Concrete Renew

High-Performance Concrete Resurfacer





DESCRIPTION

Concrete Renew is a one-component, polymer-modified, cementitious material for the resurfacing of existing concrete to provide a like-new look to concrete surfaces.

FEATURES AND BENEFITS

- Easily installed from 1/16" to 1/8" (1.5 to 3 mm) per lift
- Natural, light gray color
- Can be finished by broom or trowel to resemble surrounding concrete
- Compatible with most sealers, dyes and stains
- Freeze/thaw-stable
- Apply by trowel, broom, hopper gun or plaster pump.
- Can be used with stencils to create a decorative system

WHERE TO USE

- Interior or exterior use
- Resurfacing of sound concrete surfaces
- Residential vehicle and pedestrian applications
- Textured "skip-trowel" finishes
- Resurfacing of old concrete retaining walls
- Dressing up worn or spalled concrete to provide a like-new finish

SURFACE PREPARATION

- Concrete surfaces must be clean and free of loose particles, efflorescence, paints, tars, grease, asphaltic materials, bond breakers, curing compounds, wax, and any foreign substance or any conditions that may affect product performance or proper bonding.
- Mechanically profile and prepare concrete surfaces by engineer-approved methods in accordance with the most current ICRI 310.2R guidelines to obtain a concrete surface profile (CSP) between #2 and #3.
- Ensure that the concrete substrate is saturated surface-dry (SSD) before installation of *Concrete Renew*.
- Some substrates may benefit from priming. For priming absorbent concrete substrates, use a mixture created from a 3-to-1 ratio of water to *Planicrete*® *UA*.

MIXING

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

- 1. One 25-lb. (11.3-kg) bag of *Concrete Renew* requires 3.7 U.S. qts. (3.50 L) of water. For additional performance, the same amount of *Concrete Renew* can instead be mixed with 3.9 U.S. qts. (3.69 L) of liquid created from a 3-to-1 ratio of water to *Planicrete UA*.
- 2. Place 3/4 of the desired mixing liquid into a mixing container.
- 3. Slowly add *Concrete Renew* powder while mixing; always add the powder to the liquid. While mixing, add as much of the remaining 1/4 mixing liquid as needed to achieve the desired consistency. Do not add more mixing liquid than specified.
- 4. Mix with a medium-speed drill (at 500 to 850 rpm) and a ribbon paddle for at least 2 minutes, ensuring a lump-free consistency.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

- 1. For best results, apply material in the cool of the day, protected from wind and direct sunlight.
- 2. If priming the prepared substrate, use a roller to apply a mixture with a 3-to-1 ratio of water to *Planicrete UA*. Ensure that there are no puddles.
- 3. Immediately apply a scrubcoat of the mixed *Concrete Renew* to the prepared surface.
- 4. Apply Concrete Renew to the desired depth by trowel, hopper gun or plaster pump.
- 5. Finish to the desired appearance by trowel or broom.
- 6. For applications where Concrete Renew will be exposed to vehicular traffic (such as cars and light trucks), always use Planicrete UA mixed with Concrete Renew and utilize a three-coat application system, preparing the substrate to an SSD condition and with a scrubcoat before the application of each coat. Apply the first layer and create a brush finish or light broom texture. After at least 3 hours, apply a second layer and create a brush or light broom finish at a 90-degree angle to the first layer. After at least 3 hours, apply the third and final layer and create a brush or light broom finish in the same direction as the first layer. Once it is dry, apply a suitable sealer.

EXPANSION AND CONTROL JOINTS

- Honor all expansion and control joints.
- Fill any saw-cut joints with a suitable joint sealant to protect against water intrusion and the potential of progressive freeze/thaw damage.
- Do not allow Concrete Renew to bridge any moving expansion joint, crack or control joint.

CURING AND PROTECTION

- Concrete Renew is self-curing.
- Concrete Renew can be sealed with compatible water-based sealers within a few hours of placement when temperatures are above 70°F (21°C).
- Avoid walking on the installed surface for at least 1 hour after installation, depending on temperature and humidity conditions.
- When applying and curing the product, protect it from excessive heat and high winds, which can cause premature surface drying.
- Protect from traffic, dirt, dust and moisture until *Concrete Renew* is cured and a sealer has been installed.
- Always seal Concrete Renew with a compatible sealer such as $Mapefinish^{TM}$ Wet Look water-based, film-forming sealer as early as 3 hours after Concrete Renew has been placed and has cured. Concrete Renew must cure for 7 days before the application of solvent-borne sealers.
- Always protect surrounding landscapes, hardscapes and structures during all phases of installation.

CLEANUP

• Wash hands and tools with water promptly before material hardens. Cured material must be mechanically removed.

LIMITATIONS

- Do not install over substrates containing asbestos.
- Do not install over standing water or if rain is expected within 4 hours of the installation.
- General application thickness should be no greater than 1/8" (3 mm) per lift.
- Two or more applications of *Concrete Renew* are generally required.
- Before application, test all surface treatments on a small sample area to ensure that the desired results will be achieved.
- Always fill in deep areas, spalls or cracks with Mapecem[®] Quickpatch. Dormant cracks can be filled with Epojet[™] [NA] or Epojet LV [NA] to reduce chances of re-cracking in the future (for details, see the relevant Technical Data Sheet). MAPEI does not warrant that cracks will not reappear, even when following established repair techniques.
- Verify compatibility before coloring with iron oxide pigments and liquid color packs.
- Concrete substrate and ambient temperatures must be between 41°F and 95°F (5°C and 35°C) before
 application. Temperatures must be maintained within this range for at least 8 hours after the installation of
 Concrete Renew. Allow for extra curing time when temperatures are below 65°F (18°C). Follow ACI
 guidelines when installing above 85°F (29°C).
- Concrete Renew is not intended for use as an industrial wear surface or for heavy truck traffic.
- Sealer applications should be completed within 24 hours of the application of Concrete Renew.

- When adding powdered oxides or liquid colorants, consult the manufacturer regarding proper use and dosages. Always perform a mockup to ensure that the desired results and finish are achieved.
- Do not mix more material than can be applied within 20 minutes.
- Do not retemper or add more mix water. Remixing or adding more water will change the final cured color.
- Concrete Renew can be used for minor patching less than 3/16" (4.5 mm) deep and 2" (5 cm) in diameter. For patching, reduce the mixing liquid by 40% and mix to a stiff consistency. For patching areas greater than 3/16" (4.5 mm) in depth or greater than 2" (5 cm) in diameter, use Mapecem Quickpatch.
- For applications subject to freeze/thaw conditions or beyond light residential use, always mix *Concrete Renew* with a mixing liquid created from a 3-to-1 ratio of water to *Planicrete UA*.
- Do not expose *Concrete Renew* to rolling or dynamic loads for at least 24 hours after installation. Note: Cooler conditions require longer curing times before exposure to significant traffic.

Product Performance Properties

Laboratory Tests	Results
Compressive strength, 28 days – ASTM 109	> 4,000 psi (27.6 MPa)
Flexural strength, 28 days – ASTM C348-02	> 850 psi (5.86 MPa)
VOCs (Rule #1168 of California's SCAQMD)	0 g per L

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.

Shelf Life and Application Properties

at 73°F (23°C) and 50% relative humidity

Shelf life	1 year when stored in original, unopened packaging
Pot life	20 minutes
Open time	5 to 20 minutes after applying
Application temperature range	41°F to 95°F (5°C to 35°C)
Initial set (Vicat)	60 to 90 minutes
Final set (Vicat)	2 hours
Drying/curing time	24 hours
Color	Natural, light gray

CSI Division Classifications

Maintenance of Concrete	03 01 00

Packaging

Size

Bag: 25 lbs. (11.3 kg)

Approximate Coverage*

per 25 lbs. (11.3 kg)

Yield

 $0.28 \text{ cu. ft.} (0.0079 \text{ m}^3)$

ADDITIONAL INFORMATION

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



^{*} Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions and setting practices.

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. <u>ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.</u>

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

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