

**SECTION 07 14 16
FLUID APPLIED WATERPROOFING (SOLVENT BASED)
GREEN ROOF OVER CONCRETE OR WOOD WITH INSULATION**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fluid applied flexible rubber based waterproofing system over Concrete or Wood with Insulation covered with soil and vegetation drainage mat (Green Roof).

1.2 RELATED SECTIONS

- A. Section 03 30 00 Cast in place Concrete
- B. Section 07330 Natural Roof Coverings
- C. Section 075563 Vegetated Protected Membrane Roofing
- D. Section 072100 Thermal Insulation

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 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. 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 material description, physical properties, recommended storage conditions, shelf life, precautions, flexible flashings, joint cover sheet, 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 shall have been in business and shall have had experience in manufacturing these products for a minimum of 15 years.
- C. Roofing System: Must meet FM 4470 Wind Uplift criteria.

1.6 REGULATORY REQUIREMENTS

- A. CT Products are Naphtha based and are **HIGHLY FLAMMABLE!**
- B. CT Products **MUST** be **POURED** out of the bucket then applied. **DO NOT** plunge roller into bucket, as static electricity from the roller may start a fire.

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

- E. Metal Primer:
Sealoflex Metal Etch Primer™ Corrosion resistant acrylic primer for ferrous metal
- F. Adhesive Sealant:
Generic Single-part polyurethane caulk
- G. Roof Garden Mat:
Sealoflex Sealogreen 50/100™ Roof Garden Drainage Mat
- H. Insulation Board:
Generic Rigid Synthetic Board

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 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.

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. Apply primer per manufacturer specification.
- E. Seal cracks and joints with sealant materials using depth to width ratio as recommended by sealant manufacturer.

3.3 APPLICATION

- A. Apply primer(s), if applicable, based upon surface conditions. Allow to dry.
- B. Apply 3/8" triangular bead of Adhesive Sealant at internal corners.
- C. Apply Base Coat, Flashing Fabric and Saturation Coat over board joints, cracks, flashings, non-working joints and perimeter at 30 sq.ft. per gallon. Allow to dry.
- D. Optional: install metal drip edge at perimeter, adhering into place with Adhesive Sealant.
- E. Apply Base Coat, Field Fabric and Saturation Coat at 30 sq. ft. per gallon over the entire area. Overlap adjacent runs of fabric 3" minimum. Allow to dry.
- F. Apply two coats of Finish Coat over the entire area at 140 sq. ft. per gallon per coat. Allow to dry between coats.
- G. Waterproofing system should be a minimum of 40 mils total cured thickness and allowed to cure 7 days.
- H. Place the Insulation board over the entire roof area and secure adjoining boards with below grade tape
- I. Place appropriate Roof Garden Mat over the entire area and secure adjoining runs of mat with below grade tape.
- J. Immediately place growth medium evenly, and to the specified depth, over the Roof Garden Mat.

3.4 CLEANING

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

3.5 PROTECTION OF FINISHED WORK

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

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.