

# the factor

# Smoothing and Finishing Compound for Concrete Surfaces



# DESCRIPTION

*Tilt Finish* is a versatile, fast-setting, polymer-modified material utilizing a proprietary blend of cements and additives. It is ideal for producing a smooth finish on concrete surfaces before application of paint or coatings.

# FEATURES AND BENEFITS

- Fast-setting
- Ease of placement
- Smooth, light gray featheredge finish that blends well with surrounding concrete
- Highly versatile resurfacer that readily accepts coatings in as little as 24 hours, depending on temperatures
- *Tilt Finish* is compatible with most coatings, paints, integral pigments, sealers, dyes and concrete stains. Verify compatibility before use.

# INDUSTRY STANDARDS AND APPROVALS

LEED v4 Points Contribution	LEED Points
Health Product Declaration (HPD)*	Up to 2 points

\* Using this product may help contribute to LEED certification of projects in the category shown above. Points are awarded based on contributions of all project materials.

### Additional Green Certifications

• Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC's Website.

# WHERE TO USE

- Interior and exterior applications
- Smoothing/finishing compound for tilt-wall systems
- Patching and smoothing of poured-in-place concrete
- Architectural resurfacer for pre-cast beams and columns
- Render for smoothing of masonry surfaces

TO

# SURFACE PREPARATION

- Concrete surface must be clean and free of loose particles, efflorescence, paints, tars, grease, asphaltic materials, bond breakers, curing compounds, wax and any foreign substances.
- Mechanically profile and prepare concrete surfaces by engineer-approved methods in accordance with the most current ICRI 310.2R guidelines.
- Ensure that the concrete substrate is saturated surface-dry (SSD) before installing *Tilt Finish*.

# MIXING

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

- 1a. Depending on the application and desired consistency, mix with 3.25 to 3.46 U.S. qts. (3,08 to 3,27 L) of water per 20-lb. (9,07-kg) bag of *Tilt Finish*.
- 1b. For additional durability, *Tilt Finish* may be mixed with *Planicrete® AC* rather than with water alone. Dilute *Planicrete AC* at a ratio of 2 to 1 (water to *Planicrete AC*), and add between 3.25 and 3.46 U.S. qts. (3,08 and 3,27 L) of the diluted mixture per 20-lb. (9,07-kg) bag of *Tilt Finish*.



- 2. Pour the required amount mixing liquid into a clean mixing container and mix while slowly adding powder.
- 3. Mix with a medium-speed drill (at 550 to 800 rpm) and an appropriate paddle for 1.5 to 2 minutes, ensuring a lump-free, homogenous consistency.

### **PRODUCT APPLICATION**

Read all installation instructions thoroughly before installation.

- 1. Before application, test *Tilt Finish* on a small sample area to ensure the desired results.
- 2. Immediately after mixing, place *Tilt Finish* onto the surface and work it in with a trowel or the sacking method.
- 3. Allow the product to set before finishing.
- 4. Trowel to the desired surface finish shortly after placement.
- 5. The finished surface may be lightly sanded as soon as it is hard, and primed/painted in 24 hours with a compatible water-based paint or coating (depending on temperatures and humidity).

### CURING

- *Tilt Finish* is self-curing; do not use a damp-curing method.
- Tilt Finish can be sealed with curing compounds and compatible water-based sealers within a few hours of placement when temperatures are above 70°F (21°C). Allow 24 hours before applying solvent-based sealers.

### CLEANUP

 Wash hands and tools with water promptly before the material hardens. Cured material must be mechanically removed.

### LIMITATIONS

- Install from featheredge to 1/8" (3 mm), or up to 1/2" (12 mm) in confined areas (less than 2 sq. in. [13 cm<sup>2</sup>]) such as honeycombs and formwork tie holes.
- When placing *Tilt Finish* in voids deeper than 1/8" (3 mm), use the minimum specified water ratio. Use *Planitop® X* or *Planitop XS* for repairs deeper than 1/2" (12 mm) and cover with *Tilt Finish*.
- For enhanced durability, mix with MAPEI's *Planicrete AC* diluted and/or ensure that *Tilt Finish* is painted or sealed in environments subject to frequent freeze/thaw conditions.
- Tilt Finish can be applied from 41°F to 95°F (5°C to 35°C). Allow for extra curing time when temperatures are below 65°F (18°C). Follow ACI guidelines when installing at temperatures below 45°F (7°C) or above 85°F (29°C).
- Do not overwater the mixture.
- The mixing ratio must remain consistent for the finish color to remain consistent.
- Do not add cements or other chemical admixtures to *Tilt Finish.*
- 🐼 MAPEI<sup>®</sup>

- Do not mix more material than can be applied in 25 minutes.
- Honor all expansion and control joints. Cut or tool them as soon as *Tilt Finish* has cured hard enough to prevent the risk of surface damage.
- Protect the installation from excessive heat and/or wind until dry, for about 12 hours at 73°F (23°C).
- Protect the installation from rain and fluid for 24 hours after application, and from freezing for 7 days after application.

### **Product Performance Properties**

Laboratory Tests	Results
Compressive strength (ASTM C109) – 28 days	> 2,000 psi (13,8 MPa)
VOCs (Rule #1168 of California's SCAQMD)	O g per L

### Shelf Life and Product Characteristics (before mixing)

Shelf life	1 year when stored in the original, unopened bag at 73°F (23°C) in a dry area
Physical state	Powder
Color	Light gray

### **Application Properties**

Mixing ratio	3.25 to 3.46 U.S. qts. (3,08 to 3,27 L) of water per 20 lbs. (9,07 kg) of <i>Tilt Finish</i>
Application temperature range	41°F to 95°F (5°C to 35°C)
Pot life at 73°F (23°C)	Up to 25 minutes
Drying time at 73°F (23°C)	12 hours
Initial set at 73°F (23°C)	25 to 40 minutes

### **CSI** Division Classifications

Cast in Place Concrete	03 30 00
Concrete Restoration and Cleaning	03 90 00

### Packaging

Size	
Bag: 20 lbs. (9,07 kg)	

### Approximate Coverage\* per 20 lbs. (9,07 kg)

Thickness	Yield/Coverage
1/16" (1,5 mm)	0.312 cu. ft. (0,289 m <sup>3</sup> ), or 60 sq. ft. (5,57 m <sup>2</sup> )

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







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Refer to the SDS for specific data related to health and safety as well as product handling.

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or 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

### LEGAL NOTICE

www.mapei.com. ANY ALTERATIONS TO THE Wording or requirements contained In or derived from this tds shall Void all related mapei warranties.

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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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