied color, or surfaces with silver aluminum coatings to provide proper adhesion of the subsequent coatings.
5. **CAULK** all exposed cracks and seams with **ASTEC #2001 Acrylic Latex Caulk**, or other 100% acrylic or urethane caulking. Optionally, in gaps and cracks 1/8" or less in width, brush in **ASTEC WPM #9 BRUSH & ROLL**.
6. **WATERPROOF** all fasteners with **WPM #9 B&R** waterproofing membrane. **WATERPROOF** horizontal seams and flashing with 4" wide polyester cloth embedded into an 8" wide wet coat of **WPM #9 B&R**. Install and waterproof all expansion control joints. Use 4" or wider polyester cloth strips on joints, protrusions, vents, flashings, and repair areas. In all cases, apply cloth with a brush or roller to avoid wrinkles or gaps between the material and the surface. The cloth may be cut and overlaid. For a faster dry-in **BBT**, (butyl backed tape), is an alternative to the first coat of **WPM #9 B&R** and polyester cloth. In either case all treated areas receive a second coat of **WPM #9 B&R** overlapping 2" each side at an average rate of 82sf/gal per coat.
7. **WATERPROOF** vertical seams with 2" wide cloth embedded in a 4" wide wet coat of **ASTEC WPM #9 B&R** spread along the seams. Cover cloth with a second coat of **WPM #9 B&R** overlapping 1" on each side at 82sf/gal per coat. Standing vertical seams shall be coated with **WPM #9 B&R** in such a manner as to insure a closed seal without the use of polyester cloth reinforcement. (See Note 1)
8. **INSPECT SURFACE AREA** again to be sure it is clean, dry and free of defects. The **WPM #9** membrane must be free of all moisture, dirt, dust and debris before applying the ceramic finish coats.
9. **APPLY ASTEC #900 CERAMIC PROTECTIVE COAT** by brush, roller or sprayer over the **WPM #9** membrane covering joints, flashings, and repair areas at a rate of 74sf/gal. Apply this coat to all walkways and termination points.
10. **APPLY ASTEC #900 CERAMIC FIRST COAT** over the entire roof surface at an average coverage rate of 148sf/gal to lower substrate surface temperature, improve the rate of curing and the quality of the finished appearance.
11. **APPLY ASTEC #900 CERAMIC SECOND COAT** over the entire roof surface at an average rate of 148sf/gal, resulting in a final covering of no less than twelve (12) mils DFT (equal to a combined minimum coverage rate of 74sf/gal). Over seams and repair areas the final specification requirements will be an average of 45 mils DFT.



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**12. APPLY #2541 SKYLIGHT SEALER** on Skylights at the rate of 225-335 sq. ft./gal. (Optional)

**Notes:**

- 1. ASTEC WPM #10**, applied at a rate of 25 sq/ft per gallon (40 mils DFT) is an approved equal and will be accepted as an alternative to using **ASTEC WPM #9** and polyester cloth on seams. **ASTEC #101 Accelerator** may be added to **WPM #10** to enhance cure time. *(Mixing ratio is critical. See appropriate product specifications for proper use)*
- 2. When Substituting ASTEC WPM #10** on horizontal seams, install stitch screws or flat head pop rivets as needed to ensure the panels are mechanically fastened tightly together.
- 3. ASTEC Specification #AC-112-9** is approved for **ICC's 15 Year System Warranty** by applying a third coat of **ASTEC #900 CERAMIC COAT** over the entire roof surface at an average rate of 148sf/gal, resulting in a final covering of no less than eighteen (18) mils DFT. Over seams and repair areas the final specification requirements will be an average of 51 mils DFT