



Planiseal[®] WR 40

**Water-Based, 40%-Silane,
Penetrating Water Repellent**



DESCRIPTION

Planiseal WR 40 is a water-based, 40%-silane, penetrating water repellent and sealer designed to protect concrete and masonry against moisture/chloride intrusion.

FEATURES AND BENEFITS

- Penetrates deep into the substrate, chemically reacting to provide long-lasting protection against moisture and chloride intrusion
- Colorless and does not alter surface appearance or texture
- Breathable, allowing interior moisture to escape
- VOC-compliant with a water-based composition
- Easy to apply and one-component

WHERE TO USE

- Parking, bridge and stadium decks
- Use on vertical and horizontal surfaces to protect from the intrusion of water
- Above- and on-grade, interior/exterior surfaces
- Precast, cast-in-place and prestressed concrete, block, stone and brick
- Driveways, sidewalks and walkways

SUITABLE SUBSTRATES

- Existing and new, properly prepared and cured concrete and masonry substrates at least 28 days old

SURFACE PREPARATION

- All substrates must be structurally sound, dry, solid and stable.
- Remove all dust, efflorescence, oil, dirt, curing compounds, form release agents and any other contaminants before product application.
- Prepare concrete surface to achieve an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #1 to #2.
- Ensure that surfaces are dry for at least 24 hours before installation of *Planiseal WR 40*, to allow maximum penetration of the product.
- *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*.
- Mask all adjacent surfaces to prevent overspray or dripping.
- 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.

MIXING

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

- *Planiseal WR 40* is ready to use. Stir the product thoroughly before and during application to ensure a uniform consistency and that no separation of the product takes place.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

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1. Apply *Planiseal WR 40* by a low-pressure, non-atomizing spray with an adequate delivery tip so that the surface being treated is properly wetted during application.
2. Alternatively, for horizontal surfaces, *Planiseal WR 40* can be poured and evenly distributed with a roller or broom.
3. 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.
4. If the surface is extremely porous, apply a second coat before the surface dries but once the first application has been completely absorbed. Avoid puddling, and remove any excess material with a broom.

CLEANUP

- Clean tools immediately after use with hot water. Dried residue should be cleaned with hot water and scrubbed with a plastic sponge.

LIMITATIONS

- Apply *Planiseal WR 40* when ambient, material and substrate temperatures are in the range of 40°F to 95°F (4°C to 35°C).
- Use in well-ventilated areas.
- Do not apply *Planiseal WR 40* to a frost-filled surface or when temperatures are below 40°F (4°C).
- Do not allow puddling or surface buildup of *Planiseal WR 40*.
- Protect non-absorbent surfaces such as glass, metal, glazed brick and tile.
- Do not apply *Planiseal WR 40* in inclement weather, or when rain is anticipated within 12 hours of application.
- Protect the product from freezing. If it freezes, discard it in accordance with local, state/provincial and federal regulations.
- Do not dilute *Planiseal WR 40*.
- Not for use as a waterproofing product

Consult MAPEI's Technical Services Department for installation recommendations regarding any substrates and conditions not listed.

Product Performance Properties

Laboratory Tests	Results
Depth of penetration	< 3/8" (10 mm)
Water absorption reduction, after immersion – ASTM C642	75.4%
Water absorption reduction, after boiling – ASTM C642	71.2%
Chloride ion content reduction (5-day air-dry) per NCHRP Report 244, Series II	85.6%
Water absorption reduction (5-day air-dry) per NCHRP Report 244, Series II	70.1%
Chloride ion content reduction per NCHRP Report 244, Series IV	86.7%
Waterproofing after abrasion per Alberta B388, Type 1b	67.1%
Moisture vapor transmission per Alberta B388, Type 1b	71.5%
VOCs (Rule #1113 of California's SCAQMD)	< 350 g per L
Active ingredients, by weight	40%
Density	0.95 g per cm ³
Flash point	158°F (70°C)

Shelf Life and Product Characteristics (before mixing)

Shelf life	6 months when stored in original, unopened packaging at 40°F to 90°F (4°C to 32°C)
Chemical composition	Alkoxy silane
Consistency	Liquid
Color	Milky white (dries clear)

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

Application Properties

Drying time at 73°F (23°C)	4 to 6 hours
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CSI Division Classification

Water Repellents	07 19 00
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Packaging

Size
Pail: 5 U.S. gals. (18.9 L)
Drum: 55 U.S. gals. (208 L)

Approximate Coverage*

Size	Coverage
Per 1 U.S. gal. (3.79 L)	100 to 200 sq. ft. (9.29 to 18.6 m ²)

* Coverage varies depending on the porosity of the substrate.

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Refer to the SDS for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI meets the health and well-being requirements of product certification programs, contact the MAPEI Sustainability Team at 1-800-992-6273.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at

www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use,

and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

We proudly support the following industry organizations:



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Customer Service

1-800-42-MAPEI (1-800-426-2734)

Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)

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