

# 1.2.4 Flat and Low Pitched Roofs

## Architectural Specifications

**SECTION 07540  
FLUID APPLIED WATERPROOFING  
(OVER CELLULAR LIGHTWEIGHT CONCRETE SUBSTRATE)**

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Fluid applied flexible rubber based waterproofing system over cellular lightweight concrete.

#### 1.2 RELATED SECTIONS

- A. Section 03300 - Cast in place Concrete

#### 1.3 REFERENCES

- A. ASTM D412 - 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. ASTM E 108 - 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. Roofing System: Must meet 8109 psf uplift adhesion resistance per ASTM E74 Grade B on concrete.
- C. Manufacturer: Company shall have been manufacturing specified products for a minimum of 15 years.

#### 1.6 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.

#### 1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply if ambient temperatures are expected to fall below 32°F or if rain is expected before the application has time to cure.

#### 1.8 WARRANTY

- A. Provide ten year manufacturer's warranty.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURER

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

#### 2.2 MEMBRANE COMPOUND MATERIAL

- A. Waterproofing Material: Sealoflex three-stage, fabric reinforced, flexible coatings; 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 Coats: Sealoflex CT Pink™ (highly flexible synthetic rubber based coating).
  2. Fabric: Sealoflex, polyester, non-woven, stitch bonded and heat set fabric.
  3. Finish Coat: Sealoflex CT Top™ (ultraviolet light resistant blend of highly flexible synthetic rubber based coating). Color as selected from manufacturer's standard colors.

## SEALOFLEX INC.

### CORPORATE OFFICES

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### SALES OFFICE

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### LIMITED WARRANTY

Sealoflex warrants its products to be free of manufacturing defects and that they will meet Sealoflex's current published physical properties when applied in accordance with Sealoflex's directions. There are no other warranties by Sealoflex of any nature whatsoever, expressed or implied, including any warranty of merchantability of fitness for a particular purpose in connection with this product. Sealoflex Inc. shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty whether expressed or implied, including any warranty of merchantability of fitness for a particular purpose or from any other cause whatsoever.

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### B. Cured Membrane Characteristics:

PROPERTY	TEST	RESULT
Tensile Strength	ASTM D412	3109 psi
Elongation	ASTM D412	61%
Dimensional Stability	ASTM D1204	<0.44% change
Weathering	ASTM G26	No effect on physical properties after 3600 hours
Moisture Vapor	ASTM E96	$6.3 \times 10^{-3}$ grains/ft <sup>2</sup> /hr at 45 mils dft
Wind Uplift	FM 4470	Meets class 1-690 over concrete
Fire Rating	ASTM E108	Class A

### 2.3 ACCESSORIES

- Surface Primer: Sealoment Plus™ for light weight concrete, cementitious primer.
- Surface Primer: Dampseal 101™, two part epoxy primer, must be used if concrete exceeds 8% moisture.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- 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.
- Verify that substrate surfaces are smooth, and not detrimental to full contact bond of waterproofing materials.
- 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 should be < 19%. If the moisture content is greater than specified, it is recommended that Dampseal 101™ be applied.
- Verify that roof surface has positive drainage.

### 3.2 PREPARATION

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

### 3.3 APPLICATION

- Install a 3/8" triangular bead of single part polyurethane caulk at internal corners.
- Install metal drip edge at outside perimeters of deck adhering into position using two 1/8" diameter beads of single component polyurethane caulk.
- On concrete surfaces, apply primer over entire concrete surface. Allow to dry.
- Apply base coat, fabric and saturation coat centrally over junctions between horizontal and vertical surfaces as flashing.
- Use the polyester non-woven, stitch bonded and heat set fabric. Apply base coat to surface. While the base coat is wet, embed the fabric. Allow to dry.
- Using brush, roller, or spray, apply saturation coat and back roll to cover and penetrate fabric. Allow to dry. Overlap adjacent runs of fabric 3". Once fabric is firmly adhered in position, apply two sealer coats of Finish Coat over entire area at a total coverage rate of 70 sq.ft./gal.
- Total cured thickness of waterproofing to be a minimum of 45 mil.
- Apply extra thickness of waterproofing material at corners, intersections, angles, and overlap joints.

### 3.4 CLEANING

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

### 3.5 PROTECTION OF FINISHED WORK

- 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