Planitop X

One-Component, Fast-Setting, Fiber-Reinforced, Vertical and Overhead Repair Mortar

DESCRIPTION

Planitop® *X* is a one-component, fiber-reinforced, shrinkage-compensated, high-early-strength, fast-setting, polymer-modified, high-build cementitious repair mortar with a corrosion inhibitor.

WHERE TO USE

- Interior/exterior
- Vertical/overhead
- Precast concrete elements
- Columns
- Joint repair of concrete walls

FEATURES AND BENEFITS

- Can be mixed with water or *Planicrete*® *AC*
- Can be shaved to match the surrounding contour
- 1/16" to 4" (1,5 mm to 10 cm) vertical thickness
- 1/16" to 2" (1,5 mm to 5 cm) overhead thickness
- Contains corrosion inhibitor
- Shrinkage-compensated

INDUSTRY STANDARDS AND APPROVALS

- ASTM: Meets or exceeds the requirements of ASTM C928, R2

SURFACE PREPARATION

- Concrete surface must be clean and free of loose particles, efflorescence, paint, tars, grease, asphaltic materials, bond breakers, curing compounds, wax and any foreign substance.
- Mechanically profile clean, sound and stable concrete surfaces to obtain a concrete surface profile (CSP) equal to or greater than #5 per ICRI Guideline #310.2R-2013.

MIXING

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

1. Into a clean mixing container, pour 3/4 of the required 0.8 U.S. qt. (0,76 L) of potable water per 10-lb. (4,54-kg) bag, or 3/4 of the required 1 U.S. gal. (3,79 L) of potable water per 50-lb. (22,7-kg) bag or pail.
    - Note: If *Planicrete AC* is being used, replace the full amount of required water with diluted *Planicrete AC* per its Technical Data Sheet.
2. Slowly add the full bag of *Planitop X* into the mixing container while mixing with a drill and Jiffy mixer.
3. Add as much of the remaining 1/4 of fluid as needed.
4. Mix for 3 to 4 minutes. Continue to mix until a smooth, homogenous consistency is achieved.

APPLICATION

Read all installation instructions thoroughly before installation.

1. Before application, ensure that prepared concrete is saturated surface-dry (SSD).
2. Apply a scrubcoat of *Planitop X*.
3. Apply *Planitop X* directly to the scrubcoat before it dries out.
4. Apply *Planitop X* by float, working from the center of the repair to the outer edge. Finish the application similar to the surrounding concrete.

CURING

- Protect *Planitop X* from high wind or direct sunlight during curing.
- Protect the surface with wet burlap or a continuous mist spray for at least 4 to 6 hours after placement.
- Alternatively, immediately after finishing, apply a water-based curing compound conforming to ASTM C309.

CLEANUP

- Immediately clean tools and equipment with water before the material hardens. Hardened material must be mechanically removed.

LIMITATIONS

- Do not apply over substrates containing asbestos.
- Do not mix more material than can be installed within the working time.
- Use at between 55°F and 85°F (13°C and 29°C).
- Utilize ACI cold-weather or hot-weather guidelines when required.

- Do not overmix or overwork *Planitop X*.
- Other than MAPEI's *Planicrete AC* latex admixture, do not add any other cements, aggregates or materials to *Planitop X*.

Product Performance Properties

at 72°F (22°C)

Laboratory Tests	Results
Compressive strength – ASTM C109 (CAN/CSA-A5)	
3 hours	> 2,900 psi (20 MPa)
1 day	> 5,075 psi (35 MPa)
7 days	> 5,800 psi (40 MPa)
28 days	> 6,600 psi (45,5 MPa)
Bond strength – ASTM C882 (modified)	
1 day	> 1,400 psi (9,66 MPa)
28 days	> 1,800 psi (12,4 MPa)
Length change – ASTM C157 (modified C928)	
28 days, water-cured	< +0.15%
28 days, air-cured	< -0.15%
Flexural strength – ASTM C348 (CAN/CSA-A23.3-8C)	
1 day	> 580 psi (4 MPa)
7 days	> 725 psi (5 MPa)
28 days	> 870 psi (6 MPa)
VOC content	0 g per L

Shelf Life and Application Properties

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

Mortar consistency	Plastic
Working time	5 to 6 minutes
Initial set	> 6 minutes
Final set	< 25 minutes
Shelf life	1 year when stored in original, unopened packaging

Packaging and Approximate Coverage*

Size	Yield
Bag: 10 lbs. (4,54 kg)	0.09 cu. ft. (0,0025 m^3)
Bag: 50 lbs. (22,7 kg)	0.46 cu. ft. (0,013 m^3)
Pail: 50 lbs. (22,7 kg)	0.46 cu. ft. (0,013 m^3)

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

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet respective to each product used 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.**

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