

# PLANITOP BASECOAT Polymer-Modified, Cementitious Adhesive and Basecoat

# SECTION 09 24 00 PORTLAND CEMENT PLASTER

## **PART 1 GENERAL**

# 1.1 SECTION INCLUDES

- A. Products for maintenance of concrete, including the following:
  - 1. Vertical Portland-cement based mortar for non-structural applications.

## 1.2 RELATED SECTIONS

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

#### 1.3 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 inches (150 mm) square representing actual product, color and patterns.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years' experience in manufacturing similar products.
- B. Installer Qualifications: Minimum 2 years' experience in installing similar products.
- C. Source Limitations: For repair products, obtain each color, grade, finish, type, and variety of product from a single source and from a 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.

### 1.5 PRE-INSTALLATION MEETINGS

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

## 1.6 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.

## 1.7 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.

## 1.8 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

7 days > 2,000 psi (13.8 MPa) 28 days > 2,500 psi (17.2 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: <u>CRS@mapei.com</u>
Web: <u>www.mapei.com</u>

- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 Product Requirements.
- D. Substitutions: Not permitted.

# 2.2 POLYMER-MODIFIED CEMENTITIOUS BASECOATS

- A. Polymer-Modified, Portland-Cement Mortar for Non-Structural Applications: Packaged, dry mix for repair of concrete.
  - 1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Planitop Basecoat.
  - 2. Product shall be non-redispersible.
  - 3. Compressive Strength: Not less than 2,500 psi (17.2 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.
  - 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. Dry-Pack Mortar: Mix required type(s) of patching-mortar dry ingredients with just enough liquid to form damp cohesive mixture that can be squeezed by hand into a ball but is not plastic.
- D. Concrete: Comply with Section 03 30 00 Cast-in-Place Concrete.

#### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Sound, stable, clean, vertical concrete surfaces, both interior and exterior.
- B. As a skimcoat for smooth, locally approved and code-conforming concrete or masonry surfaces before application of the finish coat.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

## 3.2 PREPARATION

- A. All surfaces to receive application must be structurally sound, clean and free of debris, dirt, dust, efflorescence, grease, oils, curing agents, paint, coatings and cleaning solutions. Ensure that all surfaces are smooth and free of any irregularities. Repair cracks and irregular.
- B. Refer to the following standards for surface preparation:
  - ASTM D4258 Surface Cleaning of Concrete Before Painting.
  - ASTM D926 Application of Portland Cement-Based Plaster.
  - ACI 524R Guide to Portland Cement-Based Plastering.
  - ASTM C1063 Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.
  - ASTM D4261 Surface Cleaning of Concrete Masonry Unit for Coating.

## 3.3 MIXING

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



- A. Add about 1.25 to 1.4 U.S. gals. (4.73 to 5.30 L) of cool, clean water to the powder and mix to a thick, paste-like consistency. Use only slow-speed bucket mixers or mortar box for mixing. Do not exceed a mixing speed of 500 rpm. Keep the mixing time to a minimum (about 3 to 5 minutes). Do not overmix: Blend only long enough to attain a smooth, consistent mix.
- B. Mortar should be allowed to stand ("slake") for 10 to 15 minutes, and then be remixed.
- C. If the mix thickens beyond usability, do not attempt to remix. Instead, discard and mix a fresh batch.

## 3.4 INSTALLATION

Read all installation instructions thoroughly before installation. Place and finish the product according to the cited codes and the approved installation assembly.

# Application as a Basecoat for EIFS, or over scratch and brown coat:

- A. Apply Planitop Basecoat to the substrate at a minimum thickness of 1/16" (1.5 mm).
- B. Completely embed an approved fiberglass reinforcing mesh into this coat and trowel smooth, ensuring that the mesh is completely covered.
- C. Finish with a stucco or wood trowel.

## Application as a skimcoat:

- A. Apply Planitop Basecoat to the area needed to be leveled at a maximum thickness of 5/8" (16 mm) per coat. Application methods will vary based on job conditions.
- B. Finish with a stucco or wood trowel.

# Application as an adhesive:

- A. Apply Planitop Basecoat to the back of the insulation board with an approved notched trowel in vertical ribbons.
- B. Apply the side of the insulation board that has been coated with Planitop Basecoat to the substrate. Ensure that the entire piece of insulation board has made contact with and is firmly attached to the substrate.
- Allow Planitop Basecoat to set for at least 24 hours before working on the insulation board.

## Application with foam shapes:

A. Apply Planitop Basecoat to the back of the foam shape with an approved notched trowel, ensuring a consistent coat of at least 1/16" (1.5 mm).

**END OF SECTION**