

# 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

- 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 and plaster pump.

### INDUSTRY STANDARDS AND APPROVALS

LEED v4 Points Contribution	LEED Points

Health Product Declaration (HPD)\* .....Up to 2 points

\* Using this product may help contribute to LEED certification of projects in the category shown above. Points are awarded based on contributions of all project materials.

Additional Green Certifications

Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC's Website.

### 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 surface 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 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. Use a mixture with a 3-to-1 ratio of water to Planicrete UA for priming absorbent concrete substrates.

### MIXING

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

- One 25-Ib. (11,3-kg) bag of Concrete Renew requires 3.7 U.S. qts. (3,50 L) 1. of water. Alternatively, it can be mixed with 3.9 U.S. qts. (3,69 L) of a mixing liquid with 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 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 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 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 waterbased 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 sealer has been installed.
- Always seal Concrete Renew with a compatible sealer such as Mapefinish<sup>™</sup> 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 appropriate concrete restoration materials, such as *Planitop® X*, *Mapecem® Quickpatch* or *Epojet™*. Dormant cracks can be filled with *Epojet* to reduce chances of re-cracking in the future (see the Technical Data Sheet for details). 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 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 for heavy truck traffic.
- *Concrete Renew* must be sealed with a suitable, filmforming, water-based sealer after it has cured. 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.



#### **Product Performance Properties**

Laboratory Tests	Results
Flammability	This product is certified by MAPEI as "noncombustible" in accordance with IMO FTP Code requirements.
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
VOCs (Rule #1168 of California's SCAQMD)	O 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

Shelf life	1 year when stored in original container at 73°F (23°C) in a dry area
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 time	24 hours (cure time)

#### **CSI** Division Classification

Maintenance of Concrete

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## Packaging and Approximate Coverage

Size	Yield
Bag: 25 lbs. (11,3 kg)	50 to 75 sq. ft. (4,65 to 6,97 m <sup>2</sup> )

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









- 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 mix liquid 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.
- For applications subject to freeze/thaw, or beyond light residential use, always use 3-to-1 ratio of water to *Planicrete UA* as the mixing liquid.
- 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.

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

The contents of this Technical Data Sheet ("TDS") v 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

#### LEGAL NOTICE

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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.

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