



Concrete Renew™

High-Performance Concrete Resurfacer



DESCRIPTION

Concrete Renew is a one-component, polymer-modified cementitious material for the resurfacing of existing concrete. It is suitable for broom finishes and decorative trowel finishes on sidewalks, driveways, steps and anywhere that has exposed concrete. *Concrete Renew* features a natural light gray color that provides a uniform, like-new look to concrete surfaces.

FEATURES AND BENEFITS

- Natural light gray color gives concrete a “like-new” look.
- Highly versatile, allowing for broom and decorative trowel finishes
- Promotes a slip-resistant surface
- Compatible with most sealers, dyes and stains
- Advanced polymers promote superior adhesion and bond strength.
- For additional strength and durability, mix with MAPEI’s *Planicrete™ UA* (see Technical Data Sheet).
- Freeze/thaw-stable
- *Concrete Renew* must be sealed with a suitable film-forming water-based sealer after it has cured. Sealer applications should be completed within 24 hours of the application of *Concrete Renew*.
- Apply by trowel, squeegee, broom, hopper gun and plaster pump.

WHERE TO USE

- Resurfacing of pool decks, patios, sidewalks and driveways
- Commercial and residential vehicle- and foot-traffic applications
- Textured “skip-trowel” finishes
- Resurfacing of old concrete retaining walls
- Areas where slip resistance is required
- Dressing up worn or spalled concrete to provide a like-new finish

LIMITATIONS

- Do not install over substrates containing asbestos.
- General application thickness is typically as thick as the coarse aggregate in *Concrete Renew* and depends on desired finish and installer capability. Maximum thickness of a single coat of *Concrete Renew* is 1/8” (3 mm).
- Verify compatibility before coloring with iron oxide pigments and liquid color packs.
- *Concrete Renew* can be applied from 41°F to 95°F (5°C to 35°C). Allow for extra cure 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 where subject to heavy truck traffic.



SUITABLE SUBSTRATES

- Sound, stable, clean, vertical and horizontal concrete surfaces, both interior and exterior

SURFACE PREPARATION

- All substrates must be structurally sound, stable and clean and exhibit a profile of CSP2 or greater.
- Thoroughly clean the surface of any substance that could interfere with the bond of the installation material, including dirt, paint, tar, asphalt, wax, oil, grease, latex compounds, sealers, curing compounds, form release agents, laitance, loose toppings, foreign substances and adhesive residues. In all cases, clean aggressively and perform a mockup on an adequately sized test area in order to properly evaluate bond and aesthetic results.
- Ensure that any concrete that has been damaged or weakened (such as by deicing salts) is mechanically removed before application of *Concrete Renew*. Remove concrete until realizing a sound substrate with a pH > 10, and demonstrating a minimum tensile pull strength of 175 psi (1,21 MPa).
- 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*.
- Always fill in deep areas, holes or cracks with appropriate concrete restoration materials, such as *Planitop® X*, *Mapecem® Quickpatch* or *Planibond® EBA*. Dormant cracks can be filled with *Planibond EBA* to reduce chances of re-cracking in the future (see Technical Data Sheet for details). MAPEI does not warrant that cracks will not reappear, even when following established repair techniques.
- Before application of *Concrete Renew*, prepare concrete substrate to a saturated surface-dry (SSD) condition. Do not apply on standing water.
- Some substrates may benefit from priming. Contact MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

MIXING

Note: Choose all appropriate safety equipment before use. Refer to Material Safety Data Sheet (MSDS) for more information.

1. Into a clean mixing container, pour the required amount of cool, clean, potable water. If available water is not cool, chill water to below 70°F (21°C). Add *Concrete Renew* powder slowly while stirring. Mix water and *Concrete Renew* powder at a ratio of up to 3.7 U.S. qts. (3,50 L) of water per 25-lb. (11,3-kg) bag of *Concrete Renew*. The mixing ratio must remain consistent. Do not overwater material.

2. 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.
3. When adding powdered oxides or liquid colorants, add to mix water and stir for 30 seconds before adding *Concrete Renew* powder. Always perform a mockup to ensure desired results and finish are achieved.
4. Do not mix more material than can be applied within 20 minutes.
5. Do not retemper or add more mix water. Remixing or adding more water will change the final cured color.
6. Do not apply over standing water or wet surfaces.
7. When rain is expected, do not apply before the material can be well-cured or a sealer can be applied.
8. *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 mix water by 40% and mix to a stiff consistency. For patching areas greater than 3/16" (4,5 mm) depth or greater than 2" (5 cm) diameter, use *Mapecem Quickpatch*.
9. For applications subject to freeze/thaw, or beyond light residential use, always use *Planicrete UA* as an admixture. Review the *Planicrete UA* TDS to determine appropriate mixing ratios.

PRODUCT APPLICATION

1. In temperatures above 85°F (29°C), follow ACI hot-weather application guidelines. As a general practice, for best results, apply material in the cool of day, protected from wind and direct sunlight.
2. Read all installation instructions thoroughly before installation. Apply with trowel, hopper gun, plaster pump or other acceptable method immediately after mixing. General application thickness should be no greater than the coarse aggregate in *Concrete Renew*.
3. Always work a scrub coat of *Concrete Renew* into the substrate, scrubbing material in and following immediately with additional material while the scrub coat is still wet.
4. Application techniques for each of the following methods:
 - 4.1 **Trowel**: Immediately after mixing, pour onto the surface and trowel to a smooth, flat finish. Immediately broom or finish to desired texture.
 - 4.2 **Squeegee**: Immediately after mixing, pour onto the surface and squeegee (flat blade) to a smooth, flat finish. Immediately broom or finish to desired texture.
 - 4.3 **Broom**: Immediately after mixing, pour onto the surface and broom or finish to desired texture.

Product Performance Properties

Laboratory Tests	Results
Pot life	20 minutes
Open time	5 to 20 minutes after applying
Flammability	This product is certified by MAPEI as "noncombustible" in accordance with IMO FTP Code requirements.
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 time	24 hours (cure time)
Compressive strength, 28 days (ASTM 109)	> 4,000 psi (27,6 MPa)
Flexural strength, 28 days (ASTM C348-02)	> 850 psi (5,86 MPa)
Color	Natural light gray

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

Shelf life	1 year when stored in original containers at 73°F (23°C) in a dry, heated area
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CSI Division Classification

Maintenance of Concrete	03 01 00
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Packaging

Product Code	Size
11125000	Bag: 25 lbs. (11,3 kg)

Approximate Product Coverage

Size	Yield
25 lbs. (11,3 kg)	50 to 75 sq. ft. (4,65 to 6,97 m ²)

* Coverages shown are for estimating purposes only. Actual jobsite coverages may vary according to substrate conditions and setting practices.

4.4 **Hopper gun:** Immediately after mixing, pour into hopper gun outfitted with a large orifice and spray with air pressure of 8 to 15 psi. Cover 75% to 100% of the surface using a circular spray pattern. When spraying material, hold hopper gun nozzle parallel to the surface at about 2 ft. (0,61 m) from the surface. Broom or finish to desired texture.

4.5 **Plaster pump:** Several manufacturers make pumps and spray equipment for applying high-viscosity, fluid cementitious materials. Follow the guidelines for the equipment being used.

5. When applying in situations where *Concrete Renew* will be exposed to vehicular traffic (such as cars and light trucks), always use *Planicrete UA* with *Concrete Renew* and utilize a three-coat application system, preparing the substrate to an SSD condition and with a scrub coat before the application of each coat. Apply the first coat and brush to reflect the desired finished look. After at least 3 hours, when material is hard and dry, apply a second coat and brush in motions at a 90° angle to the first coat. Once dry (after at least 3 hours), apply the third and final coat and brush in the same direction as the first coat. Once dry, apply a suitable sealer.

6. Other acceptable methods of application are limited only by the imagination. Always use standard ACI and ICRI guidelines for the best practice.

EXPANSION AND CONTROL JOINTS

- Honor all expansion and control joints, cutting as soon as the product is cured hard enough to walk on without damaging the surface. A sidewalk edging trowel may be required to compact mortar and maintain appropriate thickness at the expansion joints. Fill any sawcut 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 or control joint.

CURING

- Concrete Renew* is self-curing; do not use a damp-curing method.
- Concrete Renew* can be sealed with compatible water-based sealers within a few hours of placement when temperatures are above 70°F (21°C).

Concrete Renew™



3. Avoid walking on the installed surface for at least 1 hour after installation, depending on temperature and humidity conditions. Protect from traffic, dirt and dust and moisture until *Concrete Renew* is cured and sealer has been installed.
4. 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 exposing to significant traffic.
5. When applying and curing, protect the product from excessive heat and high winds, which can cause premature surface drying.

CLEANUP

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

PROTECTION

1. Protect from traffic, dirt, dust and moisture until *Concrete Renew* is cured and sealer has been installed.
2. Always seal *Concrete Renew* with a compatible sealer such as *Mapefinish™ 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.
3. Before application, test all surface treatments on a small sample area to ensure the desired results will be achieved.
4. Always protect surrounding landscapes, hardscapes and structures during all phases of installation.

Refer to MAPEI's Material Safety Data Sheet (MSDS) for specific data related to VOCs, health and safety, and handling of product.

STATEMENT OF RESPONSIBILITY

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **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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For the most current **BEST-BACKED™** product data and warranty information, visit www.mapei.com.

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