Planitop® XS

One-Component, Fast-Setting, Extended-Working-Time, Vertical and Overhead Repair Mortar

CO_2 FULLY OFFSET IN THE ENTIRE LIFE CYCLE ZERO

CORROSION INHIBITOR ENHANCED

DESCRIPTION

Planitop XS is an extended-working-time variation of *Planitop X*. Shrinkage-compensated, fiber-reinforced, polymer-modified and containing a corrosion inhibitor, *Planitop XS* features *Planitop X*'s outstanding workability and versatility. This product features a very low emission of volatile organic compounds and includes an offset of greenhouse gas emissions.

FEATURES AND BENEFITS

- Formulated with extended working time (double the working time of *Planitop X*) and fast-curing, reducing downtime and expediting return to service
- Shrinkage-compensated
- Outstanding workability, easily blending into the concrete surface to help disguise the repaired area
- Light gray color resembles originally placed concrete
- From 1/16" to 4" (1.5 mm to 10 cm) in vertical thickness
- From 1/16" to 2" (1.5 mm to 5 cm) in overhead thickness

CO_2 FULLY OFFSET PRODUCTS

Planitop XS is part of the "CO_2 Fully Offset in the Entire Life Cycle" line of products. CO_2 emissions measured throughout the life cycle of products from the Zero line in 2023, using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of third-party-certified carbon credits in support of renewable energy and forestry protection projects: A commitment to the planet, to people and to biodiversity. For more details on how emissions are calculated and on climate-mitigation projects that are financed through certified carbon credits, scan the above QR code.

PRODUCT PERFORMANCE PROPERTIES*

Laboratory Tests	Results	
Tensile bond strength — ASTM C1583 (CSA CAN/A23.2-6B) (failure in concrete substrate)		
28 days	> 290 psi (2 MPa)	
Compressive strength – ASTM C109		
1 day	> 3,000 psi (20.7 MPa)	
7 days	> 4,000 psi (27.6 MPa)	
28 days	> 5,000 psi (34.5 MPa)	
Flexural strength – ASTM C348		
1 day	> 500 psi (3.45 MPa)	
28 days	> 800 psi (5.52 MPa)	
Tensile strength – ASTM C307		
28 days	> 450 psi (3.10 MPa)	
Modulus of elasticity (MOE) – ASTM C469		
28 days	3.23 x 10^6 psi (22.3 GPa)	
Permeability to chlorides – ASTM C1202		
28 days	Very low – 100 to 1,000 coulombs	
Scaling resistance – ASTM C672		
28 days	0 loss, no scaling (50 cycles)	
Freeze/thaw resistance – ASTM C666		
28 days	> 98.5% (300 cycles)	
Slant/shear bond strength – ASTM C882 (modified)		
1 day	> 1,000 psi (6.90 MPa)	
28 days	> 1,500 psi (10.3 MPa)	
Volume change – Exceeds ASTM C928 requirements	ASTM C928 specification	*Planitop XS* typical value
28 days, dry-cured	< -0.15%	< - 0.06
28 days, wet-cured	< +0.15%	+ 0.04%
VOC content	0 g per L	

** All tests were performed at 73°F (23°C) and 50% relative humidity with a mixture of 1 U.S. gal. (3.79 L) of water per 50-lb. (22.7 kg) bag of* Planitop XS. *An increase in the water content will alter listed properties.*

SHELF LIFE AND PRODUCT CHARACTERISTICS before mixing

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C) in a dry and covered area
Physical state	Powder
Color	Light gray
Dry-solids content	100%

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.

APPLICATION PROPERTIES

Mixing ratio	1 U.S. gal. (3.79 L) of water per 50 lbs. (22.7 kg) of *Planitop XS*
Working time	20 minutes
Initial set – ASTM C191	> 40 minutes
Final set – ASTM C191	< 60 minutes

PACKAGING

Bag: 50 lbs. (22.7 kg)
Pail: 50 lbs. (22.7 kg)

APPROXIMATE COVERAGE**

per 50 lbs. (22.7 kg)

Yield – ASTM C138
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.*

CSI DIVISION CLASSIFICATIONS

Cast-in-Place Concrete	03 30 00
Cementitious Decks and Underlayment	03 50 00
Concrete Restoration and Cleaning	03 90 00

PR: 10315 MKT: 24-3375 11/24