#### SECTION 07190

#### WATER REPELLENTS

#### PART 1 GENERAL

# 1.1 SECTION INCLUDES

- A. Water repellents for above grade surfaces of concrete.
- B. Water repellents for above grade surfaces of stone.
- C. Water repellents for above grade surfaces of masonry.
- D. Water repellents for above grade surfaces of stucco.

#### 1.2 RELATED SECTIONS

- A. Section 03300 Cast-In-Place Concrete.
- B. Section 03400 Precast Concrete.
- C. Section 03900 Concrete Restoration and Cleaning.
- D. Section 04400 Stone.
- E. Section 04800 Masonry Assemblies.
- F. Section 04900 Masonry Restoration and Cleaning.
- G. Section 07180 Traffic Coatings.
- H. Section 09630 Masonry Flooring.
- I. Section 09900 Paints and Coatings.
- J. Section 09960 High-Performance Coatings.

#### 1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's technical literature, specifications and application instructions.
- C. Contractor's certification that the applicator has the specified experience, include a list of the names of several recent projects, locations, names of architects, and methods of application.

# 1.4 QUALITY ASSURANCE

- A. Qualifications:
  - Manufacturer: A firm with not less than 10 years experience in manufacturing the products specified in this Section.
  - Applicator: A firm with not less than 3 years experience in the application of the products specified in this Section.
- B. Mock-Ups:
  - Apply specified products to sample panels as directed by the Architect to determine acceptability of appearance and optimum coverage rate required for application.
  - After materials have cured in accordance with manufacturer's recommendations, water test surface to determine that sufficient water repellent has been applied to repel liquid water.
  - Do not begin application of water repellents to the work until the mock-up has been approved by the Architect.
- C. Pre-Installation Conference: Prior to application of water repellents, hold a meeting at the job site with representatives of the manufacturer and the applicator. Notify the Owner and the Architect at least 3 days in advance of the time of the meeting.
- 1.5 DELIVERY, STORAGE, AND HANDLING
  - A. Packaging and Shipping: Deliver materials in original sealed containers, clearly marked with manufacturer's name, brand name, and type of material.
  - B. Acceptance at Site: Verify that the product delivered matches the product applied to the approved mock-up.
  - C. Storage and Protection:
    - 1. Store and handle materials in accordance with manufacturer's written instructions.
    - 2. Store materials indoors and away from sparks and open flame in a secure area to prevent tampering and contamination. Do not allow water-based materials to freeze.

#### 1.6 ENVIRONMENTAL REQUIREMENTS

- A. Provide products that comply with federal, state, and local volatile organic compounds (VOC) regulations.
- B. Do not apply water repellents to surfaces below 40 degrees F or above 95 degrees F unless recommended by the manufacturer.
- C. Do not apply water repellents when rain is predicted within 48 hours or less than 5 days after surface has been wet.
- D. Do not apply water repellents in high or gusty winds.

## 1.7 SCHEDULING

- A. Notify the Architect not less than 48 hours before each application of water repellent.
- 1.8 WARRANTY
  - A. The Contractor and the installer shall jointly and severally warrant water repellents against failure in material and workmanship for a period of 5 years from the date of Substantial Completion.

# PART 2 PRODUCTS

# 2.1 MANUFACTURERS

A. Provide water repellents manufactured by Chemprobe Technologies, Inc.; 2805 Industrial Land, Garland, TX 75041; Voice 800-760-6776 or 972-271-5551, FAX 972-271-5553.

# 2.2 PRODUCTS

- A. General: All products shall contain siloxane. No fillers, sterates, or paraffins. Products containing siloxane only, shall have a range of 3 to 7 percent solids. Silane-siloxane blend products shall contain minimum 15 percent solids.
- B. Solvent Based Siloxane: Prime A Pell 200.
- C. Water Based Siloxane: Prime A Pell H2O Block Formula.

- D. Water Based Siloxane: Prime A Pell H2O Brick & Precast Formula.
- E. Solvent Based Silane/Siloxane Blend: Deck A Pell.
- F. Solvent Based Silane/Siloxane Blend: Deck A Pell 20.
- G. Water Based Silane/Siloxane Blend: Dur A Pell 20.

## PART 3 EXECUTION

## 3.1 EXAMINATION

- A. Verification of Conditions:
  - 1. Do not apply water repellents to surfaces that contain liquid or frozen water.
  - 2. Verify that new masonry and mortar has cured for at least 21 days.
  - 3. Verify that all sealants have been installed.

## 3.2 PREPARATION

- A. Protection:
  - Prevent water repellent fumes from entering the building being treated, turn off ventilation system and close fresh air intakes.
  - 2. Protect shrubs, metal, wood trim, glass, asphalt, and hardware during application of water repellents.
  - 3. Do not permit spray mist or liquid to drift onto adjacent properties.
- B. Surface Preparation: Prepare surface so that it is free of cracks, dirt, oils, paint, and other contaminants that may affect the appearance and performance of the water repellents.

#### 3.3 APPLICATION

- A. General: Apply water repellents in accordance with manufacturer's printed instructions.
- B. Apply water repellents using low pressure spray equipment designed for water repellent application.

- C. Apply water repellents as shipped by the manufacturer, do not dilute.
- D. Apply water repellents evenly until surface is totally saturated. Coverage rates are dependent on surface material. Only one saturation coat is required.
- 3.4 FIELD QUALITY CONTROL
  - A. After water repellent has dried for 24 hours at low humidity and a temperature between 70 and 90 degrees F or for 48 hours at high humidity and a temperature between 50 and 69 degrees F., test all surfaces with a water spray. Recoat areas that indicate water absorption.

END OF SECTION