GENERAL NOTES TO SPECIFIER: THIS SPECIFICATION SECTION HAS BEEN PREPARED TO ASSIST DESIGN PROFESSIONALS IN THE PREPARATION OF PROJECT OR OFFICE MASTER SPECIFICATIONS. IT FOLLOWS GUIDELINES ESTABLISHED BY THE CONSTRUCTION SPECIFICATIONS INSTITUTE, AND THEREFORE MAY BE USED WITH MOST MASTER SPECIFICATION SYSTEMS WITH MINOR EDITING. EDIT CAREFULLY TO SUIT PROJECT REQUIREMENTS. MODIFY AS NECESSARY AND DELETE ITEMS THAT ARE NOT APPLICABLE. VERIFY THAT REFERENCED SECTION NUMBERS AND TITLES ARE CORRECT. SECTION NUMBERS AND TITLES REFERENCED ARE BASED ON MASTERFORMAT, 2004 EDITION. THIS SECTION ASSUMES THE PROJECT MANUAL WILL CONTAIN COMPLETE DIVISION 1 SECTIONS. CLOSE COORDINATION WITH DIVISION 1 SECTIONS IS REQUIRED. IF THE PROJECT MANUAL DOES NOT CONTAIN THESE SECTIONS, ADDITIONAL INFORMATION SHOULD BE INCLUDED UNDER THE APPROPRIATE ARTICLES. THIS IS A PROPRIETARY SPECIFICATION FOR MERLEX STUCCO "BASEX" CRACK-RESISTANT FINISH SYSTEM. NOTES TO THE SPECIFIER ARE IN BLUE HIDDEN TEXT AND SHOULD BE DELETED FROM FINAL COPY. OPTIONAL ITEMS REQUIRING SELECTION BY THE SPECIFIER ARE ENCLOSED WITHIN BRACKETS, E.G: [35] [40] [45]. MAKE APPROPRIATE SELECTIONS AND DELETE OTHERS.

SECTION 092400 (09220) - PORTLAND CEMENT PLASTERING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Ready-mixed cementitious color coat stucco for application over crack-resistant meshreinforced polymer-modified Portland cement base coat.

DELETE BELOW FOR NEW CONSTRUCTION

2. Rehabilitation of existing stucco finish.

1.2 SUBMITTALS

- A. Product Data.
- B. Samples: Minimum 3 x 3 inch material samples of custom colors.
- C. Quality Assurance/Control Submittals:
 - 1. Qualifications: Manufacturer and applicator qualification data.
 - 2. Certifications.
 - 3. Manufacturer's Installation Instructions.

1.3 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer Qualifications: Minimum five years experience in producing cementitious coatings of the type specified.

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- 2. Applicator Qualifications: Licensed contractor with documented experience in application of cementitious coatings.
- B. Certifications: Letter signed by manufacturer certifying that waterproof finish complies with local regulations governing use of volatile organic compounds (VOC).
- C. Mock-Ups: [Apply finish to substrate material mock-up, full or partial coverage as directed by Architect, and obtain Architect's approval of completed mock-up prior to proceeding with application] [Prior to performing finish work, apply a sample of approximately four sq ft in an unobtrusive location, and obtain Architects approval of sample].

1.4 DELIVERY, STORAGE, AND HANDLING

A. Follow manufacturer's instructions.

1.5 PROJECT CONDITIONS

- A. Comply with ASTM C 926 requirements.
- B. Environmental Requirements:
 - 1. Do not apply when ambient temperature will fall below 40 degrees F (4 degrees Centigrade) within 48 hours.
 - 2. Do not apply if rain is forecast within 24 hours.
- C. Existing Conditions:
 - 1. Do not apply to frozen or frost filled surfaces.
 - 2. Allow new cementitious surfaces, including mortars, to cure minimum 28 days prior to application.

1.6 WARRANTY

SPECIAL WARRANTIES ARE AVAILABLE ON A PROJECT BY PROJECT BASIS. CONTACT MERLEX REPRESENTATIVE FOR DETAILS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Portland Cement Plaster:
 - 1. Merlex Stucco, Inc.
 - 2. 2911 Orange-Olive Road
 - 3. Orange, CA 92865
 - 4. Tel: (714) 637-1700 Fax: (714) 637-4865
 - 5. Representative: Vince Overmyer, 714-984-3439

2.2 MATERIALS

SELECT TYPE OF METAL LATH BELOW REQUIRED FOR PROJECT.

- A. Lath:
 - 1. Expanded-Metal Lath: ASTM C 847 with ASTM A 653, G60, hot-dip galvanized zinc coating.
 - 2. 1-1/2, 17 gauge Stucco Netting.
- B. Weather-Resistant Barrier: FS UU-B-790, Type I Grade D, Style 2 vapor-permeable paper.
- C. Accessories: Comply with ASTM C 1063 and coordinate depth of trim and accessories with thicknesses and number of plaster coats required.
- D. Portland Cement: Type 1 or 2, ASTM C150.
- E. Silica Sand: clean, washed, and sharp, ASTM C897.
- F. Water: Potable.
- G. Third Base Coat: Crack-resistant, mesh-reinforced polymer-modified Portland cement.
 - 1. Physical Properties:
 - a. Tensile Strength: 50 lb/linear inch per ASTM C307.
 - b. Dimensional Movement Withstood: 0.04 inch per ASTM C 307 (modified).
 - 2. Product: Basex by Merlex Stucco, Inc.
- H. Reinforcing Mesh: Alkali resistant, open weave, polypropylene mesh, 4.5 oz/sq yd minimum weight.
- I. Liquid Acrylic Admixture: Acrylex.
- J. EVA Bonder: Superhold.
- K. Colorant: Ready-to-use cementitious color coat stucco.1. Color: Custom color as selected by Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrate and each successive layer upon which finish will be applied.
 - 1. Verify that substrate is firmly positioned and not prone to settling or movement.
 - 2. Verify that metal lath has been firmly affixed to substrate with proper weep screed attachment at base of walls. Follow ASTM C1063.
 - 3. Verify that surfaces are structurally sound, clean, free of dust, dirt, paint products, previously applied water repellents, efflorescence or other forms of contamination that could prevent proper bonding of base and finish coats.
 - 4. Verify that surface cracks, holes and voids in excess of 1/16 inch (1.5 mm) have been repaired.

- 5. Consult manufacturer's representative if conditions exist that is not covered by, or cause conflict with, manufacturer's installation instructions.
- 6. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates.
- B. Commencement of work by applicator represents acceptance of substrate.

EDIT BELOW FOR OPEN FRAME INSTALLATION.

3.2 INSTALLING METAL LATH AND WEATHER-RESISTANT BARRIER INSTALLATION

- A. Metal Lath: Install according to ASTM C 1063.
- B. Weather-Resistant Barrier: Install 2 layers over sheathing.

3.3 INSTALLING ACCESSORIES

A. Install according to ASTM C 1063.

3.4 MIXING

- A. First Two Base Coats:
 - 1. First coat (scratch coat): Mix one 94 lb. bag of Portland cement with 250 lb. of sand.
 - 2. Second coat (brown coat): Mix one 94 lb. bag of Portland cement with 300 lb. of sand.
 - 3. Mix only as much material as can be used prior to initial set; discard material after stiffening begins.
 - 4. Mix materials dry to uniform consistency prior to adding mixing water.
- B. Third Base Coat: Mesh-reinforced, polymer-modified portland cement base coat:
 1. Mix with water in accordance with manufacturer's instructions using a mechanical mixer.
- C. Finish Coat: Ready-mixed cementitious color coat stucco.
 1. Mix with water in accordance with manufacturer's instructions using a mechanical mixer.

3.5 APPLICATION

- A. System total thickness: 1 inch.
- B. Scratch and brown coat: Comply with ASTM C926.
- C. Third Base Coat:
 - 1. Crack-resistant, mesh-reinforced, polymer-modified Portland cement base coat at 1/8 inch.
 - 2. Follow manufacturer's instructions for first coat application of thickness dictated by aggregate.
 - 3. Embed reinforcing mesh in base coat troweling from center to edge, and then skim over with additional base coat to fully cover mesh.
 - 4. Curing: Follow manufacturer's instructions.

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- D. Contractor has the option of using either liquid acrylic admixture to finish coat at a 1/3 gallon per 90# sack of stucco or applying EVA bonder to third base coat prior to application of finish coat to insure bond.
- E. Finish Coat: Ready-mixed cementitious color coat stucco.
 - 1. Follow manufacturer's instructions for two coat application to a thickness of 1/8 inch by hand (hawk and trowel method).
 - 2. Texture: [Sand Float] [Smooth troweled] [Catface] [As indicated on Drawings].

3.6 ASSEMBLY

DELETE SHEATHING FOR OPEN FRAME INSTALLATION.

- A. Exterior side from framing out:
 - 1. Sheathing.
 - 2. Weather-resistive barrier.
 - 3. Metal lath.
 - 4. Scratch coat.
 - 5. Brown coat.
 - 6. Third base coat with mesh.
 - 7. Finish coat.

3.7 CURING

- A. Damp curing may be necessary during hot, windy weather; contact manufacturer's representative for requirements.
- B. Brown coat should cure 7 days before third base coat can be applied.
- C. Finish coat can be applied after (just) 24 hours of third base coat drying.

DELETE BELOW FOR NEW CONSTRUCTION

3.8 REHABILITATION OF EXISTING STUCCO FINISH

- A. Apply Superhold bonder to existing surface. Sandblasting is not required.
- B. Apply Basex and mesh and color coat with Acrylex.

3.9 CLEANING

- A. Clean spills and spatters before material is allowed to dry.
- B. Keep premises free form accumulation of waste and debris. Upon completion of work, remove surplus materials, waste and debris from site.

END OF SECTION 092400

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