

# ASTEC ® Re-Ply™ Roof System for ASPHALT & MODIFIED BITUMEN ROOFS©

Application Specification # AC-2014-A & MB©

# PART I - GENERAL

## 1.01 DESCRIPTION

- A. This guideline specification includes the installation of the fluid applied ASTEC® Re-Ply™ System. The process effectively repairs defects in the aged roof and renews the weathered surface to extend the useful life of the roofing system.
- B. Work included is labor, materials, equipment and accessories and related services to complete the application in accordance with guidelines and details as approved by ASTEC® Re-Ply™.
- C. This guideline does not specifically outline application procedures for preparation and finishing of roof drains, vents, ductwork, flashings, parapet walls or sheet metal work. This scope of work shall be submitted by the contractor prior to the commencement of work and shall be performed utilizing published trade related practices.

# 1.02 QUALITY ASSURANCE

- A. Manufacturer Qualifications: ASTEC® Re-Ply™ will furnish upon request, certification the material meets the physical properties stated in this guideline.
- B. Contractor Qualifications: All work to be completed must be done by an ASTEC® Re-Ply™ preferred applicator.
- C. No deviation from this guideline will be accepted without prior written approval of ASTEC® Re-Ply™.

#### 1.03 SUBMITTALS

- A. All projects requiring ASTEC® Re-Ply™ System Turn Key Warranties must be submitted prior to commencement of work.
- B. Consult MSDS and Product Data Guideline for each product used before beginning work. MSDS and Product Specifications for each product are available at either www.icc-astec.com or from an ICC representative.

# 1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Containers are to be labeled with manufacturer's name, product name, description and identification.
- B. **Deliver** material in original, unopened packages and containers.
- C. Store materials in a dry area above 40° and protect from water and direct sunlight.
- D. Any materials damaged in handling or storage must NOT be used.

# 1.05 JOB CONDITIONS (CAUTIONS AND WARNINGS)

- A. All **NEW** mechanical equipment, vents, skylights, etc., should be in place before the roof restoration system is installed.
- B. Coatings should be protected from traffic and other abuse until completely cured and installation is complete.
- C. Application of coatings with spray equipment may require some masking and possible erection of wind screens to prevent over-spray and drift damage. Protect surfaces of unrelated areas from coatings and over-spray possibility.



1.05 Job Conditions cont.

- D. Application shall proceed **on** dry, clean surfaces only. In planning work consider environment and weather related conditions such as frost, mist, dew, condensation, humidity, and temperature. Temperature should be above 50°F. and rising, and stay above 40°F. long enough for initial cure to occur. Moisture should not be imminent.
- E. A wet surface or a surface that is not thoroughly cured can be very slippery. All work environments should comply with current OSHA regulations

# 1.06 WARRANTY

- A. ASTEC® Re-Ply™ Roofing Systems warrants that materials provided are free from defects in manufacturing and will replace any material found to be defective.
- B. All ASTEC® Re-Ply™ Turn Key Warranty Systems must be installed by an authorized and trained contractor. Contact ASTEC® Re-Ply™ Representative or Technical Department for details regarding new and renewable warranty program.

# **PART 2 - PRODUCTS**

#### 2.01 GENERAL

A. The components of the coating system are to be products of **ASTEC** ® **Re-Ply** ™ or products approved as compatible and/or approved equal.

**Physical Properties of Cured Roofing System:** Testing of the coating system shall be done using guidelines under ASTM-D6083, "Standard Specification for Liquid Applied Acrylic Coating Used In Roofing".

# 2.02 ASTEC® BASE COAT SEALER #4

A. See Data Sheet

# 2.03 ASTEC ® BASE COAT SEALER #8

A. See Data Sheet

# 2.04 ASTEC® #2000 FINISH

A. See Data Sheet

# 2.05 ASTEC® #4000 SURFACE CONDITIONER (REQUIRED IN CHALKY SURFACE CONDITIONS)

A. See Data Sheet

# 2.06 REINFORCING FABRIC

A. See Data Sheet

# 2.07 ASTEC® #2000 FLASH GRADE

A. See Data Sheet



# 2.08 ASTEC® #2000 ASPHALT PRIMER

A. See Data Sheet

#### 2.09 RELATED MATERIALS

A. Caulks, adhesives, thinners, primers, flashing materials and products of a similar nature shall be approved by the manufacturer of the ASTEC® Re-Ply™ System prior to use. All accepted materials should be applied in accordance with its manufacturer's specification and recommendations.

NOTE: See Product Data Guidelines for additional information and detailed instruction on each product.

# PART 3 - APPLICATION

### 3.01 ROOF SUBSTRATE INSPECTION

- A. An acceptable substrate for the application of the ASTEC® Re-Ply™ System shall be provided.
- B. The roof surface must be clean, dry, and free of contaminants and structurally sound.
- C. Inspection shall include, but is not limited to, condition of flashings, drains, penetrations, skylights and other roof protrusions, as well as cracks and blisters, brittleness and "alligatoring". In instance of "alligatoring" see Notes Section 3 "Fully reinforced application specification".
- D. All insulated systems must be evaluated to assure materials are not wet. All wet insulation must be removed and replaced proir to installation of the Astec® Re-Ply™ System.

#### 3.02 SURFACE PREPARATION & CLEANING

- A. Repair or replace damaged flashings, cracks and other imperfections. See 3.03 for details.
- B. Prepare the roof surface by removing loose debris and then high pressure washing with clean water to remove dirt and undefined soils, oily or greasy films and chalky residue.
- C. Al blisters shall be cut, dried out & re-adhered or replacement membrane installed with approved & compatible mastic or approved ASTEC® Re-Ply™ product compliant with the existing substrate.
- D. After allowing repairs to thoroughly dry, apply the ASTEC® Re-Ply™#2000 reinforced specification over repair areas. See Notes Section 3 "Fully reinforced application specification".
- E. Allow repair areas to thoroughly dry before applying Astec® Re-Ply™ System as in 3.03
- F. Previously coated surfaces, including aluminum silver flake coatings, may require the application of ASTEC #4000 Surface Conditioner prior to the ASTEC® Re-Ply™ coating application. ASTEC® #4000 Surface Conditioner must be applied at a rate of 200-250 square feet per cut gallon and dry 1-2 hours prior to the application of other coatings

# 3.03 ASTEC® RE-PLY™ ROOF SYSTEM APPLICATIONS

- A. Flashing Systems-including all roof penetrations, protrusions & mechanical units. Apply ASTEC® #2000 Flash Grade in a uniform manner. While still wet, embed appropriate sized reinforcing fabric into wet ASTEC® #2000 Flash Grade. Apply a second coat of ASTEC® #2000 Flash Grade for a total coverage rate of 40 square feet per gallon resulting in a DFT of 30 mils. for odd or irregular shaped penetrations the use of WPM #10 is acceptable.
- B. Over the entire roof surface spray apply and then backroll first coat of ASTEC® Base Sealer #4 at a rate of 1 gallon per 100 square feet. Allow to dry thoroughly, usually taking a minimum of 8 hours. For all smooth asphalt surfaces replace ASTEC Base Sealer #4 with ASTEC Base Sealer #8.
- C. Reinforce all field seams, embed 4" wide reinforcing fabric into 8" wide wet coat of ASTEC® Base Sealer #4. Apply second 8" wide coat ASTEC® Base sealer #4 at a total coverage rate over seams of 40 square feet per gallon resulting in a minimum DFT of 25 mils.
- D. Prior to installation of second coat of ASTEC® BASE SEALER #4 to the roof field, inspect the entire roof for voids, "fish-mouths" & imperfections. Roof must be clean & dry.



3.03 ASTEC® Re-Ply® System Applications cont.

- E. Spray apply second coat of ASTEC® Base Sealer #4 in a cross-hatch pattern at a rate of 1 gallon per 100 square feet, resulting in a minimum of 2 gallons per 100 square feet and a total DFT of 18 20 mils in the field. For Optional roof system application procedures see Notes #2.
- F. Spray apply ASTEC® #2000 Finish at the rate of 2.0 gallons per 100 square feet using a cross-hatch pattern, in two separate coats resulting in a minimum DFT of 20 mils. Total system minimum DFT of 38 40 mils over the roof field and a minimum DFT of 55 Mils over seams, flashings & penetrations.

# PROTECTION AND CLEAN-UP PROTECTION

- A. The roof system and all components must be protected from all other trades at the job site.
- B. All damage to the system must be repaired to comply with ASTEC® Re-Ply™ guidelines prior to final inspection for warranty approval. The cost of all related repairs will be the sole responsibility of the trades and/or subcontractors responsible for the damages.

# **CLEAN-UP**

- A. Site cleanup is the responsibility of the contractor.
- B. All debris, containers, materials, equipment, and protection materials must be removed from the premises and properly disposed of. All work and storage areas must be in an undamaged and acceptable condition upon completion of clean up.

# **DETAIL WORK**

A. The purpose of this specification is to act as a guideline and is not intended to extensively describe preparation procedures, scope of work to drains, ductwork, skylights, flashings, parapets, copings, scuppers, etc. This work should be the result of consultation with contractors, manufacturer's representatives and end-users prior to commencement of the project and shall be performed using standard and acceptable trade practices.

# **NOTES**

- 1. In lieu of the WPM #10, ASTEC ® BASE SEALER #4 can be applied and, while still wet, embed a layer of reinforcing fabric into the Base Sealer #4. Use caution to prevent voids and "fishmouths" in the fabric. Apply a top layer of ASTEC ® BASE SEALER #4 for a total coverage rate of 3 gallons of ASTEC ® BASE SEALER #4 per 100 square feet.
- 2. OPTIONAL 3.03 ASTEC® Re-Ply Roof System Application procedures. (see step E section 3.03) Steps B & C may be interchanged provided minimum DFT thickness is achieved in each step.
- 3. Fully Reinforced Application Specification
  - a) Apply initial coat of ASTEC® BASE SEALER #4 over the entire roof surface at an average rate of 1 gallon per 100 sq feet (100 square feet per gallon). Spraying and back rolling with a medium nap industrial roller is the required method of applying this coat in order to ensure proper penetration of the coating into the surface.
  - b) Inspect surface area again to be sure it is dry and free of all moisture, dirt, and dust debris before applying each of the remaining coatings.
  - c) Apply second coat ASTEC® BASE SEALER #4 in sections, at a rate of 1 gallon per 100 square feet (100 square feet per gallon) while the sectioned area of ASTEC ® BASE SEALER #4 is still wet, embed sections of 36" wide x 360' long re-enforcing fabric, making sure that the cloth is free of air bubbles, "fish mouths" and wrinkles. Cloth should overlap at areas where cutting is required. Use of rollers to back roll is required. Do not leave re-enforcing fabric uncoated with final coat of ASTEC® BASE SEALER #4 overnight or if precipitation is imminent.



#### Notes cont.

- d) Apply an additional coat of ASTEC® BASE SEALER #4 over the entire roof surface at an average coverage rate 1 gallon per square feet (100 square feet per gallon). Total for all coats of ASTEC® BASE SEALER #4 equals 3 gallons of ASTEC® BASE SEALER #4 per 100 square feet. Minimum coverage rate for total ASTEC® BASE SEALER #4 without re-enforcing fabric shall have a DFT of 24 mils.
- 4. Foot Traffic- Areas of predictable excessive foot traffic, such as hatches, ladder access and around HVAC units should have a protective layer of reinforcing fabric and ASTEC® #2000 or compatible walk pads. See fully reinforced application specification details above.
- 5. Tinting of any ASTEC products must be approved by ICC. Failure to do so may invalidate manufacturer backed warranties.
- 6. Ten (10) Year Renewable Warranty Process follow guidelines for substrate inspection and surface preparation/cleaning found in section 3.01 & 3.02 that are applicable to the existing warranted system. Upon completion of the inspection and surface preparation follow guidelines found in "Coatings Application" Section 3.03 E. Consult your ICC Representative for additional information.

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