

Part 1 General

1.1 SECTION INCLUDES

- .1 The requirements for the application of water repellents/ anti-graffitiant for exterior surfaces.

1.2 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 01 61 00 - Common Product Requirements.
- .3 Section 01 74 21 - Construction/Demolition Waste Management And Disposal.

1.3 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM).
 - .1 ASTM D2369-03, Test Method for Volatile Content of Coatings.
 - .2 ASTM D2832-92(R1999), Guide for Determining Volatile and Non-volatile Content of Paint and Related Coatings.
- .2 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB 37-GP-37M-77, Application of Hot Asphalt for damp proofing or Waterproofing.
 - .2 CAN/CGSB 37-GP-6Ma-83, Asphalt, Cutback, Unfilled, for damp proofing.

1.4 SUBMITTALS

- .1 Product Data:
 - .1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 33 00 - Submittal Procedures. Indicate VOC's for water repellent/ anti-graffitiant .
- .2 Manufacturer's Instructions:
 - .1 Submit manufacturer's installation instructions.

1.5 QUALITY ASSURANCE

- .1 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
- .2 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .3 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements. Comply with Section.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Storage and Protection:
 - .1 Deliver, handle, store and protect materials of this section in accordance with Section 01 61 00 - Common Product Requirements.
 - .2 Protect products from freezing.

1.7 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
- .4 Divert unused waterproofing material from landfill to official hazardous material collections site approved by Contract Administrator.
- .5 Do not dispose of unused waterproofing materials into sewer systems, into lakes, streams, onto ground or in other locations where it will pose health or environmental hazard.

1.8 SITE CONDITIONS

- .1 Site Environmental Requirements:
 - .1 Maintain substrate temperature at water repellent/ anti-graffitiant installation area in accordance with water repellent/ anti-graffitiant manufacturer's printed instructions.
 - .2 Apply coating during dry weather. Allow surfaces to dry minimum of 3 days after rainfall or cleaning before applying further coats.
 - .3 Protect plants and vegetation which might be damaged by water repellents/anti-graffitiant .
 - .4 Protect surfaces not intended to have application of water repellents/ anti-graffitiant.

Part 2 Products

2.1 MATERIALS

- .1 Acceptable Manufacturer: Professional Products of Kansas, Inc.
- .2 Solvent base coating: colourless, penetrating, methyl and butyl, methylmethacrylate co-polymer resin.
- .3 Water base coating: colourless.
- .4 GRAFFITI RESISTANT COATINGS
 - .1 The graffiti resistant coating product is selected as a standard of quality and based on manufacturer's recommendations for execution Application

procedure and coverage rates shall be in conformance with effectiveness of testing samples submitted, recommendation of application rates suggested, approved manufacturers standards and as a minimum, that specified herein.

- .2 Performance:
 - .1 Product shall penetrate the surface of the material to which it is applied. The active ingredients react to form silicone rubber, which remains below the surface and prevents water from penetrating while permitting water vapor transmission. The silicone rubber retains its characteristic 400 percent elongation for bridging of hairline cracks, expansion and contraction, building movement and extremes of temperature
 - .2 Water repellent / anti-graffitiant shall be unaffected by ultraviolet light, ozone, water, deicers and acids.
 - .3 Slight darkening or enhancement is acceptable.
- .3 Professional Water Sealant and Anti-Graffitiant, PWS-15 Super Strength:
 - .1 Form: Liquid.
 - .2 Color: Clear.
 - .3 Active Substance: RTV Silicone Rubber.
 - .4 Percent Active Material: 15 percent.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 PREPARATION

- .1 Clean all dirt, oil, grease, mold, mildew, efflorescence, or any other coating or material from surfaces that interfere with penetration, performance, adhesion, or aesthetics of water repellents/ anti-graffitiant. Rinse thoroughly, using pressure water spray to remove cleaner residues. Allow surfaces to dry completely before application of water repellents/ anti-graffitiant.
- .2 Repair, patch, and fill all cracks, voids, defects, and damaged areas in surface as approved by the Contract Administrator. Allow repair materials to cure completely before application of water repellents/ anti-graffitiant.
 - .1 Allow new masonry and concrete construction and repointed surfaces to cure for a minimum of 28 days before application of water repellents.

3.3 INSTALLATION

- .1 Install in accordance with manufacturer's instructions.
- .2 Comply with applicable federal, state, and local environmental regulations.
- .3 Store containers upright in a cool, dry place. Keep away from sparks and open flame. Store and handle materials in accordance with manufacturer's written instructions.

Use product within 48 hours of opening container. Use PWS-15 Super Strength (15 percent solids) within 8 hours of opening.

3.4 GRAFFITI RESISTANT COATINGS

- .1 The product shall be applied to all exposed exterior concrete masonry.
- .2 Apply graffiti resistant coating to substrate in accordance with manufacturer's written instructions, environmental regulations, and application procedures determined from the test panel results.
- .3 Apply material as shipped by the manufacturer.
 - .1 Do not dilute.
- .4 Apply to clean, dry, cured, and properly prepared surfaces.
 - .1 Do not apply to below-grade surfaces.
 - .2 Do not apply to painted surfaces.
- .5 Do not apply graffiti resistant coating to horizontal surfaces, as it may cause surface to become slippery.
- .6 Apply material using a high-volume, low pressure, pump-up sprayer (between 40 and 50 psi), with a fan tip and solvent resistant fittings. Roller, or brush of natural bristle may be used in areas where spray application is not appropriate. Do not use Airless spray equipment.
- .7 Two Coat Application for Graffiti Protection over Entire Surface:
 - .1 First Coat over Entire Surface: Apply PSW-15 Super Strength in a flood coat, from top to bottom of wall, being sure to obtain a 4 to 6 inch rundown of product from the point where the spray makes contact with the surface. Work all the way down the building covering the rundown as you go. Avoid excessive overlapping. Some substrates may require back rolling after product is applied to smooth out any rundown lines. Brush any excess product that may accumulate on ledges and other areas that may hold excess material.
 - .2 Second Coat over Entire Surface: Allow surface to dry to the touch before applying a second coat of PSW-15 Super Strength (approx. 2 hours). Repeat application as described for first coat.

3.5 APPLICATION

- .1 Apply water repellents/ anti-graffitiant using low pressure spraying apparatus, in accordance with manufacturer's printed instructions.

3.6 FIELD QUALITY CONTROL

- .1 After water repellent/ anti-graffitiant has dried, spray coated surfaces with water to verify coating coverage. Allow Contract Administrator to witness tests.

3.7 CLEANING

- .1 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION