



Asphalt Restoration New or Aged BUR and
Modified Bitumen Sample Design Guideline

ACRYLIC

Elastek® #127 Solar One Plus

Holcim Solutions and Products US, LLC

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HOT ROOFS. COOL SOLUTIONS.

ASPHALT RESTORATION – NEW OR AGED BUR AND MODIFIED BITUMEN GUIDELINE – ACRYLIC SYSTEM**PART 1 – GENERAL****1.01 DESCRIPTION**

- A. This guideline includes the installation of the liquid applied ACRYLIC ASPHALT PRIMER acrylic base coating to repair and ACRYLIC coating to coat new or restore aged Modified Bitumen single-ply membrane roofs and new or aged smooth asphalt BUR. The process effectively repairs cracks, splits and defects in the aged roof, protects the Modified Bitumen or BUR from further degradation, and renews the weathered surface to extend the useful life of the roof.
- B. Work included is labor, materials, equipment and accessories and related services to complete the application in accordance with guideline and details as approved by HOLCIM SOLUTIONS AND PRODUCTS US, LLC.
- C. Work excluded is replacement of roof accessories such as drains, vents and other penetrations and structural roof repair.

1.02 QUALITY ASSURANCE

- A. Manufacturer Qualifications: HOLCIM SOLUTIONS AND PRODUCTS US, LLC. 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 HOLCIM SOLUTIONS AND PRODUCTS US, LLC. preferred applicator.
- C. No deviation from this guideline will be accepted without prior written approval of HOLCIM SOLUTIONS AND PRODUCTS US, LLC.

1.03 SUBMITTALS

- A. Warranty pre-installation notifications are required prior to the installation of the warranted systems.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in original, unopened packages and containers.
- B. Containers are to be labeled with manufacturer's name, product name, description, and identification.
- C. Store materials in a dry area between 40°F (4.45°C) and 80°F (26.7°C) and protect from water and direct sunlight.
- D. Any materials damaged in handling or storage must not be used.
- E. Deliver SDS for each product. Consult SDS and Technical Data Sheet for each product used before beginning work.

1.05 JOB CONDITIONS (CAUTIONS AND WARNINGS)

- A. All mechanical equipment, vents, skylights, etc., should be in place before the roofing system is installed.

- B. Mechanical units (blowers, HVAC) should be prevented from distributing solvent fumes into the building.
- C. Coatings should be protected from traffic and other abuse until completely cured and installation is complete.
- D. 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.
- E. Application shall proceed to dry, clean surfaces only. In planning work consider environment and weather-related conditions such as frost, mist, dew, condensation, humidity, and temperature. Surface temperature should be above 45°F (7.2°C), rising, and stay above 40°F (4.4°C) long enough for initial cure to occur, also the surface temperature should not exceed 120°F (48.9°C). Moisture should not be imminent.
- F. Sufficient safety belts and lines should be provided. 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. HOLCIM SOLUTIONS AND PRODUCTS US, LLC. warrants that materials provided are free from defects in manufacturing and will replace any material found to be defective.
- B. HOLCIM SOLUTIONS AND PRODUCTS US, LLC. /Contractor Coating System Warranty is available through preferred contractors and at a cost. Consult HOLCIM SOLUTIONS AND PRODUCTS US, LLC. for further details of the Warranty Program.

PART 2 - PRODUCTS

2.01 GENERAL

- A. The components of the coating system are to be products of HOLCIM SOLUTIONS AND PRODUCTS US, LLC., or products approved by HOLCIM SOLUTIONS AND PRODUCTS US, LLC. as compatible; or approved equal.

2.02 BASE COAT – ELASTEK #121 HI-TEK BASE COAT-ASPHALT PRIMER

- A. See Technical Data Sheet

2.03 FINISH COAT – ELASTEK #127 SOLAR ONE PLUS

- A. See Technical Data Sheet

2.04 CRACK and JOINT SEALANT: ELASTEK #103 CRACK & JOINT ACRYLIC SEALANT

- A. See Technical Data Sheet

2.05 DETAIL SEALANT: ELASTEK #105 MULTI-PURPOSE DETAIL SEALANT

- A. See Technical Data Sheet

2.06 RELATED MATERIALS

- A. Gap/Joint Sealant: **PERMATHANE® SM7120PU**

- B. Brushable/Polyurethane Detail Sealant: **ERSYSTEMS® HER**
- C. Fabric Reinforcement: **PolyTek Fabric**-Polyester reinforcing fabric.
- D. Metal Primer: **ERSYSTEMS® ACRYLIC METAL RUST PRIMER**
- E. **ERSYSTEMS® QUICKET**: Pourable self-leveling repair sealant. Quickly builds cricket and a pourable sealer.
- F. **ELASTEK #500 SEALER EMULSION**: Thick paste-like, black coating containing refined asphalt.
- G. **ELASTEK #505 PUDDLE PLASTER**: Thick paste-like, black reinforced lightweight filler. sealer.

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

PART 3 - APPLICATION

3.01 SUBSTRATE INSPECTION

- A. A proper substrate shall be provided to receive the HOLCIM SOLUTIONS AND PRODUCTS US, LLC. coatings.
- B. The roof surface must be clean, dry, and free of ponding water, and over-all structurally sound.
- C. Inspect the roof surface for cracks, blisters, brittleness and alligating. Inspect flashing details. Determine which areas may not be watertight and in need of repair.
- D. Inspect the substrate system for moisture content, and determine if areas need to be replaced.
- E. If a sound, stable, well-secured surface cannot be ensured, the roof is not acceptable to receive the Coating Restoration System.
- F. Perform an adhesion test of the #121 Hi-Tek Basecoat/Acrylic Asphalt Primer to a representative and properly prepared area of the aged BUR or Modified Bitumen membrane. Contact HOLCIM SOLUTIONS AND PRODUCTS US, LLC. Tech Service for details of adhesion test.

3.02 SURFACE PREPARATION & CLEANING

- A. Prepare the roof surface by high pressure washing with water at a pressure of 2,000 psi to 3,000 psi to remove dirt, miscellaneous soils, oily films, and the brown chalky residue, which develops on the surface of many smooth Modified Bitumen membranes over time.
- B. Repair deteriorated flashing, cracks, and other surface imperfections with like materials.
- C. Repair major substrate defects and replace with appropriate materials to provide a sound surface to which the coating may be applied.
- D. Repair and prepare incidental metal on the roof by priming with ACRYLIC METAL RUST PRIMER.
- E. Take action to ensure proper drainage exists on the roof.
- F.

3.03 SEAMS AND LAPS

- A. To help maintain the monolithic integrity of our restoration system we recommend treating all membrane seams and laps.
- B. Seams and laps shall be fabric reinforced with 4"-6" PolyTek Fabric imbedded into either #105 SUPER SEAL at the rate of 1.5 - 2 gallons Per 100 square feet in a 5"-6" width or 4"-6" PolyTek Fabric can be imbedded into #103 CRACK & joint at 60-80 wet mils in a 5"-6" width. Fabric reinforcement is required at the laps and Seams. Imbedded fabric can be brushed or rolled to be wrinkle-free. Allow to cure overnight prior to coating.

3.04 DRAINAGE

- A. Areas exhibiting a lack of positive drainage or ponding water will adversely affect performance of any roofing system and will be excluded from warranty. Where positive drainage does not exist, water removal from the roof surface must be facilitated by lowering drains and/or taking other corrective action. Additional maintenance inspections, repair work, the addition or use of primers and/or higher system mil-build may be required in these areas to extend coating life.

3.05 COATING APPLICATIONS: (Note: Total dry mil minimums not acceptable uniformly over entire field)

- A. Repair deteriorated areas with like material or by using the following method: #103 CRACK & JOINT shall be applied to flashings, cracks and substrate areas requiring repair at the rate of 60-80 wet mils. Were required imbed PolyTek Fabric of the appropriate width into the wet sealant and brushed or rolled to be wrinkle-free.
- B. Primer: ELASTEK # 121 HIGH-TEK BASE COAT is applied to the prepped and detailed substrate at the rate 1-1.5 gallons (3.79-5.68 liters) per 100 square feet. Some substrates may require additional coating.
- C. Finish Coat: After allowing the ELASTEK #121 HI-TEK BASE COAT to cure, a finish coat of ELASTEK #127 SOLAR ONE PLUS may be applied at the rate of 3 gallons per square in two passes at the rate of 1.5 gal (5.68 liters) per 100 square feet per pass, total dry mils: 32, minimum 30). Finish coat may be spray applied or rolled on perpendicular to the base coat application.
- D. Granule Application (optional): Granules may be placed into the finish coat to produce a tougher, more durable and weather resistant surface. Embed 30-40 lbs. of No. 11 Roofing Granules into a tack coat of 1/2 gallon (1.89 liters) per 100 square feet of ELASTEK #127 SOLAR ONE PLUS finish coat.
- E. Contact HOLCIM SOLUTIONS AND PRODUCTS US, LLC. Technical Department for warranty requirements.
- F.

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 HOLLAND SOLUTIONS AND PRODUCTS US, LLC. guidelines prior to final inspection for warranty approval. The cost of all related repairs will be borne by 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.