SECTION 07350

WATERPROOF DECK SURFACE

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Provide all labor, materials and equipment necessary to apply the waterproof deck surface over horizontal concrete surfaces. This specification includes application over horizontal concrete, which require waterproofing.

1.02 RELATED SECTIONS

A. Section 03300 – Cast-In-Place Concrete.

B. Section 07900 – Joint Sealants.

1.03 REFERENCES

A. ASTM E 96 – Water Vapor Transmission.

B. ASTM C 297 – Bond Strength.

C. ASTM D 968 – Abrasion Resistance.

D. ASTM G 23 – Accelerated Weathering.

E. ASTM E 84 – Surface Burning.

F. ASTM C 1028-96 – Static Coefficient of Friction.

1.04 SUBMITTALS

A. See Section 01350 – Submittals, for submittal procedures.

B. Samples:
   1. The Contractor shall make and submit a sample of the proposed finish to the architect for approval.

C. Product Data:
   1. Submit manufacturer's product information and specifications.

1.05 QUALITY ASSURANCE

A. Manufacturer shall be a company specializing in manufacturing products specified in this section.

B. The applicator/contractor shall be approved.

1.06 DELIVERY, STORAGE AND HANDLING

A. All materials shall be delivered to the job site in the original, unopened packages with labels intact. Upon arrival, materials shall be inspected for physical damage or freezing. Questionable materials shall not be used.

B. Minimum storage temperature shall be 40 degrees Fahrenheit. Maximum storage temperature shall be 110 degrees Fahrenheit. All materials shall be stored in a dry

location, out of direct sunlight and protected from weather and other damage in accordance with material data safety sheets.

1.07 JOB CONDITIONS

A. Environmental Conditions:
   1. The ambient air and surface temperature shall be a minimum of 50 degrees Fahrenheit and a maximum of 110 degrees Fahrenheit and shall remain so for at least 24 hours.

B. Protection:
   1. Adjacent areas and materials shall be protected from damage, drops and spills.
   2. The waterproofing materials shall be protected by permanent or temporary means from weather and other damage, prior to, during, and immediately after application. Care must be taken to prevent condensation and/or heat build up when using a tarp or plastic protection.

C. Sequencing and Scheduling:
   1. Application shall be coordinated with other construction trades.
   2. Sufficient labor and equipment shall be employed to ensure a continuous operation.

1.08 WARRANTY

A. Manufacturer's standard 10-year warranty.

PART 2 – PRODUCTS

2.01 MANUFACTURER

A. Pli-Dek Systems, Inc.; Product Con-Dek System.

B. Substitutions: See Section 01640 – Substitutions, for substitution criteria.

2.02 COMPONENTS

A. GU80-1 Top Coat Mix: A Portland cement and silicon dioxide composition that is to be combined with Pli-Dek Liquid Admixture GU80-1.

B. GU80-1 Liquid Mixture: An acrylic polymer emulsion.

C. GS88-1 Pigmented Sealer: A pigmented water based acrylic surface sealer.

D. Fiberglass Mat: .75 ounce fiberglass woven mat.

E. PD Resin Base Coat: A high build elastomeric acrylic resin.

F. GS99-1 Clear Sealer: Water-based, clear sealer.

2.03 MATERIALS

A. Water: Shall be clean and potable.

B. Caulking: Urethane based. Contact Pli-Dek for recommendations.

C. Flashing: 26 gauge bonderized, galvanized sheet metal.

2.04 EQUIPMENT

A. Mixing shall be done with a clean Wind-lock B-M1 mixing blade or equivalent powered by a ½-inch viable speed drill capable of producing 1000 RPM.

B. Refer to the Pli-Dek Application Instructions, PD175, for a complete list of recommended tools.

PART 3 – EXECUTION

3.01 INSPECTION

A. Concrete decks shall be sloped for positive drainage. A minimum of 1/8 – 1/4 inch per linear foot is recommended.

3.02 SUBSTRATE PREPARATION

A. Concrete on Grade and Concrete Decks:
   1. Concrete shall have cured a minimum of 28 days before application of the Con-Dek coating.
   2. All undermined, cracked, damaged, etc. concrete must be repaired or replaced before applying the Pli-Dek coatings over the concrete surfaces.
   3. All concrete surfaces must be cleaned to remove all grease, oil, dust, paint, sealer, efflorescence etc. that may impair the adhesion of the Pli-Dek materials. All concrete areas are to be free of moisture, wax, oil, silicone or solvent curing impounds. Refer to the Pli-Dek Application Instruction, PD 175, for complete information.

3.03 APPLICATION

A. General:
   1. Refer to the Con-Dek Application Instruction, PD175, for complete information.
   2. All concrete surfaces shall be covered with the .75 ounce fiberglass mat and coated the PD Resin Base Coat.

B. PLI-DECK Resin Second Coat:
   1. Apply second coat of PD Resin Base Coat as described in Con-Dek Application Instructions, PD175, for complete information. Allow it to dry a minimum of 2 to 6 hours (additional time may be necessary under the adverse drying conditions).

C. CON-DEK Finish Coats: (See Con-Dek Application Instruction PD175 for installation)
   1. Knockdown Texture Finish.
   2. Color: As selected by Architect from manufacturer's standard color.

3.04 FIELD QUALITY CONTROL

A. The Contractor shall be responsible for the proper application of the Pli-Dek materials.

3.05 CLEAN UP

A. The applicator in accordance with contract provisions shall remove all excess Pli-Dek materials from the job site.

B. All surrounding areas, where the Pli-Dek materials have been applied, shall be left free of debris and foreign substances resulting from the contractor's work.

END OF SECTION