



# Planitop<sup>®</sup> 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

Consult MAPEI's Technical Services Department for installation recommendations regarding uses not listed.

## FEATURES AND BENEFITS

- Can be mixed with water or *Planicrete<sup>®</sup> 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, Type R2, at 73°C (23°C) and 50% relative humidity

## SURFACE PREPARATION

- Concrete surface must be clean, sound and free of loose particles, efflorescence, paint, tars, grease, asphaltic materials, bond breakers, curing compounds, wax and any foreign substance or any conditions that might affect proper bonding of the product, resulting in possible cracking, discoloration or changes in overall performance.
- 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.
5. Minimum application: Feather edge, Maximum application: 100 mm (4")

## **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 45°F and 85°F (7°C and 29°C).
- Utilize ACI cold-weather or hot-weather guidelines when required.
- Do not overmix or overwork *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)
VOCs (Rule #1168 of California's SCAQMD)	0 g per L

## Shelf Life and Application Properties at 73°F (23°C) and 50% relative humidity

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

## Packaging and Approximate Coverage\*

Size	Yield
Bag: 10 lbs. (4.54 kg)	0.09 cu. ft. (0.0025 m <sup>3</sup> )
Bag: 50 lbs. (22.7 kg)	0.46 cu. ft. (0.013 m <sup>3</sup> )
Pail: 50 lbs. (22.7 kg)	0.46 cu. ft. (0.013 m <sup>3</sup> )

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

# Planitop X



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](mailto:sustainability_USA@mapei.com) (USA) or [sustainability-durabilite@mapei.com](mailto:sustainability-durabilite@mapei.com) (Canada).

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