

SECTION 09 2400

PORTLAND CEMENT PLASTERING

This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by one of the following methods:

Microsoft Word 2010: Display the FILE tab on the ribbon, click OPTIONS, then on left menu click on DISPLAY. Under ALWAYS SHOW THESE select or deselect HIDDEN TEXT.

Microsoft Word 2007: Click the OFFICE button, select WORD OPTIONS, select DISPLAY, then select or deselect the HIDDEN TEXT option.

Corel WordPerfect: From the pull-down menus select VIEW, then select or deselect the HIDDEN TEXT option.

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Portland cement plaster on [metal lath.] [[concrete] [masonry] base.]
 - 2. Trim.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C150 - Standard Specification for Portland Cement.
 - 2. C847 - Standard Specification for Metal Lath.
 - 3. C897 - Standard Specification for Aggregates for Job-Mixed Portland Cement-Based Plasters.
 - 4. C926 - Standard Practice for Application of Portland Cement-Based Plaster.
 - 5. C1063 - Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.
- B. National Association of Architectural Metal Manufacturers (NAAMM) ML/SFA 920 - Guide Specifications for Metal Lathing and Furring.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples:
 - a. [3 x 3] [__ x __] inch finish coat samples showing available colors.
 - b. [After color selection, submit] [12 x 12] [__ x __] inch finish coat samples in [specified] [selected] color and texture.
 - c. [6] [__] inch long trim samples.
 - 2. Hot weather procedures: Description of proposed application and curing procedures.
- B. Sustainable Design Submittals:
 - 1. Regional Materials: Indicate cost of products harvested, extracted, recovered, or manufactured within 500 mile radius of Project site.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Minimum [__] years [documented] experience in work of this Section.
- B. Mockup:

1. Size: Minimum [20] [] square feet.
2. Show: Plaster color and texture, horizontal and vertical control joints, and casings.
3. Locate [where directed.] [_____].
4. Approved mockup may [not] remain as part of the Work.

1.5 PROJECT CONDITIONS

- A. Cold Weather Requirements: Do not apply plaster unless minimum ambient temperature is above [50] [] degrees F for [48] [] hours prior to, during, and after application and during curing period.
- B. Hot Weather Requirements:
 1. At ambient temperature above [85] [] degrees F, relative humidity less than [75] [] percent, or winds in excess of [20] [] MPH, fog surface with water and cover with minimum [6] [] mil polyethylene film weighted or taped in place.
 2. Leave coverings in place minimum [48] [] hours after application.

1.6 WARRANTIES

- A. Provide manufacturer's 5 year warranty providing coverage against defective materials.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer - Plaster Materials: AHI Supply LP, P.O. Box 2789, Alvin, Texas 77512, 800-873-5794, marketing@ahi-supply.com, www.ahi-supply.com.
- B. Substitutions: [Under provisions of Division 01.] [Not permitted.]

2.2 MATERIALS - LATH

- A. Metal Lath:
 1. ASTM C847, [expanded [self-furring] diamond mesh,] [flat rib, [1/8] [] inch high,] [high rib, [3/8] [] inch high,] galvanized [, backed with treated Kraft paper].
 2. Recycled content: Minimum [] percent, with minimum [] percent classified as post consumer.

2.3 MATERIALS - PLASTER

- A. Plaster:
 1. Source: Spectrum Scratch and Brown [with fibers].
 2. Description: Non-sanded, proprietary mixture of Portland cement and admixtures.

2.4 MATERIALS - FINISH COAT

- A. Finish Coat:
 1. Source: Spectrum Gray Finish Coat.
 2. Description: Non-sanded, proprietary mixture of Portland cement and admixtures.
- B. Finish Coat:
 1. Source: Spectrum Elastomeric Paint.
 2. Description: 100 percent elastomeric, weather resistant coating.
 3. Color: [_____]. [Custom color to be selected.] [To be selected from manufacturer's full color range.]

**** OR ****

- C. Finish Coat:
 1. Source: Spectrum Acrylic Finish.
 2. Description: Water based, weather resistant coating.

3. Color: [____.] [Custom color to be selected.] [To be selected from manufacturer's full color range.]
4. Texture: [Adobe.] [Sand.] [Medium.] [Custom texture to be selected.]

**** OR ****

- D. Finish Coat:
1. Source: Spectrum Elastomeric Stucco Finish.
 2. Description: 100 percent elastomeric, weather resistant coating.
 3. Color: [____.] [Custom color to be selected.] [To be selected from manufacturer's full color range.]
 4. Texture: [Adobe.] [Sand.] [Medium.] [Custom texture to be selected.]

2.5 MATERIALS - TRIM

- A. Trim:
1. Material: [Formed steel sheet, hot dip galvanized finish, expanded flanges.] [Formed zinc alloy, perforated flanges.] [Extruded PVC, perforated flanges.]
 2. Corner bead: Beaded edge, size and profile to suit application.
 3. Casing bead: Thickness governed by plaster thickness, square edge.
 4. Control joint: Accordion profile with minimum 2 inch flanges each side.
- B. Fasteners: Type and size suited to application, hot-dip galvanized or fluoropolymer coated steel.
- C. Tie Wire: 16 gage, galvanized steel, soft annealed.

2.6 ACCESSORIES

- A. Primer:
1. Source: Spectrum [Primer.] [Tintable primer.]
 2. Description: 100 percent water-based, acrylic, semi-transparent / bright white primer.
- B. Bonding Agent:
1. Source: Spectrum Bonding Agent and Acrylic Admixture.
 2. Description: Re-emulsifiable concrete adhesive.
- C. Acrylic Admixture:
1. Source: Spectrum Bonding Agent and Acrylic Admixture.
 2. Description: Re-emulsifiable concrete adhesive.
- D. Adhesive:
1. Source: Spectrum Base Coat Adhesive.
 2. Description: 100 percent acrylic.

**** OR ****

- E. Adhesive:
1. Source: Spectrum Powdered Base Coat Adhesive.
 2. Description: Polymer modified Portland cement.
- F. Sand: ASTM C897, natural or manufactured, uniformly graded.
- G. Water: Potable.
- H. Portland Cement: ASTM C150, Type 1, gray.

2.7 MIXES

- A. Mix materials in accordance with manufacturer's instructions using mechanical mixer.

- B. Add acrylic admixture to scratch and brown and Portland cement based finish coats.
- C. Accurately proportion materials for initial mixture using measuring devices of known volume.
- D. Thoroughly mix materials dry before adding water. Continue mixing for 3 to 5 minutes after all ingredients have been added.
- E. Clean equipment after each batch.
- F. Mixtures may be retempered one time after initial mixing.
- G. Discard frozen, caked, and hardened mixes. Discard mixes not used within 1-1/2 hours after initial mixing.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean substrate surfaces of foreign matter.
- B. Apply bonding agent to [concrete] [and] [masonry] surfaces in accordance with manufacturer's instructions.
- C. Wet high suction bases with fine water spray to produce uniformly damp surface.

3.2 INSTALLATION OF METAL LATH

- A. Perform Work in accordance with [NAAMM ML/SFA 920.] [ASTM C1063.]
- B. Apply with long dimension perpendicular to supports, with end joints staggered [and occurring over supports]. [Secure end laps with tie wire where they occur between supports.]
- C. Lap ends minimum 1 inch and sides minimum [1-1/2] [__] inches.
- D. [Screw] [Wire tie] to framing at maximum [6] [__] inches on center.

**** OR ****

- E. Secure to [concrete] [masonry] with wire hooks or loops spaced maximum [24] [__] inches on center in both directions.
- F. Stop lath at each side of [expansion and] control joints and secure.
- G. Where control joints are not installed at corners of openings, reinforce corners with [6 x 12] [__ x __] inch lath strip installed diagonally at each corner, wire tied to lath.
- H. If lath is not continued minimum [3] [__] inches on each side of internal corners, reinforce with [12] [__] inch wide lath strip bent at 90 degrees and wire tied to lath.

3.3 INSTALLATION OF ACCESSORIES

- A. Install trim in accordance with ASTM C1063.
- B. Install casing beads where plaster abuts dissimilar material or stops with edge exposed.
- C. Install corner beads at external corners.
- D. Install control joints:

1. Locate as follows unless otherwise indicated:
 - a. As required to limit each area of plaster to [144] [] square feet with no dimension exceeding [12] [] feet.
 - b. Vertically above and below each side of openings.
 - c. Horizontally at each floor line.
2. Run vertical joints continuous; butt horizontal joints into vertical joints.
3. Apply joint sealer to form waterstop behind joints at intersections.

E. Adhere foam trim to plaster with full bed of adhesive.

F. Set level and true to line.

3.4 APPLICATION OF PLASTER

A. Test surfaces using pH pencil 4 to 6 hours after [primer] [bonding agent] has dried. Do not apply plaster to surfaces having pH over 10.

B. Apply plaster in accordance with ASTM C926 and manufacturer's instructions.

C. Dampen each coat prior to applying succeeding coats.

D. Scratch Coat:

1. Apply to nominal [3/8] [] inch thickness.
2. [Form full keys on lath.] Cross rake surface to bond brown coat.

E. Brown Coat:

1. Apply to nominal [3/8] [] inch thickness.
2. Bring out to grounds and rod level.
3. Float surface to provide surface texture receptive to application of finish coat.

**** OR ****

F. Apply plaster to nominal [1/2] [] inch thickness.

1. Bring out to grounds and rod level.
2. Float surface to provide surface texture receptive to application of finish coat.

G. Test surfaces periodically using pH pencil; do not apply plaster to surfaces having pH over 10.

3.5 APPLICATION OF FINISH COAT

A. Apply in accordance with manufacturer's instructions.

B. Clean plaster surfaces prior to applying finish coat and allow to dry.

C. Apply primer to plaster surfaces.

D. Apply finish coat working from wet edges to apply unbroken area in one continuous operation to eliminate joints.

E. Finish surfaces true to plane, plumb and with neat, sharp corners and intersections.

F. Work in panels to nearest natural break formed by intersections, corners, trim, and accessories.

G. Tool plaster to V-joint at trim, grounds and accessories.

H. Not Acceptable: Lines caused by variations in application or finishing techniques, cold joints, and other surface defects visible when viewed from a distance of 10 feet.

- I. After application of each coat, fog spray plaster with clean water in sufficiently frequent applications to maintain plaster uniformly moist for minimum of 48 hours.

3.6 INSTALLATION TOLERANCES:

- A. Plaster: Maximum 1/4 inch in 10 feet variation from true flatness.
- B. Trim: Maximum 1/4 inch in 10 feet variation from plumb, level, or true plane, noncumulative.

3.7 ADJUSTING

- A. Repair or replace damaged, discolored, and defective plaster. Match patched areas to surrounding plaster.

3.8 CLEANING

- A. Clean plaster from trim and accessories before it sets.

END OF SECTION