

SPECIAL SPECIFICATION

SECTION 07140S

FLUID-APPLIED WATERPROOFING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Fluid applied elastomeric waterproofing system to provide principle moisture barrier between interior and exterior surfaces.

1.02 REFERENCES

- A. ASTM C 836 - High Solids Content, Cold Liquid Applied, Elastomeric Waterproofing Membrane With Separate Wearing Course.
- B. ASTM D 412 - Rubber Properties in Tension.

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's technical literature for each product.
- B. Shop Drawings: Submit details indicating special joint or termination conditions and special conditions of interface with other materials.
- C. Samples: Submit samples of elastomeric compound indicating applied thickness, texture, and color.
- D. Certificates: When required by manufacturer, submit applicator's license certificate issued by waterproofing manufacturer.
- E. Manufacturer's Instructions: Submit manufacturer's printed installation instructions for each product; include applicable temperature ranges.
- F. Applicator Experience: Submit list of projects having similar scope of work which have been installed during last three years; identify projects by name, location and date, including names of reference and phone numbers.
- G. Manufacturer's Field Reports: Submit summary of job site observations, instructions and monitoring activities.
- H. Warranty: Submit signed and dated warranties from manufacturer and applicator.

1.04 QUALITY ASSURANCE

- A. Applicator Qualifications: Company specializing in application of specified waterproofing with minimum three years documented experience; licensed by waterproofing manufacturer.

1.05 FIELD SAMPLE

- A. Sample shall represent conditions of finished work, including detail work at internal and external corners, sealing, flashings, treatment of cracks and joints, texture, and color.
- B. Sample may be incorporated as part of Work if approved in writing by Architect.

1.06 PRE-INSTALLATION CONFERENCE

- A. Require attendance of manufacturer's representative, waterproofing applicator, and related trades which interface with system. Review and coordinate interfacing with adjacent materials, terminations, methods of flashing, and detail work.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Store materials in enclosed spaces protected from weather and out of direct sunlight. Maintain temperature range between 40 and 90 degrees F.

1.08 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply products when surface or ambient temperatures are below 40 degrees F or above 90 degrees F.
- B. Do not apply to damp or frozen surfaces or during inclement weather.

1.09 PROJECT/SITE CONDITIONS

- A. Provide adequate ventilation to prevent accumulation of hazardous fumes.
- B. Take precautions recommended by manufacturer to protect workmen during installation.
- C. Keep product away from heat, sparks, or open flame.

1.10 SEQUENCING AND SCHEDULING

- A. Coordinate work with other trades to properly interface with adjacent or subsequent construction.
- B. After completion of application, do not allow traffic on waterproofed surfaces until material has cured and protection system is in place.

1.11 WARRANTY

- A. Furnish executed warranties, signed jointly and severally by manufacturer and applicator on a single document, guaranteeing installed waterproofing system to be free of leaks and free from defects in materials and workmanship for a period of three years from date of completion and acceptance of waterproofing system.

- B. Furnish executed warranties guaranteeing installed waterproofing system to be free of leaks and free from defects in materials and workmanship for a period of two years from date of completion and acceptance of waterproofing system.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Seamless Membrane by Anti Hydro Co., Newark, NJ.
- B. Scotch Clad Coating System 'M' by 3M Coating Division, St. Paul, MN.
- C. Mult-I-Thane 5000 Series by Multi-Chemical Products, Inc., South El Monte, CA.
- D. Perma-Guard II by Neogard Corp., Dallas, TX.
- E. HLM-3000 Series by Sonneborn Building Products Division, Minneapolis, MN.

2.02 MATERIALS AND COMPONENTS

- A. Elastomeric Compound: Single component, moisture curing, cold applied elastomeric polyurethane conforming to ASTM C 836, 500 percent minimum elongation as determined by ASTM D 412, self-leveling grade for horizontal application, and non-sagging grade on vertical surfaces.
- B. Sheet Flashing: Elastomeric sheet material, thickness and reinforcement as recommended by manufacturer, designed for, and compatible with membrane.
- C. Liquid Flashings: Elastomeric compound recommended by manufacturer and compatible with membrane.
- D. Cants, Primer, Joint Filler, Joint Sealant: Types recommended by membrane manufacturer.
- E. Block Filler: Type and composition approved by waterproofing manufacturer and compatible with system.
- F. Asphaltic Protection Board: Preformed sheet or board, 1/8-inch thick, Sealtight Protection Course PC-2 by W.R. Meadows Inc., Tex-Mastic Bakerbord 501-A or Tuff Stuff by J&P Petroleum Products Inc., Protection Course II by Sonneborn Building Products Division.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and conditions are ready to receive work of this Section. Notify Architect of any existing conditions which will adversely affect execution. Beginning of execution will constitute acceptance of existing conditions.
- B. Verify that substrate has cured a minimum of 28 days, is solid, and free of frozen matter, loose particles, cracks, pits, rough projections and foreign matter detrimental to adhesion and application of waterproofing.
- C. Verify that curing methods used for concrete are compatible with waterproofing system.
- D. Verify that items penetrating waterproofing system are securely installed.
- E. Verify that joints in masonry surfaces are struck flush with face of unit.

3.02 PREPARATION

- A. Protect adjacent surfaces not designated to receive waterproofing.
- B. Clean, etch, and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions.
- C. Treat penetrations, cracks, honeycomb, and expansion, control and construction joints with filler, sealant, and flashing materials recommended by manufacturer.
- D. Prepare masonry surfaces by uniform application of approved block filler.

3.03 WATERPROOFING APPLICATION

- A. Apply products using skilled workmen in accordance with manufacturer's printed instructions and recommendations. Use application techniques and equipment recommended by manufacturer.
- B. Apply materials in number of coats and at rate to produce minimum dry mil thickness required by manufacturer.

3.04 PROTECTION BOARD INSTALLATION

- A. Install separate protection board system over cured membrane and retain in place using methods recommended by manufacturer. Install in single layer with tight butt joints.
- B. If required by board manufacturer, dust membrane or apply separation sheet prior to installing protection board.
- C. Close off area to construction traffic until protection board is in place.

3.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Notify manufacturer prior to start of work and make arrangements for manufacturer's technical representative to be present during first day's work to verify work is being conducted in accordance with their recommendations.
- B. Inspections:
 - 1. Before initial set takes place, periodically verify applied thickness by use of wet mil thickness gage as work progresses. In deficient areas apply additional materials to produce required thickness.
 - 2. Before installation of protection board, visually inspect surfaces for voids, ruptures and damages; make necessary repairs.
- C. Flood Tests - Horizontal Surfaces:
 - 1. Before completed surfaces are covered by protection board or other work, test for leaks with 2 inch depth of water maintained for 48 hours.
 - 2. Repair any leaks revealed by examination of substructure, and repeat test until no leakage is observed.

3.06 PROTECTION OF FINISHED WORK

- A. Do not permit traffic over unprotected or uncovered membrane.

3.07 CLEANING

- A. Clean materials from adjacent surfaces where inadvertently applied.

END OF SECTION