

SECTION 07 19 00

WATER REPELLENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Complete with Division 1, General Requirements.

1.2 SUBMITTALS

- A. Shop Drawings: Manufacturer's recommended application procedures.
- B. Samples: Selection and verification samples.
- C. Quality Control Submittals:
  - 1. Evidence of Applicator Certification by Product manufacturer.
  - 2. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
  - 3. Manufacturer's Certificate of Compliance in accordance with Section 01 33 00, Submittal Procedures.

1.3 QUALITY ASSURANCE

- A. Qualifications: Applicator certified by product manufacturer.
- B. Mockup:
  - 1. Apply water repellent to mock-up erected by Section 04 43 00, Stone Unit Masonry, following manufacturer's application instructions. Determine the optimum coverage rate required for application.
  - 2. After sample treatment has cured (approximately 12 to 24 hours), water test to verify that substrate is coated with sufficient water repellent to effectively repel moisture from the surface.
  - 3. Verify that application of water repellent materials will produce no surface stains or discoloration, and obtain Contract Administrator's acceptance.
  - 4. Maintenance: Maintain mockup during construction for workmanship comparison; remove and legally dispose of mockup when no longer required.
  - 5. Incorporation: Mockup may be incorporated into final construction upon the City's approval.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials in manufacturer's original sealed containers.

- B. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.
  - 1. Lids must be kept tightly sealed. Do not allow moisture to enter containers.
  - 2. Store containers in a dry place, upright and airtight at temperatures of 7 degrees C and not exceeding 38 degrees C.

#### 1.5 PROJECT CONDITIONS

- A. Surface, air, and material temperatures shall not be lower than 5 degrees C or higher than 35 degrees C during application unless otherwise permitted by manufacturer's instructions. Do not apply when temperature is expected to fall below 5 degrees C within 12 hours following application.
- B. Weather: Clear with no precipitation during application or expected for 4 hours following application.
- C. For interior enclosed application and other areas where natural ventilation is deemed not appropriate: Provide positive ventilation throughout the application.

#### 1.6 SPECIAL GUARANTEE

- A. Provide manufacturer's extended guarantee or warranty, with the City named as beneficiary, in writing, as special guarantee. Special guarantee shall provide for correction, or at the option of the City, removal and replacement of Work specified in this Specification section found defective during a period of 10 years after the date of Substantial Completion. Duties and obligations for correction or removal and replacement of defective Work shall be as specified in the General Conditions.
- B. Conditions: Applied product will retain its water repellent effects during the Special Guarantee period.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Harris Specialty Chemicals; Hydrozo, Enviroseal 40.
- B. Huls America, Inc.; Chem-Trete BSM 40.
- C. Tnemec Company; Prime A Pell series.
- D. Textured Coatings of America; Tex-Cote Rainstopper Series 140.

#### 2.2 WATER REPELLENT

- A. Active Alkylalkoxysilane Content: By weight, 40 percent.
- B. Not alter appearance of masonry or change the surface texture.

- C. No fillers, stearates, or paraffins.
- D. Colour: Clear.
- E. VOC content as required to meet requirements of the local authorities having jurisdiction.

### PART 3 EXECUTION

#### 3.1 EXAMINATION AND PREPARATION

- A. Verify that surfaces are solid, dry, and free of dirt, efflorescence, oil, wax, frozen matter, loose particles, cracks, pits, laitance, curing compounds, and other foreign matter that would block absorption of water repellent.
- B. Verify that curing of sealants is complete.
- C. Clean masonry surfaces to make them acceptable for application.
- D. Protect and mask adjacent surfaces during application.

#### 3.2 APPLICATION

- A. Follow product manufacturer's instructions and recommendations, including application apparatus and techniques, and coverage rates.

#### 3.3 SCHEDULE OF APPLICATION

- A. Provide uniform coverage over entire surface of the followings:
  - 1. New Stone Veneer Type 1 and Type 2 on exterior of buildings.
  - 2. New Cast Stone Sill on exterior of buildings.

#### 3.4 FIELD QUALITY CONTROL

- A. Notify Contract Administrator 48 hours prior to application.
- B. After water repellent has dried 24 hours, low humidity, medium temperature 20 to 32 degrees C and 48 hours, high humidity, low temperature 10 to 20 degrees C, test surfaces with a water spray. Recoat areas that indicate water absorption.

#### 3.5 PROTECTION

- A. Protect adjacent shrubs, metal, wood trim, glass, asphalt, and other building hardware from overspray. Do not permit spray mist or liquid to drift onto surrounding properties or parking lots. Avoid contact with automobile paint and windshields. Clean up immediately after application using cleaners approved by product manufacturer.
- B. Protect installed product's finish surfaces from damage during construction.

3.6 CLEANING

- A. At completion, remove from the jobsite excess material, debris, and waste. Dispose of water repellent containers according to state and local environmental regulations.
- B. Upon completion of work, clean window glass and other splattered surfaces.

END OF SECTION