

Mapecoat Deck S

Acrylic, Urethane Waterproofing Sealer for Concrete
and Masonry



DESCRIPTION

Mapecoat™ Deck S is a water-based, urethane-modified, acrylic coating specially designed for use on new and previously coated concrete and masonry as a waterproofing sealer. *Mapecoat Deck S* has an attractive, low-sheen finish that creates a durable wear surface for residential and commercial indoor/outdoor floors, decks, balconies and walkways. An optional high-gloss clear coat can be used to provide additional protection and dimension for creative effects or broadcast elements. *Mapecoat Deck S* offers enhanced adhesion and durability to withstand pedestrian and light vehicular traffic with the convenience and ease of application of a single-component product.

FEATURES AND BENEFITS

- Standard or custom color selection in a smooth, satin finish
- Optional clear gloss topcoat
- Suitable for application to slab on grade
- UV-resistant for better color retention
- Durable film formation resistant to hot tire pick-up
- Excellent dirt pick-up resistance (DPR) and easier cleanability
- Integrate with other MAPEI Construction and Restoration Systems products for a complete repair and waterproofing system.

WHERE TO USE

- Balconies, decks, walkways and floors
- Above-grade exterior surfaces
- For use on new or previously coated substrates
- For enhanced aesthetics over repairs and general protection

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

SUITABLE SUBSTRATES

- Fully cured concrete
- Masonry and stucco
- New and previously painted surfaces

SURFACE PREPARATION

- Substrates should be clean, sound, stable, frost-free, dry and free of dirt, residue, oils, grease, curing compounds, laitance and any contaminant that may interfere with adhesion. Substrates should be prepared using engineer-approved methods.
- Ensure there is adequate surface profile on the substrate to maintain adequate slip resistance, particularly any areas that may become wet.
- *Mapecfloor™ Filler* may be added (at about 2 U.S. oz. per U.S. gallon, or 59 mL per 3.79 L) to the final topcoat for added slip resistance.
- Previously painted surfaces should be sound and well adhered. Glossy surfaces need to be abraded to provide adequate key.
- Remove unsound masonry by wire brushing or mechanically chipping away material to provide a firm surface.
- New concrete should be allowed to cure for 28 days before application.
- Prepare concrete to a minimum concrete surface profile (CSP) of #2.

MIXING

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

- Slowly stir *Mapecoat Deck S* to ensure uniformity and minimize air entrapment.
- *Mapecoat Deck S* is ready to use. Do not dilute.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation. Contact MAPEI's Technical Services Department for more detailed recommendations.

1. Air, material and substrate temperatures during application must be between 40°F and 95°F (4°C and 35°C).
2. Apply *Mapecoat Deck S* by roller or paint sprayer directly to the prepared substrate.

3. Apply *Mapecoat Deck S* to achieve a wet film thickness (WFT) of 5 to 7 mils, which results in coverage of 230 to 320 sq. ft. per U.S. gal. (5.63 to 7.84 m² per L) per coat.
4. If specified, apply *Mapecoat Deck S Clear* to achieve a WFT of 4 to 5 mils, which results in coverage of 320 to 400 sq. ft. per U.S. gal. (7.84 to 9.8 m² per L) per coat.
5. Two coats are recommended to achieve optimum film build and hiding. Spread rates may vary depending on surface texture and porosity.
6. Ensure that the application is always worked to a natural break and that a wet edge is maintained throughout the application.
7. Roller application: Use a 1/4" to 3/8" (6 to 10 mm) nap roller cover depending on surface texture. Always keep the roller loaded and moving slowly to avoid spatter or foaming. Maintain a uniform WFT during application, finishing the coated area by lightly rolling the surface in one direction. Allow to dry thoroughly before applying a second coat.
8. Spray application: Use an airless sprayer with a 0.017 to 0.019 tip.

CLEANUP

- Use water to clean tools and equipment immediately after use. Dried material may require mechanical means for removal.

LIMITATIONS

- Do not use as a primary waterproofing membrane.
- For athletic or recreational/sports facilities, refer to MAPEI's Products for Sports Surfaces product line.
- Application on smooth floors or wet areas is not recommended without a suitable surface profile and/or an application with anti-slip additives. Refer to the Surface Preparation section above.
- Do not apply *Mapecoat Deck S* when ambient or substrate temperatures are below 40°F (4°C) or expected to fall below 40°F (4°C) within 24 hours, or when these temperatures are higher than 95°F (35°C).
- Do not apply *Mapecoat Deck S* if the relative humidity is higher than 90%.
- Do not use *Mapecoat Deck S* where excessive hydrostatic pressure from the back or underside of the substrate may be present.
- Protect *Mapecoat Deck S* from freezing and discard it if it freezes.
- Do not use *Mapecoat Deck S* in total immersion or when it is subject to migrating moisture or rising dampness.
- Substrates must be dry before application of *Mapecoat Deck S*. Allow substrates sufficient time to dry after rain; at least 24 hours of drying time is recommended.

Product Performance Properties

Laboratory Tests	Results
Appearance	Satin: 20-35 @ 60 Gloss: 70-85 @ 60
Weight	9.85 ± 0.5 lbs. per U.S. gal. (1.18 g per cm ³)
Solids by weight	43.5% ± 1.5%
Solids by volume (pastel tint base)	29.0% ± 1.0%
Water-vapor permeance – ASTM D1653 at 7 mils in dry film thickness (DFT)	10 perms

Water-vapor permeance – ASTM D1653 at 4 mils DFT	32 perms
Adhesion to concrete – ASTM D7234	> 700 psi (4.83 MPa)
Flexibility (Mandrel) – ASTM D522	1/8" (3 mm); Passed (no cracking)
Wet DCOF ANSI A326.3 (pastel tint base)	0.42
Elongation – ASTM 2370	70%
Tensile strength – ASTM 2370	1,800 psi (12.4 MPa)
Hot tire pick-up – ASTM WK14355	Passed
Impact resistance – ASTM 2794	Intrusion 120 in.lb.
Taber abrasion (CS-10, 500g, 500 cycles), mass loss	38 grams
Freeze/thaw resistance – ASTM 6944	Passed
Water resistance – ASTM D1735-14	Passed
Water absorption – ASTM C642	40.5% reduction
VOC content (SCAQMD Rule 1113)	< 100 g per L
Typical VOC content per SCAQMD Rule 1113 testing methods	71 g per L

Shelf Life and Product Characteristics

Shelf life	1 year in original, unopened container at 73°F (23°C)
Consistency	Heavy, viscous liquid
Colors	<ul style="list-style-type: none"> • 2 tint bases (pastel and medium) • An unlimited color tint selection using MAPEI's ColorMap™ automatic coloring system • 1 high-gloss clear coat

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

at 70°F (21°C) and 50% relative humidity

Drying time, dry to touch	45 minutes
Drying time before recoating or topcoating	2 hours
Drying time until full cure	24 hours

CSI Division Classification

Pedestrian Traffic Coatings	07 18 13

Packaging

Pastel base, pail: 5 U.S. gals. (18.9 L)
Medium base, pail: 5 U.S. gals. (18.9 L)
Clear base, pail: 3.5 U.S. gals. (13.2 L)

Approximate Coverage*

Thickness	Coverage
5 mils WFT or 1.5 mils DFT	320 sq. ft. per U.S. gal. (7.84 m ² per L)
10 mils WFT or 3 mils DFT	160 sq. ft. per U.S. gal. (3.92 m ² per L)

* Coverage varies depending on the surface porosity and texture of the surface as well as on job requirements.

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet (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 products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

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 nor 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.**

CONTACT INFORMATION

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For the most current product data and BEST-BACKEDSM warranty information,
visit www.mapei.com.
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