SECTION 07141 - COLD FLUID-APPLIED WATERPROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes cold fluid-applied polyurethane waterproofing for application to exterior faces of foundation walls containing interior space including Elevator Pit.

1.2 SUBMITTALS

- A. Product Data: Include manufacturer's written instructions for evaluating, preparing, and treating substrate, technical data, and tested physical and performance properties of waterproofing.
- B. Shop Drawings: Show locations and extent of waterproofing. Include details for substrate joints and cracks, sheet flashings, penetrations, inside and outside corners, tieins with adjoining waterproofing, and other termination conditions.
- C. Product test reports.

1.3 STORAGE

- A. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by waterproofing manufacturer.
- B. Remove and replace liquid materials that cannot be applied within their stated shelf life. Protect stored materials from direct sunlight.

1.4 PROJECT CONDITIONS

A. Environmental Limitations: Apply waterproofing within the range of ambient and substrate temperatures recommended by waterproofing manufacturer. Do not apply waterproofing to a damp or wet substrate, when relative humidity exceeds 85 percent, or when temperatures are less than 5 deg F above dew point.

1.5 WARRANTY

A. Special Warranty: Manufacturer's standard form, signed by manufacturer, and agreeing to repair or replace waterproofing that does not comply with requirements or that does not remain watertight for a period of five years after date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Single-Component, Modified Polyurethane Waterproofing:
 - a. Anti-Hydro International, Inc.; A-H Seamless Membrane.
 - b. Carlisle Corporation, Carlisle Coatings & Waterproofing Div.; CCW-525.
 - c. Karnak Corporation; One-Kote System.
 - d. Mameco International, Inc.; Vulkem 201.
 - e. Pecora Corporation; Duramem 500.
 - f. Sonneborne, Div. of ChemRex Inc.; HLM 5000.
 - g. Tremco; Tremproof 60.

2.2 WATERPROOFING MATERIALS

- A. Cold Fluid-Applied Waterproofing: Comply with ASTM C 836.
- B. Primer: Manufacturer's standard, factory-formulated polyurethane or epoxy primer.

C. Reinforcing Strip: Manufacturer's recommended fiberglass mesh or polyester fabric.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

- A. Clean and prepare substrate according to manufacturer's written recommendations. Provide clean, dust-free, and dry substrate for waterproofing application.
 - 1. Verify that substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D 4263.
- B. Close off deck drains and other deck penetrations to prevent spillage and migration of waterproofing fluids.
- C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, and other penetrating contaminants or film-forming coatings from concrete.
- D. Remove fins, ridges, and other projections and fill honeycomb, aggregate pockets, and other voids.
- E. Prepare vertical and horizontal surfaces at terminations and penetrations through waterproofing and at expansion joints, drains, and sleeves according to ASTM C 898 and manufacturer's written instructions.
 - 1. Apply a double thickness of waterproofing and embed a joint reinforcing strip in preparation coat when recommended by waterproofing manufacturer.
- F. Prepare, treat, rout, and fill joints and cracks in substrate according to ASTM C 898 and waterproofing manufacturer's written instructions. Remove dust and dirt from joints and cracks complying with ASTM D 4258 before coating surfaces.

3.2 WATERPROOFING APPLICATION

- A. Apply waterproofing according to ASTM C 898 and manufacturer's written instructions.
 - 1. Apply one or more coats of waterproofing to obtain a seamless membrane free of entrapped gases, with an average dry film thickness of 60 mils and a minimum dry film thickness of 50 mils at any point.

3.3 CURING, PROTECTING, AND CLEANING

- A. Cure waterproofing according to manufacturer's written recommendations, taking care to prevent contamination and damage during application stages and curing.
- B. Protect waterproofing from damage and wear during remainder of construction period.
- C. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 07141