

SECTION 09981 – CEMENTITIOUS COATING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Exterior horizontal and nonvertical plasterwork (stucco).

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show locations and installation of control and expansion joints, including plans, elevations, sections, details of components, and attachments to other work.
- C. Samples: For each type of factory-prepared finish coat and for each color and texture specified.
- D. Samples for Initial Selection: For each type of factory-prepared finish coat and for each color and texture specified.
- E. Samples for Verification: For each type of factory-prepared finish coat and for each color and texture specified, 12 by 12 inches, and prepared on rigid backing.

1.5 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Build mockups for each substrate and finish texture indicated for cement plastering, including accessories.
 - a. Size: 10 sq. ft. in surface area.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Engineer specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials inside under cover and keep them dry and protected against damage from weather, moisture, direct sunlight, surface contamination, corrosion, construction traffic, and other causes.

1.7 FIELD CONDITIONS

- A. Comply with ASTM C926 requirements.
- B. Exterior Plasterwork:
 1. Apply and cure plaster to prevent plaster drying out during curing period. Use procedures required by climatic conditions, including moist curing, providing coverings, and providing barriers to deflect sunlight and wind.
 2. Apply plaster when ambient temperature is greater than 40 deg F.
 3. Protect plaster coats from freezing for not less than 48 hours after set of plaster coat has occurred.
- C. Factory-Prepared Finishes: Comply with manufacturer's written recommendations for environmental conditions for applying finishes.

PART 2 - PRODUCTS

2.1 ACCESSORIES

- A. General: Comply with ASTM C1063, and coordinate depth of trim and accessories with thicknesses and number of plaster coats required.
- B. Plastic Accessories: Manufactured from high-impact PVC.
 1. Cornerbeads: With perforated flanges.
 - a. Small nose cornerbead; use unless otherwise indicated.
 2. Casing Beads: With perforated flanges in depth required to suit plaster bases indicated and flange length required to suit applications indicated.
 - a. Square-edge style; use unless otherwise indicated.

3. Control Joints: One-piece-type, folded pair of unperforated screeds in M-shaped configuration; with perforated flanges and removable protective tape on plaster face of control joint.
4. Expansion Joints: Two-piece type, formed to produce slip-joint and square-edged 1/2-inch- wide reveal; with perforated concealed flanges.

2.2 MISCELLANEOUS MATERIALS

- A. Water for Mixing and Finishing Plaster: Potable and free of substances capable of affecting plaster set or of damaging plaster, lath, or accessories.
- B. Fiber for Base Coat: Alkaline-resistant glass or polypropylene fibers, 1/2-inch-long, free of contaminants, manufactured for use in cement plaster.
- C. Bonding Compound: ASTM C932.

2.3 PLASTER MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I.
 1. Color for Finish Coats: White.
- B. Masonry Cement: ASTM C91, Type N.
 1. Color for Finish Coats: White.
- C. Lime: ASTM C206, Type S; or ASTM C207, Type S.
- D. Sand Aggregate: ASTM C897.
 1. Color for Job-Mixed Finish Coats: In color matching Engineer's sample.
- E. Finish Coatings: Surfaces shall be finished with high-performance coatings in accordance with Section 09960.

2.4 PLASTER MIXES

- A. General: Comply with ASTM C926 for applications indicated.
 1. Fiber Content: Add fiber to base-coat mixes after ingredients have mixed at least two minutes. Comply with fiber manufacturer's written instructions for fiber quantities in mixes, but do not exceed 1 lb of fiber/cu. yd. of cementitious materials.
- B. Base-Coat Mixes for Use over Concrete: Single base (scratch) coat for two-coat plasterwork on high-absorption plaster bases as follows:
 1. Portland Cement Mix: For cementitious material, mix 1-part portland cement and 3/4 to 1-1/2 parts lime. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
 2. Masonry Cement Mix: Use 1-part masonry cement and 2-1/2 to 4 parts aggregate.

3. Portland and Masonry Cement Mix: For cementitious material, mix 1-part portland cement and 1-part masonry cement. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
- C. Job-Mixed Finish-Coat Mixes:
1. Portland Cement Mix: For cementitious materials, mix 1-part portland cement and 3/4 to 1-1/2 parts lime. Use 1-1/2 to 3 parts aggregate per part of cementitious material.
 2. Masonry Cement Mix: Use 1-part masonry cement and 1-1/2 to 3 parts aggregate.
 3. Portland and Masonry Cement Mix: For cementitious materials, mix 1-part portland cement and 1-part masonry cement. Use 1-1/2 to 3 parts aggregate per part of cementitious material.
- D. Finish Coat: Refer to Section 09960

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect adjacent work from soiling, spattering, moisture deterioration, and other harmful effects caused by plastering.
- B. Prepare smooth, solid substrates for plaster according to ASTM C926.

3.3 INSTALLING ACCESSORIES

- A. Install according to ASTM C1063 and at locations indicated on Drawings.
- B. Reinforcement for External (Outside) Corners:
 1. Install cornerbead at exterior locations.
- C. Control Joints: Locate as approved by Engineer for visual effect and as follows:
 1. As required to delineate plasterwork into areas (panels) of the following maximum sizes:
 - a. Vertical Surfaces: 144 sq. ft.
 - b. Horizontal and Other Nonvertical Surfaces: 100 sq. ft.
 2. At distances between control joints of not greater than 18 feet o.c.

3. As required to delineate plasterwork into areas (panels) with length-to-width ratios of not greater than 2-1/2:1.
4. Where control joints occur in surface of construction directly behind plaster.
5. Where plasterwork areas change dimensions, to delineate rectangular-shaped areas (panels) and to relieve the stress that occurs at the corner formed by the dimension change.

3.4 PLASTER APPLICATION

- A. General: Comply with ASTM C926.
 1. Do not deviate more than plus or minus 1/4 inch in 10 feet from a true plane in finished plaster surfaces when measured by a 10-foot straightedge placed on surface.
 2. Provide plaster surfaces that are ready to receive field-applied finishes indicated.
- B. Bonding Compound: Apply on concrete substrates for direct application of plaster.
- C. Walls; Base-Coat Mix: For base (scratch) coat, for two-coat plasterwork and having 3/8-inch to 1/2-inch thickness on concrete, as follows:
 1. Portland cement mix.
 2. Masonry cement mix.
 3. Portland and masonry cement mix.
- D. Plaster Finish Coats: Apply to provide float finish to match Engineer's sample.
- E. Finish Coatings: Apply coating system in accordance with Section 09960.

3.5 PLASTER REPAIRS

- A. Repair or replace work to eliminate cracks, dents, blisters, buckles, crazing and check cracking, dry outs, efflorescence, sweat outs, and similar defects and where bond to substrate has failed.

3.6 CLEANING AND PROTECTION

- A. Remove temporary protection and enclosure of other work after plastering is complete. Promptly remove plaster from door frames, windows, and other surfaces not indicated to be plastered. Repair floors, walls, and other surfaces stained, marred, or otherwise damaged during plastering.

END OF SECTION 09981