

**SECTION 09 21 19**

**PLASTER PATCHING**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Patching of existing cement plaster as specified and at locations shown on Drawings.
- B. Related Sections:
  - 1. [\_\_\_\_\_].

**1.02 REFERENCE STANDARDS**

- A. ASTM International:
  - 1. ASTM A641/A641M - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
  - 2. ASTM C150 - Standard Specification for Portland Cement.
  - 3. ASTM C841 - Standard Specification for Installation of Interior Lathing and Furring.
  - 4. ASTM C847 - Standard Specification for Metal Lath.
  - 5. ASTM C897 - Standard Specification for Aggregate for Job-Mixed Portland Cement-Based Plasters.
  - 6. ASTM C926 - Standard Specification for Application of Portland Cement-Based Plaster.
  - 7. ASTM C932 - Standard Specification for Surface-Applied Bonding Compounds for Exterior Plastering.
  - 8. ASTM C1063 - Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.
- B. Federal Specifications:
  - 1. FS UU-B-790- Building Paper, Vegetable Fiber: (Kraft, Waterproofed, Water Repellent and Fire Resistant).

**1.03 DESIGN REQUIREMENTS**

- A. Plaster systems shall provide suitable base for finishes and trim scheduled for application over cement plaster work.
- B. Exposed finish surfaces shall be true, even, without waves, cracks, or imperfections. Plaster cracks, blisters, pits, or discoloration will not be acceptable.

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Coordination:
  - 1. Coordinate metal lath details with other work supporting, adjoining, or fastening to lath.
  - 2. Coordinate plastering details with other work supporting, adjoining, or fastening to plaster.
- B. Preinstallation Meeting:
  - 1. Contractor shall arrange meeting to be attended by University's Representative, Contractor and Contractor's installer, and agents of manufacturers, all of whom shall have had at least one week's advance notice.
  - 2. Convene meeting minimum 7 days prior to commencing work of this Section.
  - 3. Meeting shall be held at the job site.

4. Requirements of related work, preparation, storage and handling, materials, specification requirements, coordination with related or adjoining work, work sequence, items requiring backing and support, and issues that might affect proper metal support assemblies shall be discussed.

C. [Sequencing:]

D. [Scheduling:]

#### 1.05 [SUSTAINABLE CHARACTERISTICS]

A. Section 01 35 63 - Sustainability Project Requirements: Requirements for sustainable design compliance.

B. Materials and Resources Characteristics:

1. [Recycled Content Materials: Furnish materials with maximum available recycled content including:

**SPEC NOTE** *List materials specified in this section required to have recycled content.*

a. [\_\_\_\_\_.]

2. [Regional Materials: Furnish materials extracted, processed, and manufactured within 500 miles of Project site.]

**SPEC NOTE** *List materials specified in this section required to be regional materials.*

a. [\_\_\_\_\_.]

#### 1.06 SUBMITTALS

A. Product Data.

B. Shop Drawings: Show all exterior accessories, [both galvanized and aluminum,] including casing beads, expansion joints, control joints, drip, and other items that differ from those indicated on Drawings. Show relationship with adjacent materials and intersections of accessories.

C. Samples: Only as requested.

#### 1.07 [SUSTAINABLE DESIGN SUBMITTALS]

A. Section 01 35 63 - Sustainability Project Requirements: Requirements for sustainable design submittals.

B. Manufacturer's Certificate: Certify products meet or exceed specified sustainable design requirements.

1. Materials Resources Certificates:

- a. Certify recycled material content for recycled content products.
- b. Certify source for regional materials and distance from Project site.

C. Product Cost Data: Submit cost of products to verify compliance with Project sustainable design requirements. Exclude cost of labor and equipment to install products.

1. Provide cost data for the following products:

- a. Products with recycled material content.
- b. Regional products.

#### 1.08 QUALITY ASSURANCE

A. Perform Work in accordance with ASTM C926.

- B. Applicator to have a minimum of 5 years experience in plaster patching.
- C. Mockup: Inform the University's Representative one working day before a minimum 3 square feet of plaster patching has been applied. Incorporate the finish, a typical reveal, and other conditions unique to the character of the existing plaster. Do not proceed with the plaster patching before the approval of the University's Representative.

#### **1.09 DELIVERY, STORAGE AND HANDLING**

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use.
- B. Deliver cementitious materials to Project site in original packages, containers, or bundles, labeled with manufacturer's name, product brand name, and lot number.
- C. Store materials from moisture, contamination and damage.
- D. Comply with minimum requirements of specifications Section 01 60 00 - Product Requirements.

#### **1.10 SITE CONDITIONS**

- A. Environmental Requirements: Comply with requirements of referenced plaster application standards and recommendations of plaster manufacturer for environmental conditions before, during, and after application of plaster.
- B. Protect contiguous work from soiling, spattering, moisture deterioration and other harmful effects which might result from plastering.

### **PART 2 PRODUCTS**

#### **2.01 LATHING MATERIALS**

- A. Expanded Metal Lath: Comply with ASTM C847 for type, configuration and other characteristics indicated below, with uncoated steel sheet painted after fabrication into lath.
  - 1. Diamond Mesh Lath: Flat, weighing 3.4 pounds per square yard.
- B. Paper Backing: Where paper-backed diamond mesh lath is indicated, provide galvanized lath with asphalt-impregnated paper factory-bonded to back and complying with FS UU-B-790, for Type I, Grade D (vapor permeable), Style 2.
- C. Attachments and Fastenings:
  - 1. Tie Wire: ASTM A641/A641M, Class 1 soft temper; minimum 18 gauge.
  - 2. Screw: Galvanized, self-drilling, and self-tapping, as recommended by installer.

#### **2.02 PLASTER MATERIALS**

- A. Portland Cement: ASTM C150, Type I.
- B. Sand for Portland Cement Plaster: ASTM C897.
- C. Stucco Finish Coat: Manufacturer's standard factory-packaged stucco, including Portland cement, aggregate, coloring agent, and other proprietary ingredients. **No Asbestos.**

- D. Water: Clean and potable, free from impurities detrimental to cement plaster.
- E. Bonding Agent: ASTM C 932.

### **2.03 ACCESSORIES**

- A. Accessories: Comply with material provisions of ASTM C841; coordinate depth of accessories with thicknesses and number of plaster coats required.
- B. Metal Corner Beads: Small nose, fabricated from zinc coated (galvanized) steel, with expanded flanges.
- C. Strip Reinforcement: Smooth edge strips of expanded metal lath fabricated from uncoated or zinc-coated (galvanized) steel sheet, with uncoated steel painted after fabrication, prebent lengthwise in center for internal plaster angles not otherwise reinforced by metal lath lapped or carried around.
- D. Casing Beads: Square edged style, with expanded flanges of galvanized steel.
- E. Control Joints: Prefabricated zinc-coated (galvanized) steel, profile as detailed.

### **2.04 PLASTER MIXES AND COMPOSITIONS**

- A. General: Comply with ASTM C926 for base and finish coat mixes as applicable to plaster bases, materials, and other project requirements.
- B. Base Coat Mixes and Compositions: Proportion materials for respective base coats in parts by volume per sum of cementitious materials for aggregates. Comply with requirements for each method of application and plaster base type. Adjust mix proportions within limits to attain workability.
- C. Mechanically mix cementitious and aggregate materials for plasters to comply with applicable referenced application standard and with recommendations of plaster manufacturer.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine areas and surfaces scheduled to receive lath and accessories and verify following:
  - 1. Proper alignment of support systems.
  - 2. Complete installation of blocking, bracing, and backing members in support systems.
- B. Do not start installation until unsatisfactory conditions have been corrected.

### **3.02 PREPARATION OF SUBSTRATES**

- A. Clean plaster bases and substrates for direct application of plaster, removing loose material and substances that may impair the Work.
- B. Apply Bonding Agent for direct plaster application. Comply with manufacturer's written instructions for application.

### **3.03 INSTALLATION OF METAL LATH**

- A. Install metal lath in accordance with ASTM C1063 unless otherwise indicated. Space screws 6 inches on center.

### **3.04 INSTALLATION OF PLASTERING ACCESSORIES**

- A. General: Comply with referenced lathing and furring installation standards for provision and location of plaster accessories of type required. Miter or cope accessories at corners. Install with tight joints and in alignment. Attach accessories securely to plaster bases to hold accessories in place and in alignment during plastering.

### **3.05 PLASTER APPLICATION**

- A. Plaster Application:
  - 1. Methods and workmanship for Portland cement plastering and stucco systems shall meet requirements of ASTM C926.
  - 2. Scratch Coats: Entirely embed in lath, key in accessories, rod true surface, double back acceptable, horizontal score only.
  - 3. Brown Coats:
    - a. Apply to evenly dampened scratch coat.
    - b. Rod and float surface, no darbies permitted.
    - c. No visible laps or joints.
  - 4. Finish Coats:
    - a. Apply to evenly dampened cure brown coat.
    - b. Apply full depth to hard edges of accessories.
    - c. Uniform surface, no “dive-ins” to accessories.
    - d. No visible laps, no visible patches.
    - e. Straight, true surfaces between accessories.
    - f. Thoroughly clean accessories of cement plaster at exposed portions.
- B. Plaster Curing:
  - 1. Keep cement systems damp for at least 48 hours after application.
  - 2. Apply water in fine fog spray.
  - 3. Protect work from uneven and excessive evaporation during hot, dry weather and from strong blasts of wind.
  - 4. Cure scratch coat for minimum 2 days.
  - 5. Cure brown coat for minimum 7 days.
  - 6. Cure proprietary finish coat in accordance with manufacturer’s instructions.
- C. When complete, cement plaster surfaces shall be flat or uniformly curved, true to plane; and free from scaffold and tool marks, stains, or other damage or defects and shall be uniform in texture.
- D. Tolerances: Do not deviate more than 1/8 inch in 10’-0” from a true plane in finished plaster surfaces, as measured by a 10’-0” feet straightedge placed at any location on surface.

### **3.06 REPAIRS**

- A. At completion of plastering work, repair surfaces stained, marred or otherwise damaged.

### **3.07 CLEANING**

- A. Remove temporary covering and other provisions made to minimize spattering plaster on other work.
- B. Promptly remove plaster from surfaces not to be plastered.

- C. At completion of plastering work, remove unused materials, containers, equipment, and plaster debris.
- D. Comply with minimum requirements of specifications Section 01 74 00 - Cleaning.

**END OF SECTION**