1. **GENERAL**
   1. **SECTION INCLUDES**
      1. Water repellent coating to exterior concrete masonry units.
   2. **REFERENCES**
      1. AQMD - Local Air Quality Management District Regulations.
   3. **SUBMITTALS**
      1. Product data including details of product description, tests performed, limitations to coating, cautionary procedures required during application and chemical properties, including percentage of solids.
      2. Manufacturer's installation instructions.
      3. Provide qualification data as required by Paragraph under Quality Assurance.
   4. **QUALITY ASSURANCE**
      1. Manufacturer: Company specializing in manufacture of water repellent coatings with five years minimum experience.
      2. Applicator: 5 years experience in the application of the specified product and approved by the manufacturer.
      3. Field Sample
         1. Apply coating to maximum 4 square feet vertical or horizontal area of surface.
         2. Do not proceed with full application until sample has been subjected to water application and approved by Architect.
   5. **ENVIRONMENTAL REQUIREMENTS**
      1. Do not apply coating when surface temperature is lower than 50 degrees F or higher than 100 degrees F.
      2. Comply with AQMD Regulations.
   6. **WARRANTY**
      1. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of Contract Documents.
      2. Special Warranty: Submit written warranty, executed by applicator and water repellent manufacturer, covering materials and labor, agreeing to repair or replace materials that fail to provide water repellency within specified warranty period. Warranty does not include: Deterioration or failure of coating due to unusual weather phenomena, formation of new joints and cracks in excess of 1/16 inch wide, fire, vandalism, or abuse by maintenance equipment.
      3. Warranty Period: 10 years from Date of Certified Completion.
2. **PRODUCTS**
   1. **MANUFACTURERS**
      1. Products of following manufacturers form basis for design and quality intended.
         1. Pro So Co., Inc., Kansas City, KS. Product: Weather Seal Siloxane WB Concentrate.
         2. Raingard International Products Co, Corona del Mar, CA.
         3. Harris Specialty Chemicals Inc./Hydrozo, Jacksonville, FL.
         4. Diedrich Technologies Inc., Oak Creek, WI.
         5. Sivento Inc., Somerset, NJ.
         6. Tnemec, Product: Chemprobe
         7. Monpole Inc.
      2. Or equal as approved in accordance with Division 1, General Requirements for substitutions.
   2. **MATERIAL CHARACTERISTICS** 
      1. Self-emulsifying water repellent concentrate for dilution with fresh water at jobsite. Solvent-free blend of silanes and oligomeric alkoxysiloxanes mixes easily with water, with following characteristics:
         1. Form: Liquid
         2. Color: Clear, amber
         3. Specific Gravity: 1.000
         4. Active Substance: Microemulsion concentrate of silanes and oligomeric alkyl alkoxysiloxanes
         5. Solids: 100% concentrate
         6. VOC: 318 grams/liters
         7. Flash Point 900F (in concentrate) (>2080F @ 1:9 dilution) (>2080F @1:14 dilution
3. **EXECUTION**
   1. **INSPECTION**
      1. Verify joint sealants are installed and cured.
      2. Verify cracks and mortar-joint holes, bee holes are mortared.
      3. Verify surfaces to be coated are dry, clean, and free of efflorescence, oil, or other matter detrimental to application of coating.
      4. Beginning of installation means acceptance of substrate.
   2. **PREPARATION**
      1. Remove loose particles and foreign matter.
      2. Remove oil or foreign substance with chemical solvent that will not affect coating.
      3. Scrub and rinse surfaces with water and let dry completely.
      4. Protect adjacent surfaces not scheduled to receive coating.
      5. If applied on unscheduled surfaces, remove immediately by approved method.
      6. Protect landscaping, property and vehicles.
   3. **APPLICATION**
      1. Delay work until masonry mortar substrate is cured minimum of 60 days or as acceptable to coating manufacturer.
      2. Horizontal concrete surfaces: Cured.
      3. Apply coating in accordance with manufacturer's instructions by airless spray to provide continuous uniform coat.
      4. Apply multiple coatings recommended by manufacturer for specific porosity of surface material, minimum two coats. Apply prepared solution within 8 hours of preparation. Dilution ratio: 1 part concentrate to 9 parts water for vertical surfaces, and 1 concentrate to 5 parts water for horizontal surfaces.

**END OF SECTION**