

SECTION 07560

FLUID APPLIED ROOFING (OVER EXISTING SUBSTRATE)

PART 1 DESCRIPTION

1.1 SECTION INCLUDES

1. Fluid applied flexible acrylic waterproofing system over the existing roofing system. This work shall include the preparation of the roof deck, application of the roof system, flashing system, and clean up.

1.2 RELATED WORK

1. The contractor shall review all sections of these specifications to determine items of work that will interface with the application of this roofing system. Coordination and execution of related sections shall be the responsibility of the contractor.

1.3 REFERENCES

1. ASTM B117 - Test Method of Salt Spray (Fog) Testing.
2. ASTM G-29 - Test Methods for Algae Resistance.
3. ASTM E-108 - Test Method for Fire Test of Roof Coverings.
4. ASTM D-1653 - Water Vapor Transmission of Materials.
5. ASTM G26 - Practice for Operating Light- and Water-Exposure Apparatus (Xenon Arc Type) for Exposure of Nonmetallic Materials.
6. ASTM D-412 Ultimate Tensile Strength at Break.

1.4 SUBMITTALS

1. Shop Drawings: Submit a scaled drawing showing the layout of joint reinforcing and all flashing details.

2. **Product Data:** Provide manufacturer's technical literature on products that make up the roofing system. This shall include, but is not limited to, coatings, reinforcing fabrics, flashing materials, roof drains, fasteners, etc..
3. **Manufacturer's Installation Instructions:** Submit all data sheets available from the manufacturer on the installation of the roofing system applicable to the work.
4. **Manufacturer's Certificate:** Certify that Products meet or exceed specified requirements.

1.5 QUALIFICATIONS

1. **Applicator Qualifications:** The applicator of the roofing material specified herein shall be an approved applicator. Proof of this qualification shall be provided in written form from the manufacturer of the roofing system.

1.6 QUALITY CONTROL

1. **Codes and Standards:** The contractor shall make him/herself thoroughly familiar with all codes, regulations, and standards governing the specified work. Any contradiction between the manufacturer's requirements and these specifications shall be brought to the attention of the manufacturer and the specifier.
2. **Deviations:** There shall not be any deviations from these specifications unless the deviation is submitted in writing to the specifier. The request for deviation must have a letter from the roofing manufacturer's technical department approving the details of the deviation.
3. **Manufacturer's Technical Representative:** An employee of the roofing material manufacturer shall be on site at least once every 7-calendar days during the work specified herein. The technical representative shall provide a written inspection report, during each site visit and submit the reports to the owner/owner's representative. The manufacturer's representative must approve the application process at specific stages before the contractor may continue including: Prior to the application of the FoundationCoat and fabric, at the completion of the FoundationCoat and fabric, and after the FinishCoat is applied.

1.7 DELIVERY, STORAGE, AND HANDLING

1. Deliver materials to site in manufacturer's unopened and undamaged containers bearing the following information:
 1. Name of manufacturer.
 2. Name of contents and products code.

3. Net volume of contents.
 4. Lot or batch number.
 5. Storage temperature limits.
 6. Shelf life expiration date.
 7. Mixing instructions and proportions of contents.
 8. Safety information and instructions.
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2. Store and protect materials from damage and weather in accordance with manufacturer's instructions.
 3. Store materials at temperatures between 50 and 90 degrees F . Keep out of direct sunlight.
 4. Support stored material containers on pallets and cover with tarpaulin tied to bottom of pallets.

1.8 ENVIRONMENTAL REQUIREMENTS

1. Do not apply if ambient temperatures are expected to fall below 40 degrees F or if rain is expected before the application has time to cure.

1.9 WARRANTY

1. Provide ten-year manufacturer's warranty.

PART 2 PRODUCTS

2.1 MANUFACTURER

- | | | |
|----------------------------|------------|--|
| 1. Hydro-Stop, Inc. | Toll Free: | (800) 739-5566 |
| 1465 Pipefitter Street | Phone: | (843) 745-9600 |
| North Charleston, SC 29405 | Fax: | (843) 745-9602 |
| | Web: | www.hydro-stop.com |

2.2 MEMBRANE COMPOUND MATERIAL

1. Waterproofing Material: PremiumCoat three-stage, fabric reinforced, flexible acrylic coating, fluid applied in successive stages to form one continuous, seamless, watertight membrane; 40 mil minimum cured total system thickness; comprised of the following:
 1. Foundation and Saturation Coats: PremiumCoat FoundationCoat (highly flexible water based 100% pure acrylic polymer resin coatings).

2. Fabric: Hydro-Stop polyester, non-woven, stitch-bonded, and heat-set fabric.
3. Finish Coat: PremiumCoat FinishCoat (ultraviolet light resistant, blend of highly flexible water based 100% pure acrylic polymer resin coating); color as selected from manufacturer's standard colors.

2. Reinforcing Fabric: This material shall be non-woven, stitch bonded, heat set fabric with the following characteristics:

Weight:	3 oz per square yard.
Tensile Strength	57.1 lbs. PSI per ASTM 1682
Elongation	61.65% per ASTM D1682
Mullein Burst	176.8 lbs. Per ASTM 3786
Trapezoid	16.1 lbs. Per ASTM D117

3. Cured Membrane Characteristics:

<u>PROPERTY</u>	<u>TEST</u>	<u>RESULT</u>
Elongation fabric	ASTM D638	>300% elastomeric, 50% reinforcing
Cured System Tensile Strength	ASTM D412	>2000 PSI
Algae Resistance	ASTM G29	No Growth Supported
Moisture Vapor	ASTM E96	3 Perms
Weathering	ASTM G26	No effect after 3,000 hours.
Salt Spray Test	ASTM B117	No effect.
Fire Rating	ASTM E108	Class A
Moisture Vapor	ASTM D1653	3 perms
Wind Uplift	FM 4470	Meets Class 1- 90
Severe Hail Test	FM 4470	No separation or rupture

2.3 ACCESSORIES

1. Cant Strips: Pre-molded composition material recommended by manufacturer for installation at internal corners.

PART 3 EXECUTION

3.1 EXAMINATION

1. Verify substrate surfaces are durable, free of frozen matter, dampness, loose particles, cracks, pits, projections, or foreign matter detrimental to adhesion or application of waterproofing system.
2. Verify that substrate surfaces are smooth and not detrimental to full contact bond of waterproofing materials.
3. Verify items that penetrate surfaces to receive waterproofing are securely installed.
4. Verify that substrate areas are adequately supported and firmly fastened in place.

3.2 PREPARATION

1. Protect adjacent surfaces not designated to receive waterproofing.
2. As a minimum, clean and prepare surfaces to receive waterproofing by removing all loose and flaking particles, grease and laitence with the use of a stiff bristle push broom and a minimum of 3000 psi powerwash.
3. Do not apply waterproofing to surfaces unacceptable to manufacturer.

3.3 APPLICATION

1. Apply Foundation and saturation coats at a total rate of 25 - 40 sq. ft/gal depending on substrate.
2. Apply FoundationCoat to the treated area. Embed fabric directly into the coating while still wet. Overlap adjacent runs of fabric 4 inches minimum. Immediately follow with a saturation coat to cover fabric and allow to dry.
3. Using 12 inch flashing fabric, continue waterproofing material up vertical surface and onto roof deck 6 inches in each direction.
4. Seal items projecting through waterproofing material watertight.
5. Apply 2 coats of FinishCoat at a combined total rate of 70 sq. ft/gal over entire roof area being treated.
6. Apply roofing system to minimum 40 mil total cured thickness.

3.4 PROTECTION OF FINISHED WORK

1. Monitor finished system for 7 day, sweeping off birdbaths to allow for full cure.

3.5 CLEANING

1. Immediately clean unscheduled surfaces receiving waterproofing in accordance with manufacturer's instructions.

END OF SECTION