



FOR  
PROFESSIONAL  
USE ONLY

# Tilt Finish™

## 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 extremely fine aggregate. *Tilt Finish* is ideal for producing a smooth finish on concrete surfaces including tilt wall, poured-in-place concrete, masonry, pre-cast beams and columns. *Tilt Finish* features extraordinary ease of placement, with a variable water ratio and outstanding workability. Light gray *Tilt Finish* can be applied from featheredge, up to 1/2" (12 mm) in confined areas. Ease of placement makes it ideal for covering imperfections in concrete surfaces, providing a uniform and light gray appearance, or a smooth surface before painting or application of coating.

### FEATURES AND BENEFITS

- Fast-setting for quick job turnaround
- Extraordinary ease of placement promotes outstanding workability.
- Smooth, light gray featheredge finish blends beautifully with concrete.
- Highly versatile resurfacer readily accepts coatings.

### WHERE TO USE

- 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
- Refinishing and patching of concrete surfaces where concrete's natural gray color is desired

### LIMITATIONS

- *Tilt Finish* is not intended for use as a wear surface.
- Install from featheredge to 1/8" (3 mm), and up to 1/2" (12 mm) in confined areas (< 2 sq. in. [13 cm<sup>2</sup>]).
- When placing *Tilt Finish* in deeper voids, 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*.
- *Tilt Finish* can be primed, sealed, painted or covered with coatings in as little as 24 hours, depending on temperature.
- *Tilt Finish* can be colored with iron oxide pigments and liquid color packs. Verify compatibility before use.
- *Tilt Finish* is compatible with most coatings, paints, sealers, dyes and concrete stains.
- *Tilt Finish* can be used for exterior concrete repairs. For enhanced durability, mix with *Planicrete® AC* and/or ensure *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 cure time when temperatures are below 65°F (18°C). Follow ACI guidelines when installing at above 85°F (29°C).

### SUITABLE SUBSTRATES

- Sound, stable, clean, vertical and overhead exterior concrete surfaces free of excessive moisture
- Masonry and block surfaces
- Properly prepared interior horizontal and vertical surfaces

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

## SURFACE PREPARATION

Prepare concrete substrate in accordance with ICRI Technical Guideline #310.2-1997: Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays.

- All substrates must be structurally sound, stable and clean.
- Thoroughly clean the surface of any substance that could interfere with the bond or the installation material including dirt, paint, tar, asphalt, wax, oil, grease, latex compounds, sealers, curing compounds, form release agents, laitance, loose toppings, foreign substances and adhesive residues.
- Concrete substrate and ambient temperatures must be between 41°F to 95°F (5°C to 35°C) before application. Temperatures must be maintained within this range for at least 4 hours after the installation of *Tilt Finish*. Protect from rain and fluid for 24 hours after application, and from freezing for 7 days after application.
- If necessary, mechanically remove weak concrete surface down to solid concrete, meeting at least 175 psi (1,21 MPa) in tensile bond strength.
- Concrete substrate must have some open porosity, or it should be profiled to ensure bonding.
- To provide the most uniform surface, repair all cracks in the substrate using conventional repair techniques before applying *Tilt Finish* product. Use *Planibond® CR 50* for crack repair (see Technical Data Sheet for instructions). Ensure that any exposed epoxy receives fine sand to facilitate bond of a subsequent application coating of *Tilt Finish*. Cracks will often telegraph through any resurfacing material. While crack repair is recommended before application of *Tilt Finish*, MAPEI does not warrant that cracks will not reappear, even when following established repair techniques.
- For best results, some porous or very dry substrates should be in an SSD (saturated surface-dry) state with water before application of *Tilt Finish*.

## MIXING

Note: Choose all appropriate safety equipment before use. Refer to the (Material) Safety Data Sheet for more information.

1. Into a clean mixing container, pour the required amount of room-temperature, clean potable water. If available water is not room-temperature, chill water to 70°F (21°C). 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 lbs.(9,07 kg) bag of *Tilt Finish*. Place water in mixing pail and mix product while slowly adding powder. The mixing ratio must remain consistent. Do not overwater material, as this will result in reduced product

performance. Use the minimum water ratio when filling voids deeper than 1/4" (6 mm).

2. For additional durability, *Tilt Finish* may be mixed with *Planicrete AC* instead of with water alone. Dilute *Planicrete AC* at a ratio of 2:1 (water:*Planicrete AC*), and add 3.25 to 3.46 U.S. qts. (3,08 to 3,27 L) of diluted mix per 20-lb. (9,07-kg) bag of *Tilt Finish*.
3. Mix with a medium-speed drill (at 550 to 800 rpm) with a box paddle or other appropriate paddle for 1.5 to 2 minutes, ensuring a lump-free consistency.
4. Do not add cements or other admixtures to *Tilt Finish*.
5. Do not mix more material than can be applied in 30 to 45 minutes, depending on temperature and humidity. Do not re-temper or add more water to the mix.

## PRODUCT APPLICATION

1. Read all installation instructions thoroughly before installation.
2. Before application, test all surface treatments on a small sample area to ensure the desired results.
3. Do not apply over standing water.
4. When rain is expected, ensure that *Tilt Finish* has time to cure well or that the application surface has been sealed before the rain.
5. Immediately after mixing, place *Tilt Finish* onto the surface and work it in with trowel or sacking method to obtain an excellent mechanical bond. Allow the product to set before finishing.
6. Trowel to desired surface finish. On very hot surfaces, apply a mist of water (saturate surface-dry or SSD) and place *Tilt Finish* after surface water evaporates. Finish shortly after placing. Deeper repairs and cooler weather will require additional drying time. Alternately, *Tilt Finish* may be applied and/or finished using a sacking or rubbing method.
7. *Tilt Finish* can typically be covered in 24 to 48 hours with breathable paint, coatings, waterproofing and sealers where thickness is less than 1/4" (6 mm), depending on temperature and humidity. Do not allow *Tilt Finish* to bridge any moving expansion or control joint.
8. Honor all expansion and control joints. Cut or tool them as soon as *Tilt Finish* has cured hard enough without damaging the surface.

## Product Performance Properties

| Laboratory Tests                            | Results                |
|---|------------------------|
| Initial set                                 | 25 to 40 minutes       |
| Drying time                                 | 12 hours (curing time) |
| Compressive strength (ASTM C109)<br>28 days | > 2,000 psi (13,8 MPa) |

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.

## Shelf Life and Application Properties

|                               |  |
|-------------------------------|--|
| Shelf life                    | 12 months when stored in original, unopened bag at 73°F (23°C) in a dry, heated area |
| Pot life                      | 15 to 25 minutes   |
| Open time†                    | 15 minutes after applying  |
| Application temperature range | 41°F to 95°F (5°C to 35°C)   |
| Color                         | Light gray   |

† Open times vary based on temperature, humidity, substrate, application techniques and jobsite conditions.

## CSI Division Classifications

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

## Packaging

| Product Code | Size                   |
|--------------|------------------------|
| 14720        | Bag: 20 lbs. (9,07 kg) |

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

| Thickness      | Yield*                                 |
|----------------|--|
| 1/16" (1,5 mm) | 60 sq. ft. (5,57 m²) at 1/16" (1,5 mm) |

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

## CURING

- *Tilt Finish* is self-curing; do not use a damp-curing method.
- *Tilt Finish* can be sealed with compatible water-based sealers and curing compounds within a few hours of placement when temperatures are above 70°F (21°C). Allow 24 hours before applying solvent-based sealers.
- Typically, the product surface may be lightly sanded as soon as it is hard, and primed/painted in 24 hours with a water-based paint (temperature- and humidity-dependent). Test for compatibility with specific paint or coating, and follow manufacturer's instructions.

## CLEANUP

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

## PROTECTION

- Protect from excessive heat and/or wind, which can cause premature surface drying.
- Protect from traffic, dirt and dust and moisture until *Tilt Finish* is cured.

# Tilt Finish™



## RELATED DOCUMENTS

|   |             |
|---|-------------|
| ICRI Technical Guideline: Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays | #310.2-1997 |
|---|-------------|

Refer to MAPEI's (M)SDS for specific data related to VOCs, health and safety, and handling of product.

## STATEMENT OF RESPONSIBILITY

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **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**

We proudly support the following industry organizations:



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For the most current BEST-BACKED™ product data and warranty information, visit [www.mapei.com](http://www.mapei.com).

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