
SECTION 07 14 00

HOT FLUID APPLIED WATERPROOFING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Provide hot fluid applied membrane waterproofing system, with cant strips, internal corners, and accessories as required for complete watertight installation.
 - 1. Location: Provide fluid applied waterproofing at decks; waterproofing to be covered by reinforced concrete slab.
- B. Related Work:
 - 1. Section 07 13 00: Sheet membrane waterproofing for foundations.
 - 2. Section 07 16 00: Cementitious and reactive waterproofing at elevator pits.
 - 3. Section 07 18 70: Fire rated traffic coating system.
 - 4. Section 07 26 00: Below grade vapor retarder.
 - 5. Section 07 28 00: Weather barrier underlayment.
 - 6. Section 09 30 00: Waterproofing integral with tile.

1.2 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Meeting: Convene not less than one week prior to commencing work of this Section. Require attendance of those directly affecting work of this Section.
 - 1. Review installation procedures and coordination required with related work.

1.3 SUBMITTALS

- A. Product Data: Furnish manufacturer's literature, recommendations for surface conditioner, flashing, joint cover sheet and crack sealants, and temperature range for application of waterproofing.
- B. Certificates: Submit manufacturer's representative's certification indicating work has been installed in accordance with manufacturer's recommendations and installation instructions.

1.4 QUALITY ASSURANCE

- A. Sustainability Requirements: Comply with CALGreen requirements including those relative to finish material pollution control for paints and coatings.
- B. Qualification of Installer: Minimum five years successful experience in projects of similar scope.

1.5 PROJECT CONDITIONS

- A. Do not apply waterproofing during inclement weather or when air temperature is below 40 degrees F.
- B. Do not apply waterproofing to damp, dirty, dusty or otherwise unsuitable surfaces.
 - 1. Allow concrete surfaces to cure minimum 28 days.
- C. Provide positive ventilation when waterproofing is applied in enclosed areas, to remove toxic fumes.

1.6 WARRANTY

- A. Extended Correction Period: Provide for correcting failure of system to resist water penetration except where failure is result of structural failure of building. Repair system and pay for or replace damaged materials and surfaces.
 - 1. Hairline cracking due to temperature or shrinkage is not considered structural failure.
 - 2. Period: Two years.
- B. Manufacturer's Warranty: Submit manufacturer's warranty including special manufacturer services as required for manufacturer's warranty.
 - 1. Period: 5 years.
 - 2. Manufacturer's warranty shall not detract from requirements of extended correction period nor from Owner's rights under implied and expressed warranties regardless of wording of manufacturer's warranty.

PART 2 - PRODUCTS**2.1 SYSTEMS MANUFACTURERS**

- A. American Hydrotech, Inc./MM6125-FR, Standard Reinforced Assembly.
- B. Hydro-Gard/Hydro-Tuff System with PB Series, 215 mil reinforced system.
- C. Tremco/TREMproof 6100 215 mil fabric-reinforced system.
- D. CETCO/Strataseal HR, 215 mil reinforced system.
- E. Soprema/Colphene H, 215 mil reinforced system.
- F. Substitutions: Refer to Section 01 25 00.

2.2 MATERIALS

- A. Section Includes: Provide hot fluid applied membrane waterproofing system with accessories.

- B. Regulatory Requirements: Comply with applicable requirements limiting volatile organic compound (VOC) emissions.
 - 1. Comply with applicable Air Quality Management District limitations for volatile organic compound (VOC) emissions.
- C. Fluid Applied Waterproofing: One part, 100% solids, hot applied bitumen modified polyurethane fluid applied elastomeric waterproofing membrane system as specified.
 - 1. Reinforcing: Apply where part of specified system based on manufacturer recommendations for specific application.
- D. Surface Conditioners, Primers, and Accessories: Materials compatible with membrane compound; as recommended by waterproofing manufacturer.
 - 1. Joint Cover Sheet: Uncured neoprene or woven uncoated fiberglass mesh designed for and compatible with waterproofing as recommended by system manufacturer.
 - 2. Joint and Crack Sealant: As recommended by waterproofing manufacturer.
- E. Protection Boards: Provide protection board system recommended by system manufacturer based on each application of hot fluid applied waterproofing and type of material applied over waterroofing.
- F. Protective Drainage Composite Cover: Formed plastic with filter fabric designed to allow penetration and drainage of water while retaining silts, soils, and similar particulate matter.
 - 1. Manufacturers:
 - a. W.R. Grace/Hydroduct Drainage Composite.
 - b. Carlisle Coatings and Waterproofing/Miradrain.
 - c. Colbond/Enkadrain.
 - d. Comparable product by system manufacturer.
 - e. Substitutions: Refer to Section 01 25 00.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Ensure drains, sleeves, curbs and projections which pass through waterproofing are properly and rigidly installed.
- B. Ensure surfaces are free of cracks, depressions, waves or projections which may be detrimental to proper installation of waterproofing; repair surfaces as required by manufacturer's recommendations.
- C. Seal cracks and joints with recommended backup material and sealant. Ensure proper depth-width ratio as recommended by sealant manufacturer.
 - 1. Rout or sawcut cracks exceeding 1/16" in width and fill with sealant.

- D. Clean surfaces of dust, dirt and foreign matter detrimental to proper installation of waterproofing.
- E. Metal Surfaces: Remove contaminants which may adversely affect adhesion or performance of waterproofing; apply metal primer.
- F. Use drop cloths or masking to protect adjacent surfaces.

3.2 APPLICATION

- A. Apply waterproofing system, including surface conditioner, primers, and accessories in accordance with manufacturer's recommendations and installation instructions.
 - 1. Apply not less than 55 mil coat of waterproofing over cracks and joints not less than 2" on either side.
 - 2. Allow preparatory work to cure minimum 16 hours prior to application of waterproofing membrane.
 - 3. Minimum Acceptable Total System Thickness: 215 mil system.
- B. Seal items projecting through waterproofing.
- C. Install membrane flashings and seal into membrane.
- D. After complete installation, close off area to prevent unauthorized traffic or work over waterproofing.

3.3 SITE QUALITY CONTROL

- A. Flood Testing: Flood test fluid applied waterproofing; if defects are revealed, repair and repeat flood test until no defects are revealed.
 - 1. Allow waterproofing to cure minimum 72 hours prior to flood testing.
 - 2. Do not overload structure with flood test; if necessary, section off areas as approved by Architect.
 - 3. Install protection board over waterproofing membrane system after system passes flood test; comply with manufacturer recommendations for installation of protection board.
- B. Manufacturer's Field Services: Manufacturer's representative shall inspect work of Project on regular basis and provide certification waterproofing has been installed in accordance with manufacturer's recommendations.

END OF SECTION