

SECTION 09220

PORTLAND CEMENT PLASTER (STUCCO)

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Portland cement plaster system for exterior applications, color inherent.
- B. Smooth sand texture.
- C. Gypsum sheathing.

1.2 RELATED SECTIONS

- A. Section 06112 - Framing and Sheathing.
- B. Section 07900 - Joint Sealers.

1.3 REFERENCES

- A. ASTM C91 - Masonry Cement.
- B. ASTM C150 - Portland Cement.
- C. ASTM C206 - Finishing Hydrated Lime.
- D. ASTM C207 - Hydrated Lime for Masonry Purposes.
- E. PCA (Portland Cement Association) - Stucco Manual.

1.4 SYSTEM DESCRIPTION

- A. Fabricate vertical elements to limit finish surface to 1/360 deflection under lateral point load of 100 lbs.
- B. Fabricate horizontal elements to limit finish surface to 1/360 deflection under superimposed dead load and wind uplift loads.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide data on plaster materials, characteristics and limitations of products specified.

- C. Provide selector charts showing manufacturing standard colors.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with PCA Stucco Manual.

1.7 QUALIFICATIONS

- A. Applicator: Company specializing in performing the work of this section with minimum 5 years experience.

1.8 MOCKUP

- A. Provide mockup of stucco plaster system under provisions of Section 01410.
- B. Construct mockup, 2 feet long by 2 feet wide, illustrating surface finish and .
- C. Mockup will not remain as part of the Work.

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply plaster when substrate or ambient air temperature is less than 50 degrees F nor more than 80 degrees F.
- B. Maintain minimum ambient temperature of 50 degrees F (10 degrees C) during installation of plaster and until cured.

PART 2 - PRODUCTS

2.1 PLASTER BASE MATERIALS

- A. Cement: ASTM C150.
- B. Mason Mix: Magnolia Light.
- C. Water: Clean, fresh, potable and free of mineral or organic matter which can affect plaster.
- D. Bonding Agent: ASTM C631; type recommended for bonding plaster to wood lath.

2.2 PLASTER FINISH MATERIALS

- A. Finish Coat: Bonsal, as manufactured by W.K. Bonsal color to match existing EIFS color.
- B. Water: Clean, fresh, potable and free of mineral or organic matter which can affect plaster.

2.3 FURRING AND LATHING

- A. Metal Lath and Accessories: Specified in Section 09206.
- B. Metal Lath: "Stucco/Rite" by Tree Island Steel; self furring woven fabric, grade "D". Baked with treated paper.
- C. Underlayment: Asphalt saturated 15# felt.
- D. Casing Bead: Formed zinc minimum 26 gage thick; depth governed by plaster thickness; maximum possible lengths.
- E. Corner Bead: Formed zinc minimum 26 gage thick; depth governed by plaster thickness; maximum possible lengths.
- F. Control Joint Accessories: Formed minimum 26 gage accordion profile flanges each side.
- G. Anchorage Methods: Nails, staples or other approved metal supports, of type and size to suit application, galvanized to rigidly secure lath and associated metal accessories in place.

2.4 CEMENT PLASTER MIXES

- A. Mix and proportion cement plaster in accordance with PCA Plaster (Stucco) Manual.
- B. Base Coat and Brown Coat: One bag portland cement, two equal bags of mason's mix and twenty-eight shovels full of clean masonry sand.
- C. Finish Coat: Premix in accordance with manufacturer's instructions.
- D. Mix only as much plaster as can be used prior to initial set.
- E. Mix materials dry, to uniform color and consistency, before adding water.
- F. Protect mixtures from freezing, frost, contamination, and evaporation.
- G. Do not retemper mixes after initial set has occurred.

2.5 GYPSUM SHEATHING

- A. Equal to Dens-Glass Goud, Georgia Pacific Gypsum Corp.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify surfaces and site conditions under provisions of Section 01039.
- 3.2 PREPARATION
- A. Clean sheathing surfaces of foreign matter.
- 3.3 INSTALLATION - LATHING MATERIALS
- A. Apply one ply of felt underlayment over substrate; weather lap edges 4 inches (100 mm) minimum. Fasten in place.
 - B. Apply self furring reinforcement with self furring ribs perpendicular to supports.
 - C. Lap ends minimum 1. Secure end laps with tie wire where they occur between supports.
 - D. Attach metal lath to wood supports using nails at maximum 8 inches (mm) on center.

3.4 INSTALLATION - ACCESSORIES

- A. Continuously reinforce internal angles with corner mesh.
- B. Place corner bead at external wall corners; fasten at outer edges of lath only.
- C. Place 4 inch wide strips of metal lath centered over junctions of dissimilar backing materials. Secure rigidly in place.
- D. Place casing beads at terminations of plaster finish. Butt and align ends. Secure rigidly in place.
- E. Position to provide convenient access to concealed work requiring access.

3.5 CONTROL JOINTS

- A. Locate control joints every 12 feet in each direction on flat uninterrupted surfaces. Verify layout of joints with Architect before installing base coat.
- B. Establish control joints with double casing beads butted tight. Set both beads over 6 inch wide strip of polyethylene sheet for air seal continuity.

3.6 PLASTERING

- A. Apply plaster in accordance with PCA Plaster (Stucco) Manual.

- B. Apply scratch coat to a nominal thickness of ½ inch, brown coat to a nominal thickness of ½ inch and a finish coat to a nominal thickness of 1/8 inch over plywood sheathing.
- C. Moist cure scratch and brown coats.
- D. After curing, dampen base coat prior to applying finish coat.
- E. Apply finish coats and trowel to a smooth sand textured finish.
- F. Avoid excessive working of surface. Delay troweling as long as possible to avoid drawing excess fines to surface.
- G. Maintain clean lines between colors. If necessary, accented items may be stained for contrast.
- H. Moist cure finish coat for minimum period of 48 hours.

3.7 TOLERANCES

- A. Maximum Variation from True Flatness: 1/8 inch in 10 feet.

END OF SECTION

