# SECTION 07 19 00 – Water REPELLENTS

## GENERAL

### SUMMARY

#### Section Includes:

##### Water Repellent Treatment Applied to Exterior Exposed Masonry Unit and Concrete Walls.

#### Related Sections:

##### Section 04 01 20.91- Unit Masonry Restoration

### SUBMITTALS

#### General: Submit the following according to the Conditions of the Contract and Division 01 General Requirements specification sections.

##### Submit product data including detailed test results of materials applied to surfaces similar to requirements of this Section.

##### Submit manufacturer's instructions for methods and application procedures.

##### Submit manufacturer's certification indicating water repellent treatment conforms to or exceeds requirements stated herein.

### QUALITY ASSURANCE

#### The Contractors involved with work covered by this Section shall have had a minimum of five years of experience using specified techniques for water repellent treatment application.

#### Tradesman must be competent and experienced and shall demonstrate reasonable care during performance of operations described in this Section.

#### Tests and Approvals:

##### Sample Area:

###### Contractor shall apply a test area of wall surface from four square feet in size for inspection and approval by the Owner’s Representative after treatment has cured. Test area shall be available for comparison during the specified scope of work.

###### Samples of adjacent materials shall be tested for possible reaction with the water repellent treatment. Such samples shall be available for inspection by the Owner’s Representative.

##### If any part of this work shall be found defective (because of improper preparation of surfaces or application of water repellent treatment) at any time before the final acceptance of the item, the Contractor shall, at his own expense, make good such defect to the satisfaction of the A/E.

### PROJECT CONDITIONS

#### Protection:

##### Contractor shall provide, at all times, covered access to premises and necessary utilities, space for storage of material and equipment, etc.

##### All activities shall be in compliance with local and governmental regulations and codes.

##### The surface and atmospheric temperature should be at least 40 degrees F. and rising during application and for eight hours following. Surface and air temperatures should not exceed 90 degrees F.

##### Surfaces should be dry.

##### Apply only in well-ventilated areas.

##### All caulking (sealants) should be applied a minimum of 24 hours prior to application, or as required by sealant manufacturer, whichever is greater, before application of water repellent treatment.

##### The Contractor shall require applicators to observe safety precautions as outlined on containers and labels. It is the responsibility of the Contractor to provide well ventilated areas for all workmen as well as to observe safety precautions as stipulated on labels and instructions of all materials used, and as required by governing authorities during application and drying.

## PRODUCTS

### MANUFACTURERS

#### Water-Based Silane/Siloxane Water Repellent Treatment:

##### Use water-based silane/siloxane water repellent for concrete and most masonry and stucco surfaces to protect them from water penetration without altering the natural appearance.

##### Physical and Performance Properties:

###### Water Absorption Reduction (Brick) per ASTM C 67: Greater than 89 percent.

###### Water Absorption Reduction (CMU) per ASTM C 140: Greater than 93 percent.

###### Water Absorption Reduction (Mortar) per ASTM D 6532: Greater than 98 percent.

###### Water Vapor Transmission WVT per ASTM D 6490: Minimum 4 perms.

###### VOC Content: Less than 30 g/L.

##### Approved Products:

###### "[Sure Klean Weather Seal Siloxane PD](https://prosoco.com/product/siloxane-pd/) "; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255) (Basis of Design).

## EXECUTION

### PREPARATION

#### Verify surfaces to receive water repellent treatment are clean, free of efflorescence, oil, grease, or other foreign matter detrimental to application.

#### Remove loose particles and foreign matter. Remove grease or oil with a solvent, effective alkaline cleaner, or detergent as instructed by water repellent manufacturer. Scrub surfaces with water.

#### Allow surfaces to dry prior to application.

#### Protect all surrounding areas as recommended by the manufacturer or as directed by the Architect.

##### Windows: Windows shall be protected from contact with materials by masking with polyethylene or other approved techniques.

##### All polished stone, metal, or non-masonry surfaces shall be protected from contact with the material by masking with polyethylene.

##### Masonry surfaces must be in good repair. All new construction or repointed surfaces must be allowed to cure for a minimum of 28 days prior to application. Surfaces must be completely dry.

#### Verify all windows, exterior intakes and air conditioning vents are covered and air handling equipment is shut down during application and until vapors have dissipated.

#### Coordination with Sealants: Do not apply water repellent until sealants for joints adjacent to surfaces receiving water-repellent treatment have been installed and cured.

### WATER- Based Silane/Siloxane Water Repellent Treatment APPLICATION (VERTICAL APPLICATION)

#### Test each surface and/or material to be treated to ensure compatibility and water repellent treatment results. The surface to be treated must be clean and free of all foreign matter and as dry as possible to ensure proper penetration of water repellent treatment.

#### Do NOT dilute water repellent treatment.

#### Proceed with application of water repellent treatment in an orderly manner once application rate has been tested; work from bottom to top of each scaffold width and from one end of each elevation to the other.

#### Apply water repellent treatment wet-on-wet to vertical visibly dry and absorbent surfaces and comply with manufacturer's written instructions; use brush or spray application methods, at Contractor's option.

#### Preferred method of application is with low pressure, airless diaphragm-type spray equipment or with a heavily saturated roller or brush. Apply in coverage rate as recommended by manufacturer for type of material.

#### Spray Application:

##### Apply water repellent treatment from bottom- up using a wet-on-wet application, creating a 4 to 8 inch rundown below the spray contact point. Let the first application penetrate for 5 to 10 minutes then reapply. Apply in accordance with manufacturer recommendation. Do not spray apply at pressures exceeding 50 psi.

#### Roller or Brush Application:

##### Thoroughly saturate the surface uniformly with water repellent treatment for 5 to 10 minutes. Avoid excessive overlapping. Backroll or brush out heavy runs and drips that do not penetrate.

### PROTECTION

#### Protect adjacent surfaces not scheduled to receive water repellent treatment. If applied on unscheduled surfaces, remove immediately, by manufacturer approved method.

#### Protect treated surfaces from rain for 6 hours.

#### Correct damage by cleaning, repairing or replacing, and repainting, as approved by A/E.

END OF SECTIOn 07 19 00