
SECTION 07 13 00

SHEET WATERPROOFING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Provide self-adhesive sheet membrane waterproofing system, including sealing joints and protrusions through waterproofing, with protective board and drainage composite covering, and accessories for complete watertight installation.
 - 1. Provide sheet waterproofing at foundations.
- B. Related Sections:
 - 1. Section 07 14 00: Hot fluid applied waterproofing at decks.
 - 2. Section 07 16 00: Cementitious and reactive waterproofing at elevator pits.
 - 3. Section 07 18 70: Fire rated traffic coating system at decks.
 - 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 SUBMITTALS

- A. Product Data: Submit manufacturer's literature for waterproofing system and protection board.
- B. Shop Drawings: Indicate flashings, joints, sealing at openings, projections, and waterproofing of holes, slots and sleeves.
- C. Certificates: Submit manufacturer's representative's certification work has been installed in accordance with manufacturer's recommendations.

1.3 QUALITY ASSURANCE

- A. Qualification of Installers: Minimum five years successful experience in projects of similar scope.

1.4 PROJECT CONDITIONS

- A. Do not apply waterproofing during inclement weather or when air temperature is below 40 degrees F, except where specifically authorized by manufacturer's representative for specific materials.
- B. Do not apply waterproofing to damp, dirty, dusty, or otherwise unsuitable surfaces.
 - 1. Allow concrete surfaces to cure minimum 28 days.

1.5 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. Grace Construction Products/Bituthene 3000 or 4000 Waterproofing System.
- B. Carlisle Coatings and Waterproofing/CCW Miradri Waterproofing.
- C. Polyguard Products, Inc./Polyguard No. 650.
- D. Substitutions: Refer to Section 01 25 00.

2.2 MATERIALS

- A. System Description: Provide sheet membrane waterproofing system including sealing joints and protrusions through waterproofing, protective covering, and accessories.
- B. Regulatory Requirements: Provide materials conforming to applicable air quality management district limitations on volatile organic compound (VOC) emissions.
- C. Waterproofing System: System consisting of sheet membrane of rubberized asphalt and polyethylene film, total thickness approximately 60 mil, and fluid applied rubberized asphalt for sealing system.
 - 1. Low Temperature Applications: Where temperatures are between 25 degrees F and 40 degrees F, use manufacturer's special membrane and primer for low temperature applications.
- D. Primer: Manufacturer's recommended primer of applications involved; primer is required for waterproofing applications.

- E. Crack and Expansion Joint Sealants: Types as recommended by waterproofing system manufacturer, compatible with waterproofing system.
- F. Protective Covering:
 - 1. Protection Board: Preformed asphalt impregnated board or similar protective cover recommended by waterproofing manufacturer.
 - a. Vertical Applications: Minimum 1/8" thick protective cover.
 - b. Horizontal Applications: Minimum 1/4" thick protective cover.
 - 2. Drainage Composite: Formed plastic with filter fabric designed to allow penetration and drainage of water while retaining silts, soils, and similar particulate matter; type recommended by manufacturer for application.
 - a. Manufacturers:
 - 1) Grace/Hydroduct Drainage Composite.
 - 2) Carlisle/CCW MiraDRAIN.
 - 3) Colbond, Inc./Enkadrain.
 - 4) Substitutions: Refer to Section 01 25 00.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare surfaces in accordance with manufacturer's recommendations.
- B. Ensure sleeves, curbs and projections which pass through waterproofing are properly and rigidly installed.
- C. Ensure surfaces are free of cracks, depressions, waves and projections which may be detrimental to proper installation of waterproofing.
 - 1. Repair surfaces as required by manufacturer's representative.
- D. Seal cracks and expansion joints with recommended backup material and sealant; ensure proper depth-width ratio as recommended by sealant manufacturer.
- E. Ensure expansion joints are sharply formed, free of broken edges and loose aggregates.
- F. Clean surfaces of dust, dirt and foreign matter detrimental to proper installation of waterproofing.
- G. Prime surfaces to receive waterproofing in accordance with manufacturer's recommendations.

3.2 INSTALLATION

- A. Apply waterproofing in accordance with manufacturer's recommendations and installation instructions as required for watertight installation.
 - 1. Seal joints and items projecting through waterproofing.

- B. Seam Overlap: Minimum 2-1/2".
 - 1. Stagger end laps.
- C. Reinforce corners with double applications of waterproofing unless otherwise specifically recommended by manufacturer's representative.
- D. Allow extra materials at joints with anticipated movement to permit movement without stressing waterproofing.
- E. Roll waterproofing membrane smooth, firmly and completely to surfaces indicated, with no fishmouths or bunches of material.
- F. Inspect and repair waterproofing in accordance with manufacturer's instructions prior to application of protection board and backfill.
- G. As soon as possible after installation and inspection apply protection boards and drainage composites in accordance with manufacturer's recommendations.
 - 1. Neatly fit around pipes and penetrations.

3.3 FIELD QUALITY CONTROL

- A. 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.
 - 1. Provide unobstructed access to waterproofing work.
 - 2. Correct defects and irregularities as advised by manufacturer's representative.

END OF SECTION