

**SECTION 07 14 16  
FLUID APPLIED WATERPROOFING (WATER BASED)  
OVER CONCRETE WITH INSULATION**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Fluid applied flexible acrylic waterproofing system over Concrete with Insulation.

**1.2 RELATED SECTIONS**

- A. Section 03 30 00 Cast in place Concrete
- B. Section 07 71 00 Roof Specialties
- C. Section 07 22 00 Roof Accessories
- D. Section 07 95 00 Expansion Control
- E. Section 07 21 00 Thermal Insulation

**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 Sheeting 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. FM 4470 Wind uplift Resistance
- F. ASTM E108 Test Methods for Fire Test of Roof Coverings.

**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 rigid material description, physical properties, recommended storage conditions, shelf life, precautions, flexible flashings, joint cover sheet, and joint 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 shall have been in business and shall have had experience in manufacturing these 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:

<u>PROPERTY</u>	<u>TEST</u>	<u>RESULT</u>
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 Sealobond™ Acrylic Primer if substrate moisture ≤ 8%
- B. Surface Primer:  
Sealoflex Sealoment Plus™ Cementitious Primer
- C. Surface Primer:  
Sealoflex Dampseal 101™ Epoxy Primer if substrate moisture > 8%
- D. Rust Neutralizer:  
Sealoflex Rust X-2020™ Light surface rust neutralizer

- E. Metal Primer:  
Sealoflex Metal Etch Primer™ Corrosion resistant acrylic primer for ferrous metal
- F. Adhesive Sealant:  
Generic Single-part polyurethane caulk
- G. Insulation Board:  
Generic Generic
- H. Insulation Adhesive:  
Generic Generic
- I. Insulation Fastener:  
Generic Generic

## 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 material.
- C. Verify that roof surface has positive drainage.
- D. It is recommended that all concrete be tested for moisture content prior to application of the Sealoflex System. Structural concrete moisture should be < 8%. Cellular Lightweight concrete moisture should be < 19%. If the moisture content is greater than specified, it is recommended that Dampseal 101™ be applied over Sealoment Plus™.

### 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 accessory primer(s) as required. Allow to dry.
- B. Install Insulation Board using approved Insulation Adhesive or fasteners.
- 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 unscheduled surfaces receiving waterproofing in accordance with manufacturer's instructions.

### 3.5 PROTECTION OF FINISHED WORK

- A. Protect finished waterproofing from inclement weather until cured.

END OF SECTION

**IMPORTANT NOTE:** Always check our website, [www.sealoflex.com](http://www.sealoflex.com) to determine if the printed literature you are reading is the most current version available.