



Self-Leveling, Portland-Cement-Based Topping

DESCRIPTION

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.

FEATURES AND BENEFITS

- Easy to mix and install
- Natural-concrete gray in color
- Can be used in exterior non-freeze/thaw areas that are elevated
- Traffic-bearing
- Low shrinkage

WHERE TO USE

- Warehouse floors
- As a wear topping on flat concrete roof decks
- · Showrooms, lobbies and consistently wet areas

SURFACE PREPARATION

 Thoroughly clean the surface of any substance that could interfere with the bond of the installation material, including dirt, paint, tar, asphalt, wax, oil, grease, latex compounds, sealers, curing compounds, formrelease agents, laitance, loose toppings, foreign substances and adhesive residue.

- Mechanically profile and prepare concrete surfaces by engineer-approved methods in accordance with the most current ICRI 310.2R guidelines to obtain a concrete surface profile (CSP) of #3 to #5.
- Ensure that the substrate and ambient room temperatures are between 40°F and 95°F (4°C and 35°C) before application.
- Fill deep areas, holes and cracks with appropriate concrete restoration materials
- Install Planiseal® MB moisture barrier if the MVER exceeds 5 lbs. per 1,000 sq. ft. (2.27 kg per 92.9 m²) per 24 hours.
- Prime the prepared area with MAPEI's Primer SN™ at a rate of 80 to 133 sq. ft. per U.S. gal. (1.96 to 3.26 m² per L). Using a 10/20 graded sand, immediately broadcast to refusal.
- Allow to cure for at least 12 hours. Sweep and/or vacuum the free sand from the substrate.

MIXING

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

- 1. *Planitop EL* requires 1 to 1.05 U.S. gal. (3.79 to 3.97 L) of water per 50-lb. (22.7-kg) bag.
- 2. Into a clean mixing container, pour 3/4 of the required water.
- 3. Using a low-speed drill and appropriate mixer, slowly add the *Planitop EL* powder to the water. Mix for 1 to 2 minutes.
- While mixing, add the remaining water and continue to mix to achieve a smooth, homogenous consistency.



PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

- Pour material from mixing vessel onto the prepared sand broadcast floor, working from one side to the other in a ribbon.
- 2. Immediately, gauge the depth of the placed *Planitop EL* with a gauge rake to the desired application thickness.
- 3. After gauging *Planitop EL* to the desired thickness, use a smoother paddle or spiked roller over the gauged area.
- 4. If more *Planitop EL* is required for the area, pour the next mixed product into the already placed *Planitop EL* to minimize mottling and air bubbles.
- Allow to cure 24 to 36 hours. Planitop EL will form a glossy film upon curing, similar the finish of a hardtroweled slab.
- 6. *Planitop EL* may be polished 36 to 48 hours after placement.
- Planitop EL may be treated with MAPEI's Mapecrete™
 Hard LI, Mapecrete Hard SB or Mapecrete Hard SI
 densifier. Refer to the appropriate Technical Data
 Sheet (TDS) for more information.
- 8. Planitop EL can have Mapecrete Protector FF applied to polished or unpolished product once cured to aid in protecting the final surface.

LIMITATIONS

- Air, material and substrate temperatures during application must be between 40°F and 95°F (4°C and 35°C).
- The use of Mapecrete Film may be needed when used in temperatures higher than 85°F (29°C). Refer to the TDS for more information.
- Always honor all control, construction and isolation joints.
- Do not use for exterior applications in freeze/thaw areas.



Product Performance Properties

Laboratory Tests	Results	
Compressive strength – ASTM C109 (CAN/CSA-A5)		
1 day	> 2,000 psi (13.8 MPa)	
7 days	> 4,000 psi (27.6 MPa)	
28 days	> 5,000 psi (34.5 MPa)	
Flexural strength – ASTM C348 (CAN/CSA-A23.2-8C)		
28 days	> 750 psi (5.17 MPa)	
Slant/shear bond strength – ASTM C882 (modified)		
28 days	> 3,000 psi (20.7 MPa)	
Length change – ASTM C157 (modified)		
28 days	< 0.08%	

Planitop EL

Shelf Life and Product Characteristics before mixing

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C)	
Physical state	Powder	
Color	Gray	

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	1.00 to 1.05 U.S. gal. (3.79 to 3.97 L) of water per 50-lb. (22.7-kg) bag
Application temperature range	40°F to 95°F (4°C to 35°C)
Set time for hydraulic mortar (ASTM C191)	Initial: About 5 hours Final: About 6 hours

CSI Division Classification

Maintenance of Concrete	03 01 00

Packaging

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Bag: 50 lbs. (22.7 kg)

Approximate Coverage* per 50 lbs. (22.7 kg)

Yield

0.45 cu. ft. (0.0127 m³)



^{*} Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to climate and substrate conditions.





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 (USA) or sustainability-durabilite@mapei.com (Canada).

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 tos 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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