

SECTION 09 2300 - GYPSUM PLASTERING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Gypsum plastering on expanded-metal lath.
 - 2. Gypsum plastering on unit masonry.
 - 3. Gypsum plastering work is required in areas where existing plaster walls and ceilings have been disturbed by previous Work completed in Project No. 1. In the main A-Wing corridors and certain select spaces (see Drawings for locations) acoustic tile on plaster ceilings and painted plaster ceilings are being removed in their entirety and replaced with suspended acoustic ceilings. No plaster work shall be required on these ceiling surfaces.
- B. Related Requirements:
 - 1. Section 01 2200 "Unit Prices" for gypsum plastering repairs to be executed on a unit cost basis.
 - 2. Section 01 7300 "Execution, Cutting, and Patching" for additional requirements for repairs to existing finishes and materials.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show locations and installation of control and expansion joints, including plans, elevations, sections, details of components, and attachments to other work.

1.4 QUALITY ASSURANCE

- A. Mockups: Build mockups to demonstrate aesthetic effects and to set quality standards for materials and execution.
 - 1. Build mockups for each substrate and finish texture indicated for gypsum plastering, including accessories.
 - a. Size: Approximately 25 sq. ft. in surface area.
 - 2. Simulate finished lighting conditions for review of mockups.
 - 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials inside under cover and keep them dry and protected against damage from weather, moisture, direct sunlight, contamination, corrosion, construction traffic, and other causes.

1.6 FIELD CONDITIONS

- A. Comply with ASTM C842 requirements or gypsum plaster manufacturer's written recommendations, whichever are more stringent.
- B. Room Temperatures: Maintain temperatures at not less than 55 deg F or greater than 80 deg F for at least seven days before application of gypsum plaster, continuously during application, and for seven days after plaster has set or until plaster has dried.
- C. Avoid conditions that result in gypsum plaster drying out too quickly.
 - 1. Distribute heat evenly; prevent concentrated or uneven heat on plaster.
 - 2. Maintain relative humidity levels for prevailing ambient temperature that produce normal drying conditions.
 - 3. Ventilate building spaces in a manner that prevents drafts of air from contacting surfaces during plaster application and until plaster is dry.

PART 2 - PRODUCTS

2.1 EXPANDED-METAL LATH

- A. Expanded-Metal Lath: ASTM C847, cold-rolled carbon-steel sheet with ASTM A653/A653M, G60, hot-dip galvanized-zinc coating.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. ClarkDietrich.
 - b. MarinoWARE.
 - c. Phillips Manufacturing Co.
 - 2. Flat-Rib Lath: Rib depth of not more than 1/8 inch, 2.75 lb/sq. yd..

2.2 ACCESSORIES

- A. General: Comply with ASTM C841, and coordinate depth of trim and accessories with thicknesses and number of plaster coats required.
- B. Metal Accessories:
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. ClarkDietrich.
 - b. MarinoWARE.
 - c. Phillips Manufacturing Co.

2. Cornerite: Fabricated from expanded-metal lath with ASTM A653/A653M, G60, hot-dip galvanized-zinc coating.
3. Striplath: Fabricated from expanded-metal lath with ASTM A653/A653M, G60, hot-dip galvanized-zinc coating.
4. Cornerbeads: Fabricated from zinc.
 - a. Smallnose cornerbead with expanded flanges; use unless otherwise indicated.
 - b. Smallnose cornerbead with expanded flanges reinforced by perforated stiffening rib; use on columns and for finishing unit masonry corners.
5. Casing Beads: Fabricated from zinc; square-edged style; with expanded flanges.
6. Control Joints: Fabricated from zinc; one-piece-type, folded pair of unperforated screeds in M-shaped configuration; with perforated flanges and removable protective tape on plaster face of control joint.
7. Expansion Joints: Fabricated from zinc; folded pair of unperforated screeds in M-shaped configuration; with expanded flanges.
8. Two-Piece Expansion Joints: Fabricated from zinc; formed to produce slip-joint and square-edged reveal that is adjustable from 1/4 to 5/8 inch wide; with perforated flanges.

2.3 MISCELLANEOUS MATERIALS

- A. Water for Mixing and Finishing Plaster: Potable and free of substances capable of affecting plaster set or of damaging plaster, lath, or accessories.
- B. Bonding Compound: ASTM C631.
- C. Fasteners for Attaching Metal Lath to Substrates: ASTM C841.
- D. Wire: ASTM A641/A641M, Class 1 zinc coating, soft temper, not less than 0.0475-inch diameter unless otherwise indicated.
- E. Mix Additives: Use gypsum plaster accelerators and retarders from plaster manufacturer if required by Project conditions. Use only additives that manufacturer recommends in writing for use with plaster to which it is added.

2.4 BASE-COAT PLASTER MATERIALS

- A. Gypsum Neat Plaster: ASTM C28/C28M, for use with job-mixed aggregates.
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. CertainTeed Corporation; Saint-Gobain North America.
 - b. National Gypsum Company.
 - c. USG Corporation.
- B. Aggregates for Base-Coat Plasters: ASTM C35, sand and perlite.

2.5 FINISH-COAT PLASTER MATERIALS

- A. Gypsum Keene's Cement: ASTM C61/C61M.

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. USG Corporation.

B. Aggregates for Float Finishes: ASTM C35, [**sand**] [**perlite**]; graded according to ASTM C842.

2.6 PLASTER MIXES

- A. Mixing: Comply with ASTM C842 and manufacturer's written instructions for applications indicated.
- B. Mix Additives: Use accelerators and retarders, if required by Project conditions, according to manufacturer's written instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect adjacent work from soiling, spattering, moisture deterioration, and other harmful effects caused by plastering.

3.3 INSTALLING EXPANDED-METAL LATH

- A. Expanded-Metal Lath: Install according to ASTM C841.
 1. Partition Framing and Vertical Furring: Install flat-rib lath.
 2. Flat-Ceiling and Horizontal Framing: Install flat-rib lath.
 3. On Solid Surfaces, Not Otherwise Furred: Install self-furring, diamond-mesh lath.

3.4 INSTALLING ACCESSORIES

- A. General: Install according to ASTM C841.
- B. Cornerbeads: Install at external corners.
- C. Casing Beads: Install at terminations of plasterwork, except where plaster passes behind and is concealed by other work and where metal screeds, bases, or frames act as casing beads.
- D. Control Joints: Locate as approved by Architect for visual effect, with spacing between joints in either direction not exceeding the following:
 1. Partitions: 30 feet.
 2. Ceilings: 50 feet.

3.5 PLASTER APPLICATION

- A. General: Comply with ASTM C842.
 - 1. Do not deviate more than plus or minus 1/8 inch in 10 feet from a true plane in finished plaster surfaces when measured by a 10-foot straightedge placed on surface.
 - 2. Finish plaster flush with metal frames and other built-in metal items or accessories that act as a plaster ground unless otherwise indicated. Where casing bead does not terminate plaster at metal frame, cut base coat free from metal frame before plaster sets and groove finish coat at junctures with metal.
 - 3. Provide plaster surfaces that are ready to receive field-applied finishes indicated.
- B. Bonding Compound: Apply on unit masonry substrates for direct application of plaster.
- C. Base-Coat Plaster:
 - 1. Over Expanded-Metal Lath:
 - a. Scratch Coat: Gypsum neat plaster with job-mixed sand.
 - b. Brown Coat: Gypsum neat plaster with job-mixed sand.
 - 2. Over Unit Masonry: Gypsum neat plaster with job-mixed sand.
- D. Finish Coats:
 - 1. Smooth-Troweled Finishes:
 - a. Materials: Gypsum Keene's cement and lime putty.
 - b. Locations: Provide smooth-troweled finish unless otherwise indicated.
- E. Concealed Plaster:
 - 1. Where plaster application is concealed behind built-in cabinets, similar furnishings, and equipment, apply finish coat.
 - 2. Where plaster application is concealed above suspended ceilings and in similar locations, omit finish coat.
 - 3. Where plaster application is used as a base for adhesive application of tile and similar finishes, omit finish coat.

3.6 PLASTER REPAIRS

- A. Repair or replace work to eliminate cracks, dents, blisters, buckles, crazing and check cracking, dry outs, efflorescence, sweat outs, and similar defects and where bond to substrate has failed.

3.7 CLEANING AND PROTECTION

- A. Remove temporary protection and enclosure of other work after plastering is complete. Promptly remove plaster from door frames, windows, and other surfaces not indicated to be plastered. Repair floors, walls, and other surfaces stained, marred, or otherwise damaged during plastering.

END OF SECTION 09 2300