



PLANITOP 200
Water-Repellent Skimcoat Mortar for Concrete and Glass/Porcelain Mosaics

SECTION 03 01 30
MAINTENANCE OF CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Products for maintenance of concrete, including the following:
 - 1. For leveling and finish concrete and masonry walls.
 - 2. For coating ceramic or glass mosaic substrates.

1.2 RELATED SECTIONS

- A. Section 03 30 00 - Cast-in-Place Concrete.

1.3 REFERENCES

- A. ASTM International:
 - 1. ASTM C109 - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens).

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Verification Samples: For each finish product specified, two samples, minimum size 6" (150 mm) square representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2 years' experience installing similar products.
- C. Source Limitations: For repair products, obtain each color, grade, finish, type, and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship is approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.



1.6 PRE-INSTALLATION MEETINGS

- A. Convene at least two weeks prior to starting work of this section.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Handling: Handle materials to avoid damage.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.9 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Product Performance:
 - Compressive strength – ASTM C109
 - 1 day > 725 psi (5 MPa)
 - 7 days > 1,740 psi (12 MPa)
 - 28 days > 2,900 psi (20 MPa)
 - Flexural strength – ASTM C348
 - 28 days > 725 psi (5 MPa)
 - Tensile pullout bond strength (concrete)
 - 28 days > 290 psi (2 MPa)
 - Tensile pullout strength (ceramic and porcelain tiles)
 - 28 days > 200 psi (1.38 MPa)
- B. Acceptable Manufacturer:
 - MAPEI North America
 - 1144 E. Newport Center Dr.; Deerfield Beach, FL 33442
 - Toll-Free for CRS Technical Services: Tel. 888-365-0614
 - Email: CRS@mapei.com
 - Web: www.mapei.com
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
- D. Substitutions: Not permitted.

2.2 VERTICAL CONCRETE, GLASS AND PORCELAIN MOSAICS SKIMCOATING PRODUCTS

- A. One-Component, Water-Repellent Skimcoating Cementitious Repair Material: Packaged, dry mix for repair of concrete, glass and porcelain mosaics
 - 1. Product: Subject to compliance with requirements, provide MAPEI Corporation;



- Planitop 200.
2. Compressive Strength: Not less than 2,900 psi (20 MPa) within 28 days when tested according to ASTM C109.

2.3 MISCELLANEOUS MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I, II or III unless otherwise indicated.
- B. Water: Potable.

2.4 MIXES

- A. General: Mix products in clean containers according to manufacturer's written instructions.
 1. Do not add water, thinners, or additives unless recommended by manufacturer.
 2. When practical, use manufacturer's premeasured packages to ensure that materials are mixed in proper proportions. When premeasured packages are not used, measure ingredients using graduated measuring containers; do not estimate quantities or use shovels or trowels as units of measure.
 3. Do not mix more materials than can be used within time limits recommended by manufacturer. Discard materials that have begun to set.
- B. Mortar Scrub Coat: Mix dry ingredients with enough water to provide consistency of thick cream.
- C. Concrete: Comply with Section 03 30 00 - Cast-in-Place Concrete.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Properly prepared concrete at least 28 days old, stable, sound and dry.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Concrete surface must be free of loose particles, efflorescence, paints, tars, grease, asphaltic materials, bond breakers, curing compounds, wax, and dry foreign substances or any conditions that may affect product performance or proper bonding.
- B. Ensure that painted surfaces are well bonded to the substrate.
- C. Mechanically profile and prepare concrete surfaces by engineer-approved methods in accordance with the most current ICRI 310.2R Guidelines.
- D. Pressure-wash surfaces for complete removal of all dust residue and wait until all surface water disappears before applying Planitop 200.

3.3 MIXING

- A. Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details. The mixing ratio is 5.25 to 6 U.S. qts. (4.97 to 5.68 L) of clean, potable water per 55



lbs. (24.9 kg) of Planitop 200.

- B. Mix for about 3 minutes to a lump-free, homogeneous consistency with a low-speed mixer and ribbon paddle.

3.4 INSTALLATION

Read all installation instructions thoroughly before installation.

- A. Use a trowel to apply a layer of mortar up to a maximum thickness of 1/8" (3 mm).
- B. Smooth to a finish by trowel or dampened sponge float.
- C. In hot or windy conditions, spray water on the surface of Planitop 200 when it starts to set (when pressed lightly without leaving fingerprints) and over the next 48 hours, once the mortar has hardened.

3.5 CURING AND PROTECTION

- A. Moist-cure Planitop 200 with a fine mist of water for 48 hours immediately following finishing.
- B. Protect the applied Planitop 200 from direct sunlight, wind and frost for 48 hours.

END OF SECTION