

ASTEC ® Re-Ply[™] Roof System for AGED SINGLE PLY MEMBRANE (PVC, EPDM, THERMOPLASTIC) ROOFS

Application Specification # AC-2010-SP

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-PlyTM 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.
- D. Application shall proceed on dry, clean surfaces only. In planning work consider environment and weather relat-



1.05 Job Conditions cont.

- ed 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® EPDM RINSEABLE PRIMER

A. See Data Sheet

2.03 ASTEC ® #2000 BASE COAT

A. See Data Sheet

2.04 ASTEC® #2000 FINISH

A. See Data Sheet

2.05 ASTEC® #4000 SURFACE CONDITIONER

A. See Data Sheet

2.06 ASTEC® WPM#9

A. See Data Sheet

2.07 ASTEC® WPM 9 B & R

A. See Data Sheet

2.08 ASTEC® WPM #10

A. See Data Sheet



2.09 REINFORCING FABRIC

A. See Data Sheet

2.10 BUYTL-BACKED TAPE

A. See Data Sheet

2.11 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.
- D. <u>Wet insulation must be thoroughly evaluated and then addressed with removal and/or replacement measures.</u>

3.02 SURFACE PREPARATION & CLEANING

- A. Repair or replace damaged flashings, cracks and other imperfections. See 3.03 for details.
- B. For fully adhered membranes, all blisters shall be cut, dried out & re-adhered or replacement membrane installed with approved & compatible mastic or approved ASTEC® Re-Ply™ product.
- C. After allowing repairs to dry, apply the ASTEC® Re-Ply™#2000 reinforced specification over repair areas. SEE "Fully-Reinforced Spec AC#2010 FRSP" details.
- D. Allow repair areas to thoroughly dry before applying Astec® Re-Ply™ System as in 3.03
- E. Clean Surface by carefully removing all dust and dirt. For chalky surfaces OR for all EPDM membranes apply ASTEC® EPDM Rinseable Primer at approx. 500 sq/ft per gallon to the entire surface area. Ensure that all areas of the surface are wet with primer. Because EPDM Rinseable Primer is water activated, allow the primer to stand on the surface for a minimum of $2\frac{1}{2}$ to 3 hours before proceeding to power wash.
- F. PRESSURE WASH from low to high on the roof to achieve a clean, dry surface free of dust, dirt or primer and any other contaminants. Some surfaces may require an additional pressure washing to ensure adhesion of the ASTEC® Re-Ply™ Coating System.

3.03 ASTEC® RE-PLY® SYSTEM APPLICATIONS

- A. A dry roof surface is essential for the successful application of the ASTEC® Re-Ply™ Roof System. Power blowing or **squeegying** surface can accelerate the drying process.
- B. Over areas of previously coated and/or chalky surfaces apply ASTEC® #4000 Surface Conditioner at a rate of 200 sq/ft per cut gallon.
- C. Apply 4" Butyl-backed tape (BBT) over all seams, flashings, penetrations and repair areas. Immediately follow with an application of ASTEC® WPM #9 waterproof membrane over the BBT to extend 2" either side at an average rate of 82 square feet per gallon, resulting in a total DFT of 25-30 mils. Do not allow uncoated BBT to become wet or to remain uncoated overnight.



3.03 ASTEC® Re-Ply® System Applications cont.

As an alternative, embed 4" wide reinforcing fabric into a wet 8" application of WPM #9 or WPM # $\frac{9}{2}$ B&R applied an average rate of 82 square feet per gallon per coat to the seam. Allow 1-2 hours drying time. Apply a second coat of WPM #9 or WPM#9 B&R over cloth at an average rate of 82 square feet per gallon, resulting in a total DFT of 25-30 mils. 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. All reinforcing fabric must be coated the same day

- D. ASTEC® #2000 Basecoat shall be applied over the entire roof at a coverage rate 1.5 gallons per 100 sq/ft per coat resulting in a DFT of 15 MILS. In applying ASTEC® #2000 Basecoat, overlap each pass using a crosshatch pattern. Allow Basecoat to cure a minimum of 6-8 hours before applying finish coat.
 - In all areas of standing water an addition coat of ASTEC® #2000 Basecoat must be applied at the rate of 1 gallon per 100 sg/ft.
- E. Inspect surface area to be sure it is free of all moisture, dirt, dust and debris before applying the ASTEC® #2000 Finish.
- F. Apply ASTEC® #2000 Finish coat at a rate of 1.5 gallons per 100 square feet using a crosshatch method. The ASTEC® Re-Ply™ Multi-layer system will result in a minimum of 3 gallons per 100 sq/ft, resulting in a DFT of 30 mils over the roof field and a DFT of 55-60 mils at reinforced areas.
- G. A fully reinforced application spec for Single-ply membrane roofs is available. See #1 under NOTES.

PROTECTION AND CLEAN-UP

- 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 clean up 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. Fully Reinforced Application Specification for Single –ply membrane roofs
 - a) Spray apply flash coat of ASTEC® #2000 basecoat over the entire roof surface at an average rate of .5 gallon per 100 sq feet (100 square feet per gallon).
 - b) Apply ASTEC® #2000 Basecoat in sections, at a rate of 1 gallon per 100 square feet (100 square feet per gallon) while the sectioned area of ASTEC ® #2000 Basecoat 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 reenforcing fabric uncoated with final coat of ASTEC®#2000 Basecoat overnight or if precipitation is imminent.
 - c) Spray apply second coat ASTEC® #2000 Basecoat over entire roof surface, at a rate of 1 gallon per 100 square feet (100 square feet per gallon). In applying ASTEC® #2000 Basecoat, overlap each pass using a crosshatch pattern. Allow Basecoat to cure a minimum of 6-8 hours before applying finish coat. In all areas of standing water an addition coat of ASTEC® #2000 Basecoat must be applied at the rate of 1 gallon per 100 sq/ft.



Notes cont.

Total for all coats of ASTEC ® #2000 Basecoat shall be equal to 2.5 gallons 100 square feet. Minimum coverage rate for total ASTEC® #2000 Basecoat, not including re-enforcing fabric, shall have a DFT of 25 mils. Minimum coverage rate for total ASTEC® #2000 Basecoat, including re-enforcing fabric, shall have a DFT of 35 mils.

- d) Inspect surface area to be sure it is free of all moisture, dirt, dust and debris before applying the ASTEC® #2000 Finish.
- e) Apply ASTEC® #2000 Finish coat at a rate of 1.5 gallons per 100 square feet using a crosshatch method. The ASTEC® Re-Ply™ Multi-layer system will result in a minimum of 4 gallons per 100 sq/ft, resulting in a DFT of 40 mils over the roof field and a DFT of 50 mils at reinforced areas.
- 2. 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 F. Consult your ICC Representative for additional information.
- 3. 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.

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