

Note to Specifiers: This specification for **Surebond SB-4000** Water Repelling Invisible Sealer has been provided in CSI format. Contact **SEK-Surebond, Inc. at (800) 932-3343** for other formats you may require.

This Breathable Water Repelling Invisible Sealer section is intended to incorporate the specific elements that make up a good quality product and calls out some installation methods that help produce a good quality installation. The format should be modified to fit within the larger set of specifications used on your project. The specifications for breathable water repelling sealer are often not freestanding, but are included into the Materials, Submittal, Installation or other portions of the sections on Unit Paving.

SECTION 1 - BREATHABLE WATER REPELLING INVISIBLE SEALER

PART 1 - GENERAL

1.01 SUMMARY

- A. **Section Includes:** Furnishing of all labor, materials, services and equipment necessary for the supply and installation of breathable water repelling sealer for unit pavements as indicated on drawings and as specified herein.
- B. **Related Sections:**
1. Section 02783 - Interlocking Concrete Unit Paving
 2. Section 02780 - Clay Unit Pavers
 3. Section 03100 - Concrete Work

1.02 REFERENCES

- A. **Applicable Standards:** The following standards are referenced herein.
1. American Society for Testing and Materials (ASTM)

1.03 SYSTEM DESCRIPTION

- A. **Breathable Concrete Sealer** - Clear, water repelling, breathable, pavement sealer.

1.04 SYSTEM PERFORMANCE REQUIREMENTS

- A. **Testing Requirements:** Pavement sealer shall be tested in accordance with the following standards and conditions, and the testing results shall meet or exceed the performance requirements as specified herein.
- B. **Independent Laboratory:** Testing shall be performed by an independent laboratory meeting the requirements of ASTM E 329-95 and certified by the United States Bureau of Standards. Testing laboratory shall obtain all samples.
- C. **Permeability:** The sealer shall conform to ASTM E 514.
- D. **Water Vapor Transmission:** The sealer shall have a minimum water vapor transmission rate of 60 grams/meter²/day at an average dry film thickness of 3.5 to 4.0 mils and a relative humidity of 40% when tested as per ASTM D 1653.

1.05 SUBMITTALS

- A. **General:** Submit listed submittals in accordance with conditions of the Contract and with Division 1 Submittal Procedures Section.
- B. **Product Data:** Submit product information, including manufacturer's specifications, installation instructions, manufacturer's recommendations, and manufacturer's certification or other data substantiating the product complies with requirements of these Contract Documents.
- C. **Manufacturer's Certification:** Provide certificates signed by manufacturer or manufacturer's representative certifying that the materials to be installed comply in all respects with the requirements of this specification.
- D. **Installer:** The installer shall provide a list of projects, including references with contact information, demonstrating at least 3 years of experience in the application of the sealer or similar materials.

1.06 QUALITY ASSURANCE

- A. **Manufacturer:** The manufacturer shall have no less than 10 years experience in manufacturing of sealant and sealer.

- B. **Installer:** The installer shall demonstrate to the satisfaction of the Architect/Engineer an acceptable level of experience in the installation of the sealer or similar products.
- C. **Pre-Installation Conference:** Prior to installation of sealer, conduct meeting with the installer, general contractor and Architect/Engineer, owner's representative, and waterproofing manufacturer's representative to verify and review the following:
 - 1. Project requirements for materials and installation as set out in Contract Document.
 - 2. Manufacturer's product data including application instructions.
 - 3. General site conditions, schedule, coordination with other activities, line and grade of the work, substrate conditions, procedures for substrate preparation and cleanup.

1.07 DELIVERY, STORAGE AND HANDLING

- A. **Delivery:** Deliver packaged materials to project site in original undamaged containers, with manufacturer's labels and seals intact.

1.08 MATERIALS

- A. The material shall be an epoxy-modified joint sand stabilizer and concrete sealer, capable of penetrating and sealing the surface of the paver without causing a high gloss effect.
- B. Shall conform to ASTM C1028 Static Coefficient of Friction requirements.
- C. The material, as delivered, will be liquid at typical ambient temperatures
- D. It shall have a VOC of less than 100 grams per liter.
- E. The material shall be designed to be installed 24 hours before or after the joint sand has been installed and stabilized. The material shall not be used as a joint sand stabilizer.
- F. The product shall be manufactured as a water repelling invisible sealer and labeled as such.
- G. The material shall comply with the criteria in 1.04 of this section.
- H. Material shall be water based and shall not contain solvents.

1.09 PROJECT CONDITIONS

- A. Comply with manufacturer's product data regarding condition of substrate to receive penetrating sealer, weather conditions before and during installation, and protection of the installed materials.
- B. Prior to the installation of the sealer all other pavement related work shall be completed, including but not limited to installation of bedding sand, edge restraints, pavers, and joint sand, to final alignment and elevation. The surface shall be clean and free from any staining, oil, dust, loose material or any other substance interfering with the penetration of the liquid material into the joint sand or the surface of the pavers. The surface of the paver shall be dry.
- C. Work shall not commence if rain or other precipitation is predicted in the area for a period of 24 hours before, during and after the application.
- D. Do not apply sealer if the temperature of the pavement is below 45°F or above 95°F, or if the air temperature is at or below 50°F and falling or at or above 90°F and rising.

1.10 EXECUTION

- A. The sealer shall be applied as per the manufacture's data sheet and these Construction Documents.
- B. The manufacture's recommended coverage rate shall be followed.
- C. Prepare a test area of 100SF for review of and approval by the Architect/Engineer. The test area shall include at least one example of every type of joint or material to be sealed. Do not proceed with the balance of the work until approval, in writing, is received. Upon approval the test area may be incorporated into the work.
- D. The surface to receive the sealer must be clean, dry and free of loose materials or chemicals (including curing compounds).
- E. Do not apply sealer if the temperature of the concrete is below 45°F or above 95°F, or if the air temperature is at or below 50°F and falling or at or above 90°F and rising. Do not apply the sealer if rain is predicted in the area within the following 24 hours.

- F. The water repelling invisible stabilizer shall be applied evenly using a low-pressure system with a nozzle pressure not exceeding 60 psi. Manual or electro-mechanical systems are acceptable.
- G. A second coat shall be applied at right angles to the first application. Apply according to manufacturer's coverage guidelines. Allow ample time for the first coat to dry before applying the second application.
- H. Draw the excess sealer off the surface with a foam or sponge roller.
- I. Do not allow excess sealer to remain on the surface.
- J. Remove all spillage promptly and rinse affected area with water.
- K. The surface should be dry to the touch within 30 minutes, Do not allow foot or vehicle traffic on the sealed surface for 24 hours after application. Although initial drying occurs quickly, complete curing will take additional time.
- L. When in conflict with any other portion of these specifications, the manufacturer's recommended installation methods shall be followed, except that in all cases the material shall be worked onto the surface of the pavers using appropriate tools.

1.11 EXECUTION

- A. Work shall cease if inclement weather (rain or strong wind) will affect the sealing operation and shall not recommence until the surface of the pavers has dried.
- B. The treated area shall be protected from rain, sprinklers, or any other form of moisture, and traffic for 24 hours after completing the application of the sealer.

(NOTE: Joint sands should conform to ASTM C33 or ASTM C144 and ICPI recommendations. Confirm with appropriate project specifications.)

END OF SECTION