Concrete Repair Mortars Solutions

Horizontal · Form-and-Pour · Vertical and Overhead · Rapid





Concrete repair mortars are essential to keeping America's infrastructure in working order. Whether the mortars resurface the cracked and pitted lanes of a Midwestern highway, or smooth the roadbed of a sun-baked Western bridge deck, or help strengthen hurricane-damaged buildings in the South, or cover exposed rebar during renovation work on the East Coast the uses are as wide and as varied as the repairs themselves. MAPEI's concrete repair mortars fill this need efficiently and effectively, offering options for vertical and overhead repairs, as well as additives to speed up or slow down the applications.

Horizontal repair mortars

Whether the repair is a quick surface touch-up or the fill of a deeper void, MAPEI's horizontal repair mortars offer a variety of one- and two-component products designed to resurface and strengthen concrete surfaces.



Topcem[™] Pronto Extended-Working-Time Screed Mortar

Topcem Pronto is a single-component, extended-workingtime screedable mortar.



Bag: 55 lbs. (24.9 kg)

-

50

024325

U.S./Canada

Topcem[™] Premix

Accelerated-Cure Screed

Topcem Premix is an accelerated-cure screed mortar suitable for bonded as well as unbonded applications. *Topcem Premix* can easily be screeded or sloped, and has the workability and working time of conventional screed mortars.

	Product Code	Packaging
U.S./Canada	15750	Bag: 50 lbs. (22.7 kg)



	Product Code	Packaging
U.S./Canada	0151025	Bag: 55 lbs. (24.9 kg)

Mapecem® 102

Medium-Build, One-Component, Fast-Setting Mortar

Mapecem 102 is a one-component, shrinkage-compensated, polymer-modified, fast-setting cementitious mortar with a corrosion inhibitor and silica fume. *Mapecem 102* is intended for the renovation and topping of horizontal concrete surfaces.



Horizontal repair mortars



	Product Code	Packaging
U.S./Canada	0150025	Part A, Bag: 55 lbs. (24.9 kg)
	0150003	Part B, Jug: 0.71 U.S. gal. (2.69 L)

Mapecem[®] 202

Medium-Build, Two-Component, Fast-Setting Mortar

Mapecem 202 is a two-component, shrinkage-compensated, polymer-modified, fast-setting cementitious mortar with a corrosion inhibitor.



Planitop[®] EL

Self-Leveling, Portland-Cement-Based Topping

Planitop EL is a self-leveling, Portland-cement-based topping that can be used as a wear surface on interior and elevated exterior areas where worn concrete is an issue. *Planitop EL* can be installed to provide a smooth troweled appearance or can be polished to provide a more decorative appeal.

	Product Code	Packaging
U.S./Canada	2759923	Bag: 50 lbs. (22.7 kg)



	Product Code	Packaging
U.S./Canada	17603000 4024004	Part A, Bag: 57.1 lbs. (25.9 kg) Part B, Jug: 1.05 U.S. gals. (3.97 L)

Planitop[®] 25

Two-Component Resurfacing Mortar

Planitop 25 is a two-component, shrinkage-compensated, cementitious, flowable resurfacing mortar with a corrosion inhibitor.

Form-and-pour mortars

Pumpable or pourable, these mortars are designed for a wide scope of repairs, including bridge decks, dredging projects and large-scale commercial construction.



	Product Code	Packaging
U.S./Canada	15050000	Bag: 50 U.S. lbs. (22.7 kg)

Planitop[®] FD

Full-Depth Repair Mortar

Planitop FD is a one-part, shrinkage-compensated, cementitious, flowable mortar for a variety of repairs. *Planitop FD* contains a corrosion inhibitor and is suited for form-andpour applications as well as flatwork.



Product CodePackagingU.S./Canada13980Bag: 80 lbs. (36.3 kg)

Planitop[®] 11

Pre-Extended, Pumpable and Pourable Concrete Mix

Planitop 11 is a one-component, pre-extended, cementitious, pumpable and pourable concrete mix for full-depth concrete repairs in above-, below- and on-grade applications. Designed for large-volume repairs with application thicknesses of 1" (2.5 cm) to full depth, *Planitop 11* is suitable for form-and-pour and form-and-pump applications. It is ideal for repairs on horizontal, vertical and overhead surfaces in applications such as tunnels, bridges, dams, parking garages, balcony edges and columns.





Form-and-pour mortars

U.S./Canada 13965

U.S./Canada 2015025



Bag: 65 lbs. (29.5 kg)

Bag: 55 lbs. (24.9 kg)

Planitop® 11 SCC

Self-Consolidating Concrete Mix with Corrosion Inhibitor

Planitop 11 SCC is a one-component, cementitious, selfconsolidating concrete mix with silica fume and a corrosion inhibitor for full-depth structural concrete repairs in above-, below- and on-grade applications.



Planitop[®] 15

Form-and-Pour, One-Component Repair Mortar

Planitop 15 is a one-component, shrinkage-compensated, cementitious, fiber-reinforced, fluid mortar. *Planitop 15* contains a corrosion inhibitor and silica fume, and is well-suited for formand-pour and form-and-pump applications where high early strength and flowability are required.



Vertical and overhead mortars

Nonslump and non-sag are critical attributes in a vertical or overhead repair mortar. With these mortars from MAPEI, you get those features, plus high-strength, highperformance durability across a wide variety of application options.

42	PERIFIC
	Des Gragement, Franzeiserten, der State Franzeiserten, der State Franze
	SION TOP
EHRAN	50 22,7

Planitop[®] X

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

Planitop X is a one-component, fiber-reinforced, shrinkagecompensated, high-early-strength, fast-setting, polymermodified, high-build cementitious repair mortar with a corrosion inhibitor.

	Product Code	Раскауну
U.S./Canada	12850000	Bag: 50 lbs. (22.7 kg)
	12850010	Bag: 10 lbs. (4.54 kg)
	12851000	Pail: 50 lbs. (22.7 kg)



	Product Code	Packaging
U.S./Canada	13050000	Bag: 50 lbs. (22.7 kg)
	13051000	Pail: 50 lbs. (22.7 kg)

Planitop[®] XS

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

Planitop XS is an extended-working-time variation of *Planitop X*. Shrinkage-compensated, fiber-reinforced, polymer-modified and containing a proprietary corrosion inhibitor, *Planitop XS* features *Planitop X* 's outstanding workability and versatility.



Vertical and overhead mortars



	Product Code	Packaging
U.S./Canada	16756	Bag: 55 lbs. (24.9 kg)

Planitop[®] 12 SR

Sulfate-Resistant, Vertical, Overhead and Horizontal **Repair Mortar with Silica Fume**

Planitop 12 SR is a sulfate-resistant, one-component, shrinkagecompensated, cementitious repair mortar. Planitop 12 SR is fiber-reinforced and contains both silica fume and a corrosion inhibitor, and is intended for the repair of vertical, overhead and horizontal concrete surfaces.



	Product Code	Packaging
U.S./Canada	2758720	Part A, Bag: 38.58 lbs.
	2758820	(17.5 kg)
		Part B, Jug: 0.76 U.S. gal.
		(2.88 L)

Planitop[®] 23

Vertical and Overhead, Two-Component Repair Mortar

Planitop 23 is a two-component, fast-setting, polymer-modified, thixotropic, fiber-reinforced, cementitious mortar with a corrosion inhibitor. *Planitop 23* is intended for vertical and overhead repairs, and contains silica fume to provide a durable, high-strength mortar in these applications.



Product Code	Packaging	
	SS	b

Planitop[®] Shotcrete

Silica-Fume-Enhanced Shotcrete Mix

Planitop Shotcrete is a silica-fume-enhanced, cementitious mortar designed to be machine-applied on horizontal, vertical and overhead concrete surfaces, using the dry- or wet-mix spray process. *Planitop Shotcrete* is a special blend of hydraulic binders, silica fume and well-graded aggregates.

	Product Code	Packaging				
U.S./Canada	1389625	Bag: 55 lbs. (24.9 kg)				

Rapid-hardening mortars

They're not just for roadwork anymore. Repairs of up to 8" (when used with extenders) can now be rapidly repaired in as little as one hour with these single-component, shrinkage-compensated repair mortars.



Product Code Packaging U.S./Canada 17950000 Bag: 50 lbs. (22.7 kg)

000 Bag: 50 lbs. (22.7 kg)



Planitop® 18 ES

Planitop[®] 18

Very Rapid-Hardening Repair Mortar

Very Rapid-Hardening Repair Mortar with Extended Working Time

Planitop 18 is a very rapid-hardening repair mortar that exhibits high early strength and provides a quick return to service.

Planitop 18 ES is a one-component, high-early-strength, cementitious repair mortar, with a corrosion inhibitor, that has the very rapid-hardening characteristics of *Planitop 18* but with an extended set and working time.

	Product Code	Packaging
U.S./Canada	17250	Bag: 50 lbs. (22.7 kg)



Planitop[®] 18 TG

Very Rapid-Hardening, Trowel-Grade, High-Early-Strength Repair Mortar

Planitop 18 TG is a one-component, shrinkage-compensated, very rapid-hardening, trowel-grade, cementitious repair mortar with a corrosion inhibitor. *Planitop 18 TG* gains strength rapidly and is particularly suited for all horizontal concrete repairs from 1/2" to 2" (12 mm to 5 cm) thickness when applied neat and up to 8" (20 cm) when extended with aggregate.



Concrete Restoration Systems – Quick Reference Guide

	Form-and-Pour/Form-and-Pump Applications				Trowelable/Screed Mortars						
Product Name	Planitop® 11	Planitop 11 SCC	Planitop 15	Planitop 18	Planitop FD	Topcem™ Premix	Topcem Pronto	Mapecem® 102	Mapecem 202	Planitop 18 ES	Planitop 18 TG
Number of Components	1	1	1	1	1 or 2	1 or 2	1	1	2	1	1
Maximum Extension Rate	Pre- extended	Pre- extended	50%, 27.5 lbs. (12.5 kg)	80%, 40 lbs. (18.1 kg)	50%, 25 lbs. (11.3 kg)	20%, 10 lbs. (4.54 kg)	N/A	20%, 11 lbs. (4.99 kg)	20%, 11 lbs. (4.99 kg)	50%, 25 lbs. (11.3 kg)	80%, 40 lbs. (18.1 kg)
Yield, Neat Per Mixed Bag	0.65 cu. ft. (0.0184 m³)	0.5 cu. ft. (0.0142 m³)	0.46 cu. ft. (0.0130 m ³)	0.42 cu. ft. (0.0119 m³)	0.43 cu. ft. (0.0122 m³)	0.41 cu. ft. (0.0116 m³)	0.42 cu. ft. (0.0119 m³)	0.48 cu. ft. (0.0136 m³)	0.47 cu. ft. (0.0133 m³)	0.41 cu. ft. (0.0116 m³)	0.41 cu. ft. (0.0116 m³)
Minimum Depth, Neat	N/A	N/A	3/8" (10 mm)	1/2" (12 mm)	1/2" (12 mm)	1/4" (6 mm)	3/8" (10 mm)	1/4" (6 mm)	1/4" (6 mm)	1/4" (6 mm)	1/2" (12 mm)
Minimum Depth, Extended	1" (2.5 cm)	1" (2.5 cm)	1" (2.5 cm)	1" (2.5 cm)	1" (2.5 cm)	1" (2.5 cm)	N/A	1" (2.5 cm)	1" (2.5 cm)	ו" (2.5 cm)	ا" (2.5 cm)
Maximum Depth, Neat	N/A	N/A	4" (10 cm)	2" (5 cm)	4" (10 cm)	2" (5 cm)	2" (5 cm)	2" (5 cm)	2" (5 cm)	1" (2.5 cm)	2" (5 cm)
Maximum Depth, Extended	Full-depth	Full-depth	Full-depth	Full-depth	Full-depth	4" (10 cm)	N/A	6" (15 cm)	6" (15 cm)	6" (15 cm)	Full-depth
Pot Life	60 min.	60 min.	60 min.	15 min.	30 min.	30 min.	60 min.	20-30 min.	30 min.	30 min.	15 min.
Initial Set (hours:minutes)	> 5:00	> 6:00	> 3:00	> 0:12	1:00	0:50	1:30	0:50	1:00	> 0:45	> 0:15
Final Set (hours:minutes)	> 6:00	> 8:00	< 10:00	≤ 0:30	2:00	< 2:00	3:20	1:10	1:30	< 1:50	< 0:40
Minimum Temperature	45°F (7°C)	45°F (7°C)	45°F (7°C)	32°F (0°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	32°F (0°C)
Compressive strength - ASTM C109 (CAN/CSA-A5)											
1 day	≥ 2,500 psi	> 2,200 psi (15 2 MPa)	> 4,350 psi (30 MPa)	> 7,800 psi	> 2,700 psi (18 6 MPa)	> 2,000 psi (13.8 MPa)	> 1,150 psi (7.93 MPa)	> 5,000 psi (34 5 MPa)	> 3,100 psi (21 4 MPa)	> 5,000 psi (34 5 MPa)	> 7,800 psi (53 8 MPa)

1 day	≥ 2,500 psi (17.2 MPa)	> 2,200 psi (15.2 MPa)	> 4,350 psi (30 MPa)	> 7,800 psi (53.8 MPa)	> 2,700 psi (18.6 MPa)	> 2,000 psi (13.8 MPa)	> 1,150 psi (7.93 MPa)	> 5,000 psi (34.5 MPa)	> 3,100 psi (21.4 MPa)	> 5,000 psi (34.5 MPa)	> 7,800 psi (53.8 MPa)
7 days	≥ 5,000 psi (34.5 MPa)	> 5,500 psi (37.9 MPa)	> 8,600 psi (59.3 MPa)	> 8,490 psi (58.6 MPa)	> 6,600 psi (45.5 MPa)	> 2,700 psi (18.6 MPa)	> 3,190 psi (22 MPa)	> 5,400 psi (37.2 MPa)	> 4,950 psi (34.1 MPa)	> 5,500 psi (37.9 MPa)	> 8,000 psi (55.2 MPa)
28 days	≥ 6,000 psi (41.4 MPa)	> 7,000 psi (48.3 MPa)	> 10,875 psi (75 MPa)	> 9,400 psi (64.8 MPa)	> 7,500 psi (51.7 MPa)	> 3,000 psi (20.7 MPa)	> 4,350 psi (30 MPa)	> 5,800 psi (40 MPa)	> 6,150 psi (42.4 MPa)	> 7,000 psi (48.3 MPa)	> 9,400 psi (64.8 MPa)
Compatible with Mapeshield [™] I	•	•	•	•	•	•	•	•	•	•	•
Interior and Exterior Applications	•	•	•	•	•	•	•	•	•	•	•
Residential	•	•	•	•	•	•	•	•	•	•	•
Commercial	•	•	•	•	•	•	•	٠	•	•	•
Industrial	•	•	•	•	•	•	•	٠	•	•	•
Minimum ICRI CSP Needed	#7	#7	#5	#5	#5	#5	#5	#5	#5	#5	#5



Horizontal Cement Overlays	Ve	ertical Rep	Self-Leveling Toppings		
Planitop 25	Planitop Planitop Planitop Planitop XS		Planitop EL		
2	1	2	1 or 2	1 or 2	1
20%, 12 lbs. (5.44 kg)	N/A	N/A	N/A	N/A	N/A
0.47 cu. ft. (0.0133 m³)	0.46 cu. ft. (0.0130 m³)	0.36 cu. ft. (0.0101 m³)	0.46 cu. ft. (0.0130 m³)	0.46 cu. ft. (0.0130 m³)	0.45 cu. ft. (0.0127 m³)
1/4" (6 mm)	1/4" (6 mm)	1/4" (6 mm)	1/16" (1.5 mm)	1/16" (1.5 mm)	3/8" (10 mm)
ן" (2.5 cm)	N/A	N/A	N/A	N/A	N/A
ן" (2.5 cm)	2" (5 cm)	2" (5 cm)	4" (10 cm)	4" (10 cm)	2" (5 cm)
2" (5 cm)	N/A	N/A	N/A	N/A	N/A
20 min.	> 60 min.	20 min.	5 min.	20 min.	20 min.
1:00	3:00	0:50	> 0:06	> 0:40	5:00
1:10	6:30	1:30	< 0:25	< 1:00	6:00
45°F (7°C)	45°F (7°C)	45°F (7°C)	55°F (13°C)	55°F (13°C)	40°F (4°C)

> 3,300 psi (22.8 MPa)	> 2,900 psi (20 MPa)	> 4,060 psi (28 MPa)	> 5,600 psi (38.6 MPa)	> 3,000 psi (20.7 MPa)	> 2,000 psi (13.8 MPa)
> 5,800 psi (40 MPa)	> 7,975 psi (55 MPa)	> 4,800 psi (33.1 MPa)	> 6,650 psi (45.9 MPa)	> 4,000 psi (27.6 MPa)	> 4,000 psi (27.6 MPa)
> 7,200 psi (49.7 MPa)	> 10,450 psi (72.1 MPa)	> 7,975 psi (55 MPa)	> 7,300 psi (50.3 MPa)	> 5,000 psi (34.5 MPa)	> 5,000 psi (34.5 MPa)
N/A	٠	•	٠	•	N/A
•	•	•	٠	•	٠
•	٠	•	٠	•	٠
•	٠	•	٠	•	•
•	•	•	•	٠	•
#5	#7	#5	#5	#5	#3







MAPEI Headquarters of North America

1144 East Newport Center Drive Deerfield Beach, Florida 33442 1-888-US-MAPEI (1-888-876-2734) / (954) 246-8888

Technical Services 1-888-365-0614 (U.S. and Puerto Rico 1-800-361-9309 (Canada)

Customer Service 1-800-42-MAPEI (1-800-426-2734)

Services in Mexico 0-1-800-MX-MAPEI (0-1-800-696-2734)

Copyright ©2021 by MAPEI Corporation ("MAPEI") and all rights are reserved. All intellectual property rights and other information contained in this document are the exclusive property of MAPEI (or its parent or related companies), unless otherwise noted. No part of this document may be reproduced or transmitted in any form without the prior written consent of MAPEI.

Printed in the USA.

