

#### Application Specification # AC-712-9

### ASTEC #900 System Sprayed Polyurethane Roof

2/17/04

# ALL GENERAL REQUIREMENTS AND ARCHITECTURAL DETAILS ARE PART OF THIS SPECIFICATION

- 1. FINISHED SURFACES of applied spray foam shall be of reasonable smoothness, free of ridges, bumps and depressions to facilitate drainage. Foam shall be in an acceptable condition to receive coatings.
- **2. ASTEC COATINGS** shall be applied only after foam has cured sufficiently according to the foam manufacture's specifications.
- 3. PRESSURE WASH to achieve a clean, dry surface free of all dust, dirt, oil and other contaminants so as to have a sound, clean and dry surface prepared for subsequent coating operations. Some surfaces may require multiple passes of pressure washing to ensure adhesion of the ASTEC Coating System.
- 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.
- 5. DRY SURFACE means that all water shall be removed from the surface at least 2 hours prior to application of the ASTEC system. Additional vacuuming and/or power blowing will help remove water and moisture from roof surface.
- 6. EXISTING WEATHERED OR LOOSE URETHANE shall be removed from the substrate and that section shall be refoamed to provide a sound surface.
- 7. REPAIR FOAM SURFACE breaks or cracks with urethane caulking compound or urethane foam prior to application of the ASTEC system.

- **8. INSTALL AND/OR REPAIR** any drains, protrusions, vents, expansion control joints and flashing areas as required. If any rusted metal is present, after proper surface preparation, follow with a minimum two coat application of anticorrosive **ASTEC B-16-71** applied to the roof surface at a minimum coverage rate of 300 sf/gal to result in an average of 2-4 mils DFT.
- 9. 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.
- **10. WATERPROOF** caulked seams with an 8" wide wet coat of **WPM #9 B&R** centered on the bead applied at an average rate of 82sf/gal.
- 11. REINFORCE all joints, flashing, and repair areas with 4" wide polyester cloth embedded into 8" wide wet coat of WPM #9 B&R. 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 polycloth. 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 (allow 1-2 hours drying time between applications) (See Note 1)
- **12. INSPECT SURFACE AREA** again to be sure it is dry and free of all moisture, dirt, dust, and debris before applying each of the remaining coatings.
- 13. APPLY ASTEC WPM #9 COATING over the entire roof surface at an average coverage rate of 82 sf/gal. A brush or medium nap industrial roller is the recommended method of applying this coat in order to insure proper penetration of the coating into the surface.

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- 14. APPLY A SECOND COAT OF WPM #9 over the entire roof surface at an average coverage rate of 82 sf/gal. Use airless spray equipment that delivers at least two gallons/minute at less than 2000 PSI for proper atomization. Using a carbide or tungsten steel reversible tip ranging in size from .031 to .035 is recommended.
- 15. ALLOW WPM #9 COATS TO DRY from 4-8 hours of full sun. Once dry, inspect surface for continuous, unbroken, dry film seal. Seal any irregularities or breaks in surface integrity with WPM #9 B&R.
- 16. APPLY TWO ASTEC #900 CERAMIC FINISH COATS. Two ceramic coating applications, each at an average coverage 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.

#### **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. Not Responsible for the bond of the preexisting polyurethane foam system to the existing roof deck.