

**SECTION 09 21 13.01
LATH / PLASTER**

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. The Contractor is referred to the "Instructions to Bidders and General Conditions, NYCHA Contracts", latest edition; the "Special Notice to Contractors"; the "Form of Proposal"; the "Form of Bid Bond"; "Division 01 - General Requirements" of the Contract Specifications"; the "Contract Drawings" and all Amendments and Addenda thereto; all of which govern the Work of this Section.

1.02 SCOPE OF WORK

- A. The Work of this Section includes all labor, materials, equipment and services necessary to complete the lath and plastering work in renovated/reconfigured apartments as indicated on the Drawings and/or specified herein including, but not limited to, the following:
 - 1. Patching/replacement of plaster partitions/finish including replacement of metal lath, channel studs, etc. as required to permit installation/replacement of gas piping.
 - 2. Provide all other labor and materials as may be reasonably inferred to be required to make the Work of this Section complete.

1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. The following Sections/Divisions contain requirements that relate to the work of this Section:
 - 1. Section 02 41 19 – Selective Demolition / Removals
 - 2. Section 09 21 16 – Gypsum Wallboard System

PART 2 PRODUCTS

2.01 MATERIALS

- A. Channel Studs: Shall be cold-rolled, 16 ga. galvanized steel, 3/4" wide with 1/2" flanges to match existing.
- B. Base Clips: To secure studs to existing concrete floors shall be 18 ga. galvanized steel to match existing.
- C. "Z" Runners: To secure studs to existing concrete ceilings shall be 26 ga. galvanized steel to match existing.
- D. Fasteners: Screws, nails and other fasteners shall be as recommended by the manufacturer of the framing components.
- E. Metal Lath: Shall be 18. ga. galvanized expanded flat rib weighing not less than 3.4 lbs. per sq. yd., free from rust and shall conform to ASTM C847.
- F. Tie Wire: To secure lath to studs shall be 18 ga. galvanized soft annealed wire and shall conform to ASTM A641.
- G. Trim Accessories: Corner beads, corner lath, etc. shall be galvanized steel as recommended by the lath/plaster manufacturer.
- H. Plaster: Shall comply with ASTM C28 requirements and have a minimum compressive strength of 750 p.s.i.
 - 1. Scratch and Brown Coats: Basecoat plaster shall be Structo-Base Gypsum Plaster by United States Gypsum or approved equal.
 - 2. Finish Coat: Finish plaster shall be Structo-Gauge Gauging Plaster by United States Gypsum or approved equal.
- I. Sand: Shall comply with ASTM C35 requirements
- J. Finish Lime (Quick Lime): Shall comply with ASTM C206 requirements.

2.02 PROTECTIVE COATING

- A. Galvanize (zinc-coat) steel studs, runners, base clips, accessories, etc. as per ASTM A123, G-60 minimum.

PART 3 EXECUTION

3.01 PREPARATION

- A. Where new gas piping is to be installed concealed in existing plaster partitions/finish, plaster and metal lath, together with deteriorated channel studs/clips/runners, shall be removed as required for patching/replacement.
- B. All removal of existing plaster partitions/finish or portions thereof shall be carefully and neatly done with circular or reciprocating saws having HEPA attachments in accordance with Section 02 90 00– Dust Control.

3.02 INSTALLATION

- A. General: The following new installations shall match and be properly tied-in to adjacent existing construction, with exposed surfaces aligning:
 - 1. After removal of plaster/lath and metal framing components in accordance with Paragraph 3.01.A, patch and restore openings with new base clips, runners, channel studs, metal lath and plaster as required.
 - 2. Framing
 - a. Base clips shall be properly secured to bottom of new channel studs and shall be fastened to the existing concrete slabs with two (2) ½” case-hardened concrete stub nails, spaced to match stud spacing.
 - 1) “Z” runners shall be attached to the underside of the concrete slabs with fasteners similar to above, spaced 9” o.c.
 - 2) Channel studs shall be erected vertically and properly secured to the base clips at the floor and the “Z” runner at the ceiling. Plumb and align vertical members within 1/8”. Spacing of studs shall be a min. of 16” o.c. or to match existing. Where existing channel studs have been cut to remove deteriorated portions, install new channel stud sections overlapping existing remaining stud sections a min. of 6” at top and bottom, tied together with wire. As an alternative, existing and new stud sections can be bolted together
 - (a) Base clips and runners shall be installed so as to locate the face of the channel studs on the lath side, ¾” from the face of the finished plaster.

METAL LATH / TRIM ACCESSORIES

3.01 INSTALLATION OF INTERIOR LATHING SHALL CONFORM TO ASTM C841.

- 1. Where deteriorated metal lath is being replaced and at new infill locations, new lath shall overlap existing adjacent lath to remain a min. of 1”, and shall be properly tied to it and to studs with wire as specified.
 - (1) Whenever possible, metal lath shall be placed with its long dimension perpendicular to channel studs.
 - 2) Metal lath shall be stretched-out properly before fastening without any wobbling or buckling.
 - 3) Ends and edges of lath shall be overlapped a min. of 1” between supports and shall be properly tied together with wire as specified.
 - (a) Install new corner beads at all outside corners, including finished ends of partially demolished plaster partitions.
 - 4) Where metal lath is used on butting walls (i.e. internal corners), start lath one stud away from corner and bend it into corner, carrying it onto the adjoining surface. As an alternative, butt lath into corner and apply corner lath (Cornerite) over the abutting laths.
 - 5) Where abutting surface is not being plastered, attach metal lath to the abutting surface so that lath edge and attachment will be embedded in plaster.

3.02 PLASTERING

A. General

1. Plaster for walls shall consist of three (3) coats, scratch, brown and finish, complying with requirements of the pertinent ASTM specifications and the NYC Building Code. Where it meets the requirements of the Building Code, the Authority will accept a two-coat in lieu of a three-coat plaster installation. On exposed surfaces, the last coat shall be a white finish coat.
2. Plaster mixing and installation shall be in accordance with the manufacturer's recommendations.
3. Plaster on metal lath shall have a minimum overall thickness of $\frac{3}{4}$ " measured from the face of the lath.
4. All deteriorated and damaged areas at existing plaster walls shall be repaired and finished to match existing adjacent surfaces.
5. The Contractor shall protect all existing plaster work to remain. Any damage to existing walls due to the work of this Contract shall be repaired at his own expense.
6. Mixing of Plaster
 - a. Use a proper type of mechanical mixer to ensure that the plaster, aggregate and water are evenly mixed. The mixer shall be kept continuously clean.
7. Proportioning of gypsum plaster materials shall be by weight of gypsum to volume of aggregate as recommended by the manufacturer with variations permitted only where they will improve, under prevailing conditions, the quality of the work.
8. Prepare only one hour's supply of plaster at one time and do not remix if plaster has started to set. All such plaster shall be discarded.
9. Water added to form gypsum plaster shall be clean, fresh and free from mineral and organic substances. Only enough water shall be used to provide a plaster of workable consistency.
10. Aggregate shall be sand, clean and free of dirt, clay and foreign matter.
11. All aggregates shall be properly gradated by size in accordance with ASTM C35.
12. Setting time shall be from 2 to 4 hours after mixing for both the scratch and brown coat applications. If conditions exist that affect normal setting time, retarders or accelerators may be used (Red Top Retarder and Red Top Accelerator or approved equals) as approved by the Authority.
13. Temperatures in conformance with manufacturer's recommendations shall be maintained prior to, during and after application of plaster. As soon as setting of plaster occurs, free circulation of air shall be provided to carry off excess moisture.
14. Finish gypsum plaster coat shall be applied over a set high-strength base coat that has been broomed and is partially dry. Scratch in thin coat and then double back with second coat to provide a true hard float finish surface.
15. The Authority may choose to test the several coats of plaster for proportion in accordance with the applicable Federal Specifications and /or ASTM C472-90a.
 - a. Placement of Plaster
 - 1) Typical plaster wall installation shall be three (3) coats with a minimum overall thickness of $\frac{3}{4}$ " consisting of a scratch coat ($\frac{1}{4}$ " brown coat ($\frac{1}{8}$ " and finish coats ($\frac{3}{8}$ ", consisting of $\frac{1}{4}$ " undercoat and $\frac{1}{8}$ " top finish coat).
 - 2) Plaster shall be applied with sufficient force to cause perfect adhesion and to form good keys on lath.
 - 3) The scratch coat shall completely cover the lath on which it is applied and shall be cross scratched in both directions before the mortar is set.
 - 4) The brown coat of plaster shall be applied over the scratch coat after the undercoat has sufficiently set to carry its own weight, but before it is dry.
 - 5) The brown coat shall be applied in such thickness so that it will produce an overall thickness of plaster equivalent to that specified herein less the thickness of the finish, or as required.

- b. The brown coat shall be rodded and brought to a true uniform surface, lightly broom and allowed to set and dry for the finish coat.
 - 1) Plastering on wall surfaces shall be carried to the floor line unless otherwise indicated.
 - 2) The finish coats shall cover the brown coat completely so that no part of the undercoat shall show and shall be of sufficient thickness to produce the surface specified.
 - 3) Top finish coat shall be applied to a thickness of 1/8" and shall be troweled to a hard float finish in accordance with the manufacturer's recommendations
 - 4) Top finish coat of plaster shall be allowed a curing period of two days before application of prime coat of paint.

3.03 CLEANING AND PROTECTION

- A. At the end of each day's work, the Contractor shall remove all debris and materials not used during the day to a designated storage area(s). No used or unused materials or equipment shall be permitted to remain in occupied apartments or public spaces after the workmen leave.
- B. All floors at the work area shall be protected against damage and deposits of plaster materials.
- C. After completion of the work, the work area shall be thoroughly cleaned. The Contractor shall remove from the work area all material, rubbish, stains and defacements which have been placed thereon as a result of his work. The entire work shall be left in a clean condition satisfactory to the Authority.

END OF SECTION 09 21 13.01