



**PLANISEAL WR 40**  
**Clear, Water-Based, 40%-Silane Water Repellent**

**SECTION 07 19 00**  
**Water Repellents**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Products for a fast-beading water repellency for concrete, block, brick and stone.

**1.2 RELATED SECTIONS**

- A. Section 03 30 00 – Cast-in-Place concrete
- B. Section 03 40 00 – Pre-cast concrete

**1.3 SUBMITTALS**

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Submit manufacturer's data sheets and safety data sheets (SDS) on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Samples: Submit samples of specified traffic deck system. Samples shall be construed as examples of finished color and texture of the system only.
- D. Warranty: Submit copy of manufacturer's standard warranty.

**1.4 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.
- B. Applicator Qualifications: Minimum 2 years' experience installing similar products.
- C. Field Sample:
  - 1. Install a sizeable field sample at the discretion of the engineer of record (EOR).
  - 2. Apply material in accordance with manufacturer's written application instructions.
  - 3. Field sample will be standard for judging color and texture on remainder of project.
  - 4. Maintain field sample during construction for workmanship comparison.
  - 5. Do not alter, move or destroy field sample until work is completed and approved by owner's representative.
- D. Requirement of Regulatory Agencies: Comply with applicable codes, regulations, ordinances and laws regarding use and application of coating systems.

**1.5 PRE-INSTALLATION MEETINGS**

- A. Convene at least two weeks prior to starting work of this section.

**1.6 DELIVERY, STORAGE AND HANDLING**

- A. Deliver: Materials shall be delivered in original sealed containers, clearly marked with



supplier's name, brand name, type of material and legible lot number.

- B. Storage and Handling: Recommended material storage temperature is 75°F (24°C). Handle products to prevent damage to container. All materials shall be stored in compliance with fire and safety requirements. Do not store at high temperatures or in direct sunlight.

## 1.7 PROJECT CONDITIONS

- A. Prior to starting work, read and follow the Safety Data Sheet (SDS) and container labels for detailed health and safety information.
- B. Do not proceed with application of material when surface temperature is less than 40°F (4°C) or if precipitation is imminent. Ambient temperature should be a minimum 40°F (4°C) and rising, and more than 5 degrees Fahrenheit (2.8 degrees Celsius) above dew point. Special precautions are to be taken when ambient and/or surface temperatures are approaching, at or above 100°F (38°C), and it may be necessary to limit material application to evening hours for exterior exposed decks.
- C. Coordinate waterproofing work with other trades. Applicator shall have sole right of access to the specified area for the time needed to complete the application and allow the vehicular traffic coatings to cure adequately.
- D. Protect plants, vegetation and other surfaces not to be coated against damage or soiling.
- E. Keep products away from spark or flame. Do not allow the uses of spark-producing equipment during application and until all vapors have dissipated. Post "No Smoking" signs.
- F. Maintain work area in a neat and orderly condition, removing empty containers, rags and rubbish daily from the site.

## 1.8 WARRANTY

- A. Upon request, MAPEI shall offer a manufacturer's standard warranty for institutional, commercial, industrial and high-rise/multi-family residential projects only. A properly submitted warranty request form shall be submitted prior to start of project.

## PART 2 PRODUCTS

### 2.1 MANUFACTURER

- A. Product Performance:

Chemical composition	40% silane
Chloride ion content reduction (5-day air-dry) NCHRP Report 44, Series II	85.6%
VOCs (Rule #1113 of California's SCAQMD)	< 350 g per L
Color	Milky white (dries clear)
- B. Acceptable Manufacturer:

MAPEI North America

1144 E. Newport Center Dr.; Deerfield Beach, FL 33442

Toll-Free for CRS Technical Services: Tel. 888-365-0614

Email: [CRS@mapei.com](mailto:CRS@mapei.com)

Web: [www.mapei.com](http://www.mapei.com)



C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

D. Substitutions: Not permitted.

## 2.2 WATER REPELLENTS

A. A clear, high-performance, 40%-silane penetrating water-repellent transparent and sealer designed to protect concrete and masonry against moisture/chloride intrusion.

1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Planiseal WR 40.

## PART 3 EXECUTION

### 3.1 EXAMINATION

A. Properly prepared concrete at least 28 days old, stable, sound and dry.

B. Porous block, stone and brick substrates.

### 3.2 PREPARATION

A. Remove all dust, efflorescence, oil, dirt, curing compounds, form-release agents and any other contaminants before product application.

B. Prepare concrete surface to achieve an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #1 to #2.

C. Ensure that surfaces are dry for at least 24 hours before installation of Planiseal WR 40, to allow maximum penetration of the product.

D. Planiseal WR 40 will not seal cracks or voids. Crack control, patching and expansion joint filling should be performed before application of Planiseal WR 40.

E. Mask all adjacent surfaces to prevent overspray or dripping.

F. Allow recently repaired areas of mortar to cure for 72 hours before application of Planiseal WR 40. Before exposure to Planiseal WR 40, sealants should cure in accordance with the manufacturer's recommendations.

### 3.3 MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

A. Planiseal WR 40 is ready to use. Stir the product thoroughly before and during application.



### 3.4 INSTALLATION

Read all installation instructions thoroughly before installation.

- A. Apply Planiseal WR 40 by a low-pressure sprayer with an adequate delivery tip so that the surface to be treated is properly wetted during application.
- B. Alternatively, for horizontal surfaces, Planiseal WR 40 can be poured and evenly distributed with a roller or broom.
- C. Evenly flood the surface in a consistent manner with a low-pressure sprayer, roller or broom, ensuring an adequate overlap of material when applying. Saturate the surface, allowing for an overlap of 8" to 10" (20 to 25 cm). For applying Planiseal WR 40 on vertical surfaces, start at the bottom of the wall and work upward.
- D. If the surface is extremely porous, apply a second coat before the surface dries but once the first application has been completely absorbed.

END OF SECTION