

GUIDE SPECIFICATION FOR PENTREAT™ 244-100: PENETRATING SILANE WATER REPELLENT SEALER

SECTION 07 19 16

SILANE WATER REPELLANTS

Specifier Notes: This guide specification is written according to the Construction Specifications Institute (CSI) MasterFormat. The section must be carefully reviewed and edited by the architect or engineer to meet the requirements of the project. Coordinate this section with other specification sections and drawings.

Specifier Notes: PENTREAT 244-100 is a penetrating, 100% active silane sealer that inhibits water and chloride ion penetration in concrete and masonry structures. PENTREAT 244-100 is a hydrophobic, impregnating sealer that helps prevent chloride-induced corrosion of rebar, scaling, spalling, freeze-thaw damage, and other causes of debilitating concrete.

PENTREAT 244-100 is designed for use on horizontal and vertical, new and existing concrete and masonry above-grade surfaces. Suitable applications include residential commercial, industrial, and municipal projects. PENTREAT 244-100 can be used on all types of concrete, including parking structures, driveways, plazas, patios, walkways, median barriers, bridge decks and piers, ramps, traffic barring concrete, marine structures, vehicular repair and wash down facilities, and loading docks.

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Application of clear, water repellent sealer for concrete and masonry surfaces.

1.02 RELATED SECTIONS

Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

- A. Section 03 05 00 - Common Work Results for Concrete.
- B. Section 03 30 00 - Cast-in-Place Concrete.
- C. Section 04 20 00 - Unit Masonry.

1.03 SUBMITTALS

- A. Comply with Section 01 33 00 - Submittal Procedures.
- B. Submit manufacturer's product data and application instructions.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in a clean, dry area in accordance with manufacturer's instructions.
- C. Keep product from freezing.

- D. Avoid direct contact with this product as it may cause mild to moderate irritation of the eyes and/or skin.
- E. Protect materials during handling and application to prevent damage or contamination.
- F. Do not mix any compound containing solvent.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply product when surface temperatures are expected to be below 40° F (4° C) or above 90° F (32° C) during or within eight hours of expected application.
- B. Do not apply to frozen concrete.
- C. Do not apply to surfaces that are to receive caulks or sealants.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. W. R. MEADOWS®, INC., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax: (847) 683-4544. Website: www.wrmeadows.com.

2.02 MATERIALS

- A. PENTREAT 244-100 Water Repellent Penetrating Sealer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces to receive water repellent sealer. Notify architect if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.
- B. Perform a test application on each type of surface prior to full-scale application to determine suitability and final appearance.
- C. Test using the recommended application instructions.
- D. Let area dry thoroughly before inspection.

3.02 SURFACE PREPARATION

- A. Protect adjacent surfaces not designated to receive water repellent.
- B. Wait a minimum of 14 days before applying the water repellent to new concrete.
- C. Clean and prepare surfaces to receive water repellent in accordance with manufacturer's instructions, ensuring that all stains, oil, grease, form release agents, dust and dirt are removed prior to application.
- D. Ensure surface is clean and thoroughly dry. The residual moisture must not exceed 4% and the surface temperature should be 5.5° F (3° C) above the dew point.
- E. Apply water repellent on substrate and observe the rate of penetration. If it does not absorbed by the surface immediately, then additional cleaning of surface is required.

3.03 APPLICATION

- A. Apply with low-pressure sprayer (<50 psi) using a 0.1 gallon/minute (0.379 L/minute) spray rate, allowing the water repellent to totally saturate the surface.
- B. Horizontal Application Instructions
 - 1. Saturate in a single application at a coverage rate of 200 ft.²/gal. (4.91 m²/L).
 - 2. Use enough to keep surface wet for 3-5 minutes.
 - 3. Broom out puddles until they soak in.
- C. Vertical Applications Instructions
 - 1. Apply to a visibly dry and absorbent surface.
 - 2. Saturate from the bottom up, creating a 4" - 8" (10 - 20 cm) rundown below the spray contact point.
 - 3. Let the first application penetrate for 3 – 5 minutes.
 - 4. Re-saturate while surface is still wet.

3.04 PROTECTION

- A. Protect treated surfaces from rain for a minimum of six hours.
- B. Restrict foot traffic for a minimum of four hours at 68° F (20° C). This time may need to be extended based on air and surface temperatures.

END OF SECTION