Application Specification # **AC-212-9**

ASTEC #900 System
Built-Up Roofs
Having Positive Slope and Drainage

2/17/04

ALL GENERAL REQUIREMENTS
AND ARCHITECTURAL DETAILS ARE
PART OF THIS SPECIFICATION

1. DEFINE WITH INFARED SCANNING or other moisture detection equipment any excessive moisture under roofing materials. Moisture or wet insulation that is identified must be allowed to dry out, or be removed and replaced as needed prior to the application of the **ASTEC #900 SYSTEM.**

2. PRESSURE WASH to achieve a clean, dry surface free of oil, dirt, residues, oxidation, and any other contaminants. Some surfaces may require multiple passes of pressure washing to ensure adhesion of the **ASTEC Coating System.**

3. 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.

4. APPLY ASTEC #2000 ASPHALT PRIMER, providing the roof has not been previously coated or painted, to the entire surface at a coverage rate of 200 sq/ft per gallon obtaining a dry film thickness of 3-4 mils.

5. DRY SURFACE means that all water shall be removed from the roof at least 2 hours prior to application of the **ASTEC** system. Additionally, vacuuming and/or power blowing will help remove water and moisture from the roof surface.

6. REPAIR all deteriorated or damaged seams, drains, protrusions, vents, flashing areas, and weak or damaged substrate as required. If any rusted metal is present, after proper surface preparation, give a minimum two-coat application of anti-corrosive **ASTEC B-16-71 Metal Primer** at a minimum coverage rate of 300 sf/gal per coat to result in an minimum average of 2-4 mils DFT. Apply **ASTEC #2000 Asphalt Primer** at a coverage rate of 200 sq/ft per gallon to any repair area where new asphalt has been applied.

7. "ALLIGATORED" SURFACES, where there is cracking and surface separation of the existing roofing materials, surface shall be back filled and coated with multiple layers of **ASTEC #2000 Patching Compound** in order to seal and build the area up enough that a smooth surface is attained.

8. REPAIRING BLISTERING AREAS. All blisters or delaminated roofing must be repaired by cutting the blistered area in an "X" pattern where moisture and/or contaminates can be removed and properly cleaned. With material pulled back, apply **ASTEC WPM #9 Waterproof Membrane** 30 to 40 wet mils in the delaminating area. Then fasten "X" down. Once this area has properly dried (approximately 24 hours), using **ASTEC WPM #9 Waterproof Membrane,** fully cloth and embed over these repair areas using the 3-step flashing system.

1. **Apply ASTEC WPM #9 Waterproof Membrane** @ 82 sf/gal.
2. Polyester Cloth embedded into first coat. Let dry 2-4 hours.
3. Apply second coat **ASTEC WPM #9 Waterproof Membrane** over repaired area @ 82 sf/gal assuring no pin-holing in repaired area.

9. CAULK all exposed cracks, seams, and termination points with **ASTEC #2000 Patching Compound.** Optionally, in gaps and cracks 1/8" or less in width, brush in **ASTEC WPM #9 Waterproof Membrane.**

10. REINFORCE ALL ROOF PENETRATIONS AND REPAIR ALL DAMAGED OVER LAP SEAMS by reinforcing seams with 4" wide polyester cloth embedded into the 8" wide wet coat of **ASTEC WPM #9 Waterproof Membrane.** Apply a second coat of **ASTEC WPM #9 Waterproof**

Membrane overlapping 2" each side at an average rate of 82 sf/gal. (Allow 2-4 hours drying

time between coats.) If more than **5%** of the lineal seams are damaged or separating, it is required that all seams be reinforced. (See Note 1)

11. REINFORCE all joints, flashing, and repair areas with 4" wide polyester cloth embedded into 8" wide wet coat of **ASTEC WPM #9 Waterproof Membrane.** 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 **ASTEC WPM #9 Waterproof Membrane** and polycloth. In either case all treated areas receive a second coat of **WPM #9 Waterproof Membrane** overlapping 2" each side at an average rate of 82sf/gal per coat (allow 1-2 hours drying time between coats. (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 Waterproof Membrane 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.

14. APPLY A SECOND COAT OF ASTEC WPM #9 Waterproof Membrane 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 a continuous, unbroken, dry film seal. Seal any irregularities or breaks in surface integrity with **WPM #9 Waterproof Membrane.**

16. 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

17. APPLY ASTEC #900 CERAMIC FINISH 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).

18. Over seams and repair areas the final specification requirements will be an average of 45 mils DFT.

NOTE:

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*)