

SECTION 07110 - LIQUID DAMPROOFING

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Liquid Damproofing. Apply to vertical surfaces above and below grade.
- B. Application of all joint sealants as specified.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Division 2 Sitework – Installation of Landscaping and Irrigation Systems.
- B. Section 03300 – Cast-In-Place Concrete.
- C. Section 03410 – Structural Precast Concrete.
- D. Section 04000 – Unit Masonry
- E. Section 07920 – Sealants and Caulking
- F. Division 15 Plumbing – Installation of Gutters and Rainwater Leaders.

1.03 QUALITY ASSURANCE

- A. Applicator qualifications: Approved in writing by the manufacturer of the liquid damproofing used.
- B. All products used in all instances and applications under this Section shall be as recommended by the manufacturer pertaining to this work to provide Owner with single source system and warranty.

1.04 SUBMITTALS

- A. Submit laboratory tests or data that validate product compliance with performance criteria specified.
- B. Submit intent to warranty document from manufacturer of liquid damproofing.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Store material in original, unopened containers in compliance with manufacturer's printed instructions.

- B. Deliver materials to Project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with following information.
 - 1. Name of material.
 - 2. Manufacturer's stock number and date of manufacture.
 - 3. Material safety data sheet.
- C. Recommended storage and application temperature is approximately 60 to 70 degrees F. Store materials in protected and well ventilated area.

1.06 PROJECT CONDITIONS

- A. Observe manufacturers recommendations for temperature and relative humidity conditions for a period before, during and after application.
 - 1. If rain occurs, allow surfaces to dry a minimum of 5 days.
- B. Do not apply coating materials if temperature is less than 40 degrees F or if precipitation is imminent.
- C. Coordinate deck-coating work with other trades to ensure adequate illumination, ventilation, and dust-free environment during application and curing of deck coatings. The applicator shall have sole right of access to the specified areas for the time needed to complete the application and allow the coating to cure adequately.
- D. Protect adjoining surfaces not to be coated against damage or soiling. Protect plants, vegetation and animals, which might be affected by coating operations.
- E. Warn personnel against breathing of vapors and contact of material with skin or eyes. Wear applicable protective clothing and respiratory protection gear.
- F. Keep products away from spark or flame. Do not allow the uses of spark producing equipment during application and until all vapors have dissipated. Post "NO SMOKING" signs.
- G. Maintain work area in a neat an orderly condition, removing empty containers, rags, and rubbish daily from the site.

1.07 WARRANTY

- A. Upon completion and acceptance of the work required by this Section, the installation shall be warranted, on a single document, by the Manufacturer and the Applicator.
- B. The installation shall be warranted against loss of damproofing integrity, adhesive or cohesive failure, for a period of 5 years from substantial completion.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. For purpose of defining quality of materials in this Section, Sonneborn Building Products, Chemrex, Inc., Shakopee, Minnesota, conforms to requirements of this specification.
- B. Products of other manufacturers which meet the requirements of the Drawings and this Section may be accepted.

2.02 MATERIALS

- A. Damproofing: Hydrocide 600, 700, and 700B (Spray, Trowel, and Roller grade) single component, waterborne emulsified-asphalt damproofing compound used above grade within cavity walls, and exterior below grade on masonry, concrete, and incidental metal.
- B. Incidental Substrate Priming Materials: Primer 733, single component solvent based primer for use with Sonolastic urethane sealants.
- C. Crack Preparation Materials:
 - 1. Sonolastic NP 2, two component polyurethane sealant for use in expansion and control joints, saw cuts, horizontal and vertical crack repair, and for forming cants.
 - 2. Sonocrete Gel Patch, single component, cement based patching compound that contains no added gypsum and is formulated with selected aggregates, redispersable acrylic polymer additives, and shrinkage compensating agents for general small area repair and patching applications.
- D. Protection: Protection Course II, multiplayer fiber-board bonded and laminated with water resistant adhesive or 15-mil Stego Wrap to protect membrane from damage during construction and backfilling.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces scheduled to receive liquid damproofing for conditions that will adversely affect execution, permanence and quality of work. Conduct all pre-application

inspections of site verification with authorized damproofing manufacturer's representative. Should any deficiencies exist, the Resident, Owner, or General Contractor shall be notified in writing.

- B. Allow surfaces to cure at least 10 days before application.
- C. Arrange for the pointing of cracks other than hairline cracks.
- D. Correct unsatisfactory conditions before proceeding with this work.

3.02 PREPARATION

- A. Clean surfaces prior to application of liquid damproofing. Remove dust, dirt, efflorescence, oil or other contaminants and deleterious materials.
- B. Open up air void pockmarks and honeycombs to allow damproofing to fill cavities completely. Parge coat excessively porous surfaces with Sonoblock.
- C. Rout and clean cracks and joints over 1/8 inch wide to minimum of 1/4 inch by 1/4 inch. Install bond breaker tape to prevent adhesion to bottom of joint. Prime joint faces only with Sonneborn Primer 733. Seal with NP 2 sealant. Allow sealant to cure.
- D. For expansion joints less than 2 inches wide, prime with Primer 733. Install Sonolastic NP-2 as per manufacturer's recommendations.
- E. Prime all penetrations with Primer 733. Seal with NP-2.

3.03 APPLICATION

- A. Apply liquid damproofing in strict compliance with its manufacturer's specifications and the requirements of this Section.
- B. Protect adjacent finished materials from overspray. Protect all surroundings from primers, patching repair compounds and damproofing products to include, but not limited to, windows, roofs, walkways, drives, automobiles, and landscaping.
- C. Complete all preparatory work before application begins. Select grade of damproofing that best meets job requirements: Hydriocide 600 for spray application, or Hydriocide 700 for trowel application, or Hydriocide 700B for roller application.
- D. Dampen surfaces to be coated with water prior to damproofing application.
- E. Apply damproofing in 1, 2 or more coats to achieve specified thickness, depending on the amount of vapor retarding that is called for.

- F. Verify applied thickness with specifier using wet mil gauge as work progresses. Allow to cure 48 hours at 70 degrees F and 50% relative humidity. Extend curing time at lower temperatures and relative humidity.
 - G. Install protection course in areas in need of protection from backfill.
- 3.04 ADJUST AND CLEAN
- A. Clean spillage and overspray from adjacent surfaces as recommended by liquid damproofing manufacturer.
 - B. Clean up and properly dispose of all debris remaining on the job site related to application.
- 3.05 FIELD QUALITY CONTROL
- A. Spray test. After damproofing has dried, spray coated surfaces with water.
 - B. Recoat surfaces that show water absorption.
 - C. Manufacturer's representative will inspect finished surface preparation, application, and finished damproofing and may require further preparation or application to achieve appropriate result. In no case will manufacturer's representative approve surface or finish if following conditions are found: pinholes, insufficient thickness, or any other conditions, which, in manufacturer's representative's opinion, may cause failure of installation.

END OF SECTION