Applied Technologies, LLC P. O. Box 18476 Fairfield, OH 45018 1-877-277-5948 (513) 939-3767

Section 07 19 23 Siloxane Water Repellants

Specifier Note: The following information is for use by the architect in developing specifications for products manufactured by Applied Technologies. The following information should be used as a guide and not viewed as a complete source of information about the product. The architect should look at the MSDS for additional safety information.

Part 1. GENERAL

1.01 SUMMARY

A. Section Includes: Siloxane Water Repellents

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard reference in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indication edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section

- B. Related Sections:
 - 1. Section 0300-Concrete

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM E-514 Standard Test Method for Water Penetration and Leakage Through Masonry
- B. National Cooperative Highway Research Program (NCHRP)
 - 1. NCHRP Report 244 Reduction of Chloride Ion Uptake

1.03 SUBMITTALS

- A. General: Submit Listed Submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit manufacturer's product data and installation instructions.
- C. Quality Assurance/Control Submittals: Submit the following:
 - 1. Certificates: Submit certificate that applicator complies with the requirements of this section.

Specifier Note: Article below should include prerequisites, standards. Limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.04 QUALITY ASSURANCE

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided.

A. Applicator Qualifications: Utilize an applicator trained and approved by waterproofing manufacturer.

1.05 DELIVERY, STORAGE, & HANDLING

- A. General; Comply with Division 1 Product Requirement Section
- Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1.06 PROJECT/SITE CONDITIONS

- A. Environmental Requirements: Comply with application temperature range 40-95°F
- B. Substrate shall be rain free 24 hours prior to application and 24 hours after application.
- C. Concrete shall be cured 28 days prior to application.

Specifier Note: Article below should include special and unique requirements. Coordinate article below with Division 1 Product Requirements Section.

1.07 WARRANTY

A. Waterproofing Warranty: Product has a five (5) year material warranty. Manufacturer's warranty shall be independent from any other warranties made by the Contractor under requirements of the Contract Documents and may run concurrent with said warranties. Should the product fail to perform as specified the manufacturer shall reimburse the purchase price of the material used or supply new material for replacement.

PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.01 SILOXANE WATER REPELLENT

- A. Manufacturer: Applied Technologies, LLC
 - 1. Contact: P. O. Box 18476 Fairfield, OH 45018 1-877-277-5948 (513) 939-3767 Fax (513) 939-3787
- B. Proprietary Products/Systems to be purchased directly from Applied Technologies by Applicator.
- C. Siloxane Water Repellants include the following:
 - 1. A-Tech Concrete Sealer
 - a. Material: Water-based emulsion siloxane water repellent
 - b. Siloxane Content: 10%
 - c. Application Method: [Brush] [Roller] [Sprayer]
 - d. Color: Milky white, dries clear
 - e. Active Content: 100%
 - f. Freeze Point: 32°F
 - g. Coverage Rate: 1 gallon/100 ft2
 - h. Water Penetration and Leakage: (ASTM E-514): 100% average reduction
 - i. Chloride Ion Uptake: (NCHRP Report 244): 94% reduction

2.02 LIMITATIONS

- A. Will not prevent water through cracks, defects or open joints
- B. Mortar and concrete shall be cured for 28 days prior to use

2.03 TESTING

A. Test a minimum 3' x 3' area on each type of masonry. Use the manufacturer's application instructions. Let test area cure before inspection. Keep test panels available for comparison throughout application procedure.

Part 3. EXECUTION

Specifier Note: Article below is an addition to the CSI SectionFormat. Revise article below to suit project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the most current written installation instructions and recommendations of the waterproofing manufacturer.

3.02 EXAMINAITON

A. Site Verification of Condition:

- 1. Verify that conditions are acceptable for application of the waterproofing system.
- 2. Do not proceed with the application until unacceptable conditions are corrected.
 - a. Substrate must not have rain for 24 hours prior to application
 - b. Substrate must not have rain for 24 hours after application
 - c. Site temperatures must be above 40°F during and after application

3.03 PREPARATION

A. Surface Preparation:

 Ensure that surfaces to be coated are structurally sound and free of moisture, dust, loose materials, frost, loose mortar or any materials or obstructions that would be detrimental to the penetration of the sealer.

3.04 APPLICATION

- A. Stir before use. Do not dilute. So not apply in high winds. Protect glass and metal from coverage. Wash off with soap and water.
 - 1. <u>Vertical Application:</u> Spray, brush or roll sealer onto substrate starting at bottom of area. Maintain 6-8" run down of sealer. Protect coated areas for 24 hours from rain.
 - 2. <u>Horizontal Application:</u> Spray, brush or roll sealer onto substrate. Maintain even coating and spread out any ponding that may occur prior to curing. Protect coated areas for 24 hours from rain

3.05 CLEAN UP

A. Clean any over application of sealer off glass and metal with soap and water before drying.