

**SECTION 07 14 16
FLUID APPLIED WATERPROOFING (WATER BASED)
OVER TPO**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fluid applied flexible acrylic waterproofing system over TPO.

1.2 RELATED SECTIONS

- A. Section 07 22 16 Roof Deck Insulation Board
- B. Section 03 30 00 Cast in place Concrete

1.3 REFERENCES

- A. ASTM D2370 Test Method for Tensile Properties of Plastics.
- B. ASTM D1204 Test Method for Linear Dimensional changes of Non-rigid Thermoplastic Sheetting or Film at Elevated Temperature.
- C. ASTM G26 Practice for Operating Light Exposure Apparatus (Xenon Arc Type) With and Without Water for Exposure of Non Metallic Surfaces.
- D. ASTM E96 Water Vapor Transmission of Materials.
- E. ASTM E108 Test Methods for Fire Test of Roof Coverings.
- F. FM 4470 Wind Uplift Resistance.

1.4 SUBMITTALS

- A. Shop Drawings: Indicate special joint or termination conditions and conditions of interface with other materials.
- B. Product Data: Provide data for material description, physical properties, recommended storage conditions, shelf life, precautions, flexible flashings, and joint and crack sealants, with temperature range for application of waterproofing membrane.
- C. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- D. Test Data: Provide documentation supporting tests referred to under item 1.3.

1.5 QUALIFICATIONS

- A. Applicator: Company specializing in performing the work of this section approved by manufacturer.
- B. Manufacturer: Company shall have been manufacturing specified products for a minimum of 15 years.

1.6 REGULATORY REQUIREMENTS

- A. Products: V.O.C. Requirements shall be less than 90 grams/liter.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. 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
- B. Store and protect materials from damage and weather in accordance with manufacturer's instructions.
- C. Store materials at temperatures between 40°F and 90°F. Keep out of direct sunlight.
- D. Support stored material containers on pallets and cover with tarpaulin tied to bottom of pallets.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply if rain is expected before the application has time to dry.
- B. Temperatures should remain in the following ranges during application, drying and curing:
 - a. For Solvent based products:
 - i. Ambient Temperatures: between 32°F and 105°F
 - ii. Surface Temperature: between 32°F and 130°F
 - b. For Water based products:
 - i. Ambient Temperatures: between 45°F and 105°F
 - ii. Surface Temperature: between 40°F and 130°F

1.9 WARRANTY

- A. Upon contractor's completion of project and proper submittal of warranty request forms and documentation, manufacturer will determine acceptance and issue 10 year manufacturer's warranty.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Sealoflex, Inc
2520 Oscar Johnson Dr.
Charleston, SC 29405
www.sealoflex.com
- Phone: (843) 554-6466
Toll Free: (800) 770-6466
Fax: (843) 554-6458

2.2 MEMBRANE COMPOUND MATERIAL

- A. Waterproofing Material: Sealoflex three-stage, fabric reinforced, flexible, acrylic coating; liquid applied in successive stages to form one continuous, seamless watertight membrane; 45 mil minimum cured total system thickness; comprised of the following:

- 1. Base and Saturation Coat: Sealoflex Pink® Highly flexible water based acrylic emulsion coating
- 2. Flashing Fabric: 4", 6", 12", 20" Sealoflex Fabric™ Polyester, non-woven, stitch bonded and heat set fabric
- 3. Field Fabric: 40" Sealoflex Fabric™ Polyester, non-woven, stitch bonded and heat set fabric
- 4. Finish Coat: Sealoflex Finish Coat™ Ultraviolet light resistant blend of highly flexible waterbased acrylic co-polymer resin coating.

- B. Cured Membrane Characteristics:

PROPERTY	TEST	RESULT
Tensile Strength	ASTM D2370	3109 psi
Elongation	ASTM D2370	61%
Dimensional Stability	ASTM D1204	<0.44% change
Weathering	ASTM G26	No effect on physical properties after 3600 hours
Moisture Vapor	ASTM E96	3.2 grain/hr./sq.ft
Wind Uplift	ASTM E330	Satisfies SFBC for roofs 150 ft. in elevation
Fire Rating	ASTM E108	Class A

2.3 ACCESSORIES

- A. Surface Primer: Sealoflex EPDM Primer™ Solvent primer for EPDM, TPO and Hypalon®
- B. Rust Neutralizer: Sealoflex Rust X-2020™ Light surface rust neutralizer
- C. Metal Primer: Sealoflex Metal Etch Primer™ Corrosion resistant acrylic primer for ferrous metal
- D. Adhesive Sealant: Generic Single-part polyurethane caulk

PART 3 EXECUTION

3.1 EXAMINATION

- A. 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.
- B. Verify that substrate surfaces are smooth and not detrimental to full contact bond of waterproofing materials.
- C. Verify that roof surface has positive drainage.

3.2 PREPARATION

- A. Protect adjacent surfaces not designated to receive waterproofing.
- B. Clean and prepare surfaces to receive waterproofing by removing all loose and flaking particles, grease, dirt and laitance.
- C. Do not apply waterproofing to surfaces unacceptable to manufacturer.
- D. Seal cracks and joints with sealant materials using depth to width ratio as recommended by sealant manufacturer.

3.3 APPLICATION

- A. Apply surface primer(s) at 250 sq.ft./gallon. Allow to dry.
- B. Apply accessory primer(s) as necessary. Allow to dry.
- C. Apply 3/8" triangular bead of Adhesive Sealant at internal corners.
- D. Apply Base Coat, Flashing Fabric and Saturation Coat over board joints, cracks, flashings and non-working joints at 40 sq.ft. per gallon. Allow to dry.
- E. Optional: apply primed metal drip edge at perimeter, adhering into place with Adhesive Sealant.
- F. Apply Base Coat, Field Fabric and Saturation Coat at 40 sq. ft. per gallon over the entire area. Overlap adjacent runs of fabric 3" minimum. Allow to dry.
- G. Apply two coats of Finish Coat over the entire area at 140 sq. ft. per gallon per coat. Allow to dry between coats.
- H. Waterproofing system should be a minimum of 45 mils total cured thickness.

3.4 CLEANING

- A. Immediately clean adjacent areas not scheduled to receive waterproofing in accordance with manufacturer's recommendations.

3.5 PROTECTION OF FINISHED WORK

- A. Protect finished waterproofing from weather until cured.

END OF SECTION

IMPORTANT NOTE: Always check our website, www.sealoflex.com to determine if the printed literature you are reading is the most current version available.