

Planicrete UA

Universal Latex Additive



FOR PROFESSIONAL USE ONLY

DESCRIPTION

Planicrete[®] *UA* is a next-generation, water-based, one-component, concentrated liquid latex admixture used to enhance the performance of several MAPEI mortar products, including mortar mixes. Using *Planicrete UA* as part of the designated design mixes will increase product performance in the areas of bond, flexural and tensile strengths in addition to increased durability and enhanced workability.

FEATURES AND BENEFITS

- Increases bond strength
- Improves flexural strength
- Improves workability by eliminating premature evaporation of mix water; ensures better curing and a stronger, more durable repair
- Use as an admixture for horizontal, vertical exterior and interior concrete repairs and concrete toppings. When mixed with cementitious materials, *Planicrete UA* is suitable for properly prepared pre-cast, cast-in-place, post-tensioned and pre-stressed concrete repair.

WHERE TO USE

- Use in mortar mixes for interior or exterior applications.
- Use to enhance applications of *Concrete Renew™* and *Concrete Renew Fine*.
- Use to enhance the performance of mortars in thin finishing applications, such as refinishing walkways, patios and parking decks. Applications should subsequently be sealed to provide additional durability and maintain cleanliness.
- Use to enhance patch performance, bond and flexural properties of *Mapecem® Quickpatch*.
- Use with products to enhance cosmetic repairs on ramps, beams and columns.

SURFACE PREPARATION

- Surfaces must be prepared in accordance with the appropriate Technical Data Sheet (TDS) for the product that *Planicrete UA* is being used with.

MIXING

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

1. Always premix *Planicrete UA* for adequate dispersion of any material that may have settled during extended storage. Once the concentrate is homogenous, proceed with portioning for dilution.
2. Always dilute *Planicrete UA* as designated on the Mixing Ratio Table below to create properly proportioned admixtures. Use diluted admixtures in the quantities prescribed in the Mixing Ratio Table for the products listed. The table states the maximum amount of admixture recommended; if a stiffer mix is required, reduce the quantity of admixture by up to 10%.
3. Follow specific product limitations, mixing and application guidelines as published in the respective product's TDS.

PRODUCT APPLICATION

- When adding *Planicrete UA* to *Concrete Renew*, *Concrete Renew Fine*, *Mapecem Quickpatch*, *4 to 1™ Mud Bed Mix* or an alternate mortar mix, follow product instructions as indicated in the respective product's TDS.

CLEANUP

- Clean the mixing equipment with water before the mortar hardens. Hardened material must be mechanically removed.

LIMITATIONS

- Concrete substrate and ambient temperatures must be between 45°F and 95°F (7°C and 35°C) before application.
- When adding *Planicrete UA* to *Concrete Renew*, *Concrete Renew Fine*, *Mapecem Quickpatch*, *4 to 1 Mud Bed Mix* or an alternate mortar mix, follow product instructions as indicated in the respective product's TDS.
- Do not apply over any substrates containing asbestos.

Mixing Ratio Table

	Bag Size	Dilution Ratio (Water: Planicrete UA)	Amount of Diluted Mix Fluid
<i>Concrete Renew</i>	25 lbs. (11.3 kg)	3:1	Up to 3.9 U.S. qts. (3.69 L)
<i>Concrete Renew Fine</i>	25 lbs. (11.3 kg)	3:1	Up to 3.8 U.S. qts. (3.60 L)
<i>Mapecem Quickpatch</i>	25 lbs. (11.3 kg)	2:1 or 3:1	Up to 2.65 U.S. qts. (2.51 L)
<i>Mapecem Quickpatch</i>	10 lbs. (4.54 kg)	2:1 or 3:1	Up to 1.06 U.S. qts. (1.00 L)
<i>4 to 1 Mud Bed Mix</i>	55 lbs. (24.9 kg)	2:1 or 3:1	Up to 3.17 U.S. qts. (3.00 L)
Typical sand/cement mix		2:1 or 3:1	Follow manufacturer's instructions

Product Performance Properties

Concrete Renew or *Concrete Renew Fine* (25 lbs. [11.3 kg]) mixed at 3:1 with 3.7 U.S. qts. (3.50 L) of diluted *Planicrete UA* mix fluid

Laboratory Tests	Results
Compressive strength – ASTM C109	
24 hours	> 1,740 psi (12 MPa)
7 days	> 2,610 psi (18 MPa)
28 days	> 3,625 psi (25 MPa)
Flexural strength – ASTM C348	
24 hours	> 522 psi (3.6 MPa)
7 days	> 986 psi (6.8 MPa)
28 days	> 1,196 psi (8.25 MPa)
Adhesion (tensile strength) – ASTM C1583	
7 days	> 435 psi (3 MPa) over concrete
Taber abrasion* – ASTM D4060	< 0.55 g loss

*H-22 200 cycles, 500 g

Product Performance Properties

Mapecem Quickpatch (25 lbs. [11.3 kg]) mixed at 2:1 with 2.75 U.S. qts. (2.60 L) of diluted *Planicrete UA* mix fluid

Laboratory Tests	Results
Compressive strength – ASTM C349	
24 hours	> 2,585 psi (17.8 MPa)
7 days	> 3,425 psi (23.6 MPa)
28 days	> 4,050 psi (27.9 MPa)
Flexural strength – ASTM C348	
24 hours	> 925 psi (6.38 MPa)
7 days	> 1,250 psi (8.62 MPa)
28 days	> 1,700 psi (11.7 MPa)
Adhesion (tensile strength) – ASTM C1583	
7 days	> 400 psi (2.76 MPa) over concrete
Taber abrasion** – ASTM D4060	0.33 g after 28 days

** H-22 200 cycles, 500 g

Product Performance Properties

4 to 1 Mud Bed Mix (50 lbs. [22.7 kg]) mixed at 3:1 with 3.17 U.S. qts. (3.00 L) of diluted *Planicrete UA* mix fluid

Laboratory Tests	Results
Compressive strength – ASTM C349	
24 hours	> 1,490 psi (10.3 MPa)
7 days	> 3,770 psi (26 MPa)
28 days	> 4,175 psi (28.8 MPa)
Flexural strength – ASTM C348	
24 hours	> 463 psi (3.19 MPa)
7 days	> 970 psi (6.69 MPa)
28 days	> 1,115 psi (7.69 MPa)

Shelf Life and Product Characteristics

before mixing

Physical state	Liquid
Color	White
VOCs (Rule #1168 of California's SCAQMD)	3 g per L
Solids content	> 45%
Shelf life	1 year when stored in original, unopened packaging
Storage conditions	Store at between 50°F and 85°F (10°C and 29°C). Protect from freezing.

CSI Division Classification

Maintenance of Concrete	03 01 00
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Packaging

Size
1 U.S. gal. (3.79 L)
5 U.S. gals. (18.9 L)

Approximate Coverage

Coverage depends on suitable dilution and the mix quantity required for the product being modified.

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-durabilite@mapei.com.

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.**

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

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