

## SECTION 09200 - LATHING AND PLASTERING

### City of San Diego, CWP Guidelines

#### PART 1 -- GENERAL

##### 1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing lathing, plastering, stucco, and all related work, complete.

##### 1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
  - 1. Section 07600 Flashing and Sheet Metal
  - 2. Section 07920 Sealants and Caulking

##### 1.3 CODES

- A. The WORK of this Section shall comply with the current editions of the following codes as adopted by the City of San Diego Municipal Code:
  - 1. Uniform Building Code

##### 1.4 SPECIFICATIONS AND STANDARDS

- A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:

###### 1. Federal Specifications:

FF-N-105	Nails, Brads, Staples and Spikes: Wire, Cut and Wrought
QQ-W-461	Wire, Steel, Carbon (Round, Bare, and Coated)
SS-C-161	Cement, Keene's
UU-B-790	Building Paper, Vegetable Fiber, (Kraft, Waterproofed, Water Repellant and Fire Resistant)

###### 2. Commercial Standards:

ASTM C 5	Specification for Quicklime for Structural Purposes
ASTM C 28	Specification for Gypsum Plasters
ASTM C 37	Specification for Gypsum Lath
ASTM C 61	Specification for Gypsum Keene's Cement

ASTM C 150	Specification for Portland Cement
ASTM C 206	Specification for Finishing Hydrated Lime
ASTM C 841	Specification for Installation of Interior Lathing and Furring
ASTM C 842	Specification for Application of Interior Gypsum Plaster
ANSI A 42.2, 3	Portland Cement Plastering Standards

3. **Trade Standards:**

"Lathing and Plastering Reference Specifications" as compiled by the California Lathing and Plastering Contractor's Association (CLPCA).

"Handbook for Ceramic Tile Installation" (HCTI) by the Tile Council of America.

4. **Manufacturers' Standards:** In addition to the standards listed above, the lathing and plastering products and their installation shall be in accordance with the manufacturer's published recommendations and specifications.

1.5 SHOP DRAWINGS AND SAMPLES

- A. The following shall be submitted in compliance with Section 01300:

1. **Samples:** Samples of integral color exterior plaster shall be submitted for color selection. When requested by the CONSTRUCTION MANAGER, a 12-inch by 12-inch sample panel of exterior cement plaster in the selected color(s) shall be submitted for approval. Samples of metal lath, metal furring devices, trim, and plastering accessories shall be submitted for approval.
2. **Manufacturer's Information:** Manufacturer's literature, specifications, installation instructions, technical data, and general recommendations for the lathing and plastering materials shall be submitted. Fastening instructions shall be submitted for securing trim items to framing.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. **Delivery of Materials:** Manufactured products shall be delivered in original, unbroken, packages, containers or bundles bearing the name of the manufacturer.
- B. **Storage:** All products shall be carefully stored as recommended in the Trade Standards in an area that is protected from deleterious elements. Storage shall be in a manner that will prevent damage to the products or marring of their finishes.

**PART 2 -- PRODUCTS**

2.1 PLASTER MATERIALS

- A. **General:** The materials for lath and plaster work shall conform to the applicable requirements of ASTM C 841 and ASTM C 842 and as specified herein.
1. Cement for portland cement plaster shall be [Type I] [Type II] portland cement as specified in ASTM C 150.
  2. Integral colored finish coat plaster shall be factory-prepared, colored plaster, "Finish Coat Portland Cement (Stucco)," complying with ASTM C 150.
  3. Keene's cement plaster shall be a high-strength, white, gypsum plaster used with finish lime putty for extremely hard, dense surfaces conforming to ASTM C 61, and Federal Specifications SS-C-161, Type 1.
  4. Lime or hydrated lime shall conform to ASTM C 206 and quicklime shall conform to ASTM C 5. Lime putty shall weigh no less than 33 lb/cu ft and shall be made of hydrated lime or quicklime.
  5. Bonding agents, conforming to ASTM C 631, shall be non-water-deteriorating, non-oxidizing, non-crystallizing, liquid, resinous water-emulsion designed for exterior use. The bonding agent shall provide a permanent bond for gypsum, lime putty, cement, or acoustical plaster finishes to gypsum, cement plaster, concrete, masonry, wood, or steel, whether the surfaces are painted or unpainted, old or new, damp or dry. It shall be free from any tendency to harden or craze crack. It shall be non-toxic, vermin proof, and non-combustible. Bonding agents shall be certified to be non-deteriorating as shown by minimum 2 year controlled laboratory test.
  6. Gypsum plaster shall conform to ASTM C 28.
  7. Finish coat sand for exterior cement plaster finish coat shall be No. 30. Sand for interior cement plaster finish coat shall be No. 200.
- B. **Exterior Plaster:** Exterior plaster surfaces shall be a combination of portland cement scratch and brown coats and prepared integral colored finish coat. Thickness of exterior plaster shall be not less than 7/8-inch. Exterior cement plaster over concrete block shall be not less than 1/2-inch thick and shall consist of a bonding agent applied to wall, application of a portland cement scratch coat, and application of a prepared, integral-colored finish coat.
- C. **Backing:** Plaster backing for tile work shall be portland cement scratch coat with surface cross-scratched to provide adequate bond. All membranes, metal lathing, and accessories shall be not less than that specified within HCTI system W 231-87 and W 241-87. Welded wire fabric lath shall be used as backing behind tile work.
- D. **Interior Plaster:** Interior plaster materials shall conform to the following requirements:
1. Interior cement plaster shall be not less than 7/8-inch thick and shall be portland cement plaster for the scratch, brown, and finish coats.
  2. Interior Keene's cement plaster shall be not less than 7/8-inch thick and shall be Keene's cement plaster over (scratch and brown) coats of gypsum plaster.
  3. Interior gypsum plaster shall be 3/8-inch thick gypsum lath and 1/2-inch thick gypsum plaster finish coat.

## 2.2 METAL LATH AND WIRE PRODUCTS

- A. **Rib Lath:** Rib lath shall be 3.4 lb/sq yd with 3/8-inch metal rib and shall be expanded from copper-bearing-steel and coated with rust-inhibitive paint after fabrication or shall be galvanized. Rib lath shall be galvanized when used for exterior conditions and at locations with moisture, high humidity and at water holding areas.
- B. **Flat (or Self-Furring) Diamond Mesh:** Flat or self-furring diamond mesh shall be 3.4 lb/sq yd and shall be expanded from copper-bearing steel sheets either coated with rust-inhibitive paint or hot-dip galvanized after fabrication. Flat (or self-furring) diamond mesh shall be hot-dip galvanized mesh when used for exterior conditions and at locations with moisture, high humidity and at water holding structures.
- C. **Welded Wire Fabric:** Welded wire fabric, with backing, shall be fabricated from minimum 16-gage galvanized wire, with openings not to exceed 2-inch by 2-inch, and welded at all intersections. Backing shall comply with Federal Specifications UU-B-790.
- D. **Paper Backing (Weather-Resistive Barrier):** Paper backing for use as a weather-resistive barrier with metal plaster bases shall comply with UBC Standard 17-1, Class B. It shall be either Building Paper or Vegetable Fiber which is waterproofed, water repellent, and fire resistant and of the style and grade applicable or specified for the intended use. Paper shall be securely held in place by or attached to the metal plaster base. Paper shall permit full 1/8-inch plaster embedment, for not less than 1/2 of the total length of the wire strands and 1/2 of the total weight of the metal.
- E. Where not otherwise indicated, installer shall comply with MLSFA "Technical Bulletin 101" and ASTM C 841 for selection of metal lath for each application indicated.

## 2.3 GYPSUM LATH

- A. Gypsum lath, either perforated or plain, shall conform to ASTM C 37.
  - 1. Perforated gypsum lath shall be 1/2-inch thickness, unless otherwise specified or shown.
  - 2. Type "X" plain gypsum lath for fire rated construction shall be 1/2-inch thick, unless otherwise specified or shown.

## 2.4 ACCESSORIES

- A. Metal and welded wire shapes used as base screeds, casing beads, ventilating screeds, weep screeds, control joints, etc., shall be of such size and dimension as to provide for the full required plaster thickness. Accessories shall be fabricated of minimum 24-gauge galvanized steel or minimum 19-gauge galvanized wire.
  - 1. Corner beads, control joints, and ventilating expansion screed with short or expanded flanges shall be fabricated from minimum 24-gauge galvanized steel.
  - 2. Drip screed or weep screed and casing beads shall be fabricated from minimum 24-gauge galvanized steel.
  - 3. Expansion joint trim shall be as indicated hereinafter.

4. External corner reinforcement for portland cement plaster applications shall be fabricated either from large-opening, expanded metal or from welded, minimum 18-gauge, copper-bearing wire and shall be galvanized after fabrication.
5. Extruded aluminum vent screeds and reveal shall be as specified or shown.

## 2.5 SUSPENSION SYSTEM

- A. **Channels:** Channels shall be hot-rolled or cold-rolled steel, free of rust, and shall be provided with a corrosion-resistant protective coating. Channels shall be of the size set forth in the UBC for span and load imposed. Furring channels for gypsum board construction shall be as specified in Section 09250.
- B. **Tie Wire and Clips:** Tie wire and/or clips used for attaching lath to supports and for securing cross furring to primary members, shall be galvanized, soft-annealed steel wire, and the weight of galvanizing shall be not less than Class 1 as set forth in Federal Specifications QQ-W-461. Tie wire gages shall be as set forth in the UBC.
- C. **Hangers:** Supporting hangers for main beams or runners in suspended ceilings shall be steel hanger wire of gages set forth in the UBC and Class 1 galvanized as set forth in Federal Specification QQ-W-461.

## 2.6 MISCELLANEOUS MATERIALS

- A. **Nails:** Nails shall conform to Federal Specifications FF-N-105.
- B. **Staples:** Staples shall be USS 14-gage, flattened, galvanized wire staples conforming to Federal Specifications FF-N-105.
- C. **Unspecified Materials:** Unspecified materials and fasteners shall meet or exceed the requirements of UBC] and other referenced standards. In case of conflict, the most stringent requirements shall govern.

## 2.7 MANUFACTURERS

- A. Products shall be of the following type and manufacture, or equal:
  1. Bonding Agent: "Weldcrete" by Larson Products Corporation; "Enco Weld" by Enco Products.
  2. Expansion Joint Trim: No. J-U-4 by Superior; No. 40 by Inryco.

# PART 3 -- EXECUTION

## 3.1 GENERAL

- A. Unless otherwise indicated, all exterior plaster shall be portland cement, "Exterio Plaster." Where plaster is indicated at interior conditions such as kitchens, toilets, and [ ], it shall be Keene's cement plaster. Where plaster is indicated at interior having wet, damp, or moist environments such as locker rooms, dressing areas, showers, wash areas, janitor areas, water process areas, chemical areas and [ ], it shall be portland cement plaster.

- B. The application and finishing of lath and plaster work shall conform to the applicable requirements of ASTM C 842 and ASTM C 841 and other referenced standards.

### 3.2 INSTALLATION

- A. **General:** The applied methods procedures and materials shall be appropriate for job conditions such as temperature, humidity, ventilation, and surface type and condition and shall conform to the requirements of the referenced specifications, codes, and standards.
- B. **Metal Accessories:** Metal accessories shall be set plumb, level, and true and shall be shimmed where necessary for a true, tight, and secure application. Corners shall be mitered and exposed joints shall be accurately and tightly fitted. Sections shall be installed in the maximum practical lengths and splices shall be held to a minimum. Corner beads and casing beads shall be securely fastened at spacings of not more than 12 inches.
- C. **Tile Backing:** All tiles shall be mortar set into a portland cement plaster backing system of moisture backing system, welded wire fabric lath, and portland cement scratch and brown coat.
- D. **Edges and Boundaries:** All plaster surfaces shall be finished to metal casings, sheet metal shapes, or wood grounds. (Wood grounds may be used only where covered by other finish work.) Where joining other materials in locations exposed to view, the edges or boundaries of all plaster surfaces shall be finished with metal casing beads.

### 3.3 CEILING SUSPENSION SYSTEM

- A. The ceiling suspension system shall be provided for plaster ceilings unless otherwise shown. The suspension system shall include all hangers, anchors, channels, wires, and furring to form a complete system that meets the requirements of the referenced specifications, codes, and standards.

### 3.4 PLASTER FINISHES

- A. **Exterior:** Exterior (Stucco) plaster finish texture shall be [float] [ ] finish, as indicated in the referenced standards unless otherwise indicated.
- B. **Interior:** Interior plaster shall have a [putty coat] [ ] finish.
- C. **Cement:** Cement plaster shall be given a [fine float] [ ] finish.
- D. **Keene's Cement:** Keene's cement plaster shall have a [smooth, putty coat] [ ] finish.

### 3.5 CUTTING AND PATCHING

- A. Cutting, patching, painting and repair of plaster shall be as necessary to accommodate other WORK and to restore cracks, dents and imperfections. Plaster WORK shall be repaired or replaced as required to eliminate blisters, buckles, excessive crazing and check cracking, dry-outs, efflorescence, sweat-outs and similar defects, including areas of the WORK which do not comply with specified tolerances and where bond to the substrate has failed.
- B. Smooth-troweled finishes shall be sanded lightly to remove trowel marks and arrises.

### 3.6 CLEANING AND PROTECTION

- A. Temporary protection and enclosures around other WORK shall be removed when the WORK is complete. Plaster residue shall be removed promptly from door frames, windows, and other surfaces which are not to be plastered. Floors, walls and other surfaces which have been stained, marred or otherwise damaged during the plastering WORK shall be cleaned and repaired. When plastering WORK is completed, unused materials, containers and equipment shall be removed and floors cleaned of plaster debris.
- B. Installer shall advise CONTRACTOR of requirements for the protection of plaster from deterioration and damage during the remainder of the construction period.

\*\* END OF SECTION \*\*