Metal Lath Specifications

Specification for Metal Lath and Accessories
Section 09100 — Lath and Plaster

I. General

1. ASTM Reference Standards: C-847 – Metal lath and trims for interior and exterior application of portland cement stucco; C-841 – Interior metal lath and trims for stucco; C-1063 – Application of metal lath and accessories.


3. All galvanized products produced from G-60 pre-galvanized steel coil, per ASTM C-847. Zinc accessories, per ASTM B-69, are produced from 99% zinc alloy and are recommended for exterior applications.


II. Products

1. Lath shall be ____ (2.5, 3.4) lbs./sq. yd. ________ (flat/ self furred) diamond mesh, as produced by Alabama Metal Industries, Inc. (AMICO) or pre-approved equal, per ASTM C-847. Rib Lath shall be used for horizontal applications, see Table 3, ASTM C1063-06 for style of Rib Lath for spacing of framing.

(Verify with the stucco manufacturer as to what lath weight is required in their specification or warranty requirements. Self furred metal lath must be used on solid substrates)

2. Metal Trims and Accessories – shall be produced according to ASTM C-841, or C-1063, and come packaged for site storage. All metal accessories shall be identified on the drawings and submitted to architect for approval prior to purchase. Identify the planned location of the metal accessory and method of attachment in submittal documents.

3. Attachment – Wire ties, screws, and staples shall all comply in size and gauge to requirements found in ASTM C-1063.

4. Grade D Moisture Resistant Paper – paper to be used in backup on sheathing shall comply with Federal Specification UU-B-790a, Type 1, Grade 2, Style 2. Contractor may elect to install AMICO’s Tilath®, paper-backed metal lath to achieve 1 of the 2 layers of Grade D paper.

5. Storage: all lath and accessories shall be protected from the elements per ASTM C-1063 during storage and on the job site.

III. Products

1. Verify that the substrate to apply the metal lath framing is free of gaps, protrusions or other foreign objects that would impair the integrity of the stucco membrane. If stucco system will be applied over wood sheathing, verify the sheathing has a 1/8" gap on all edges of every sheet. Do not begin work unless this condition exists.

2. Apply 2 layers of Grade D Asphalt Paper, or pre-approved equivalent, to the substrate to receive stucco. Contractor’s option: 1 layer of Grade D and Tilath® paper-backed metal lath, to equal the 2 layers of Grade D.

3. Shingle the edges, overlapping 2" on all sides. Apply mechanical fastening in a manner that attaches the building paper, without more fasteners than required for the fastening pattern.

4. Accessories to be attached prior to the application of the lath include Casing Beads (X-66) and Foundation Weep Screeds (#7 FHA). X-66 to be attached to assure a straight line and square angles and to separate structural from non-structural elements such as window/door openings. The #7 FHA flange to be installed under the Grade D building paper.

5. Attach metal lath sheets to the substrate, beginning at the base of the wall and working up the wall. Sheets shall be installed perpendicular to the vertical framing, lapping the lath 1" at the edges. Stagger the joints of lath on the surface, similar to a brick pattern, therefore staggering the vertical butt joints.

6. Fasteners shall be driven into the framing members 3/4" and engage at least 3 strands of diamond mesh to secure to surface. Spacing of fasteners shall be 6" on center (maximum) along the framing member vertically. No staples are allowed on ceiling applications.

7. Wire Ties – shall be installed a minimum 9" on center at edges, ends and laps between framing members. Staples, nails or screws will not be allowed in these areas, per ASTM C-1063.

8. Accessories – choose casing beads, expansion and/or control joints to the specified ground of the stucco system, based on number of coats – scratch, brown finish. Set corner beads to the specified ground height to match the other accessories. Wire tie all control/expansion joints, per ASTM C-1063. Lath sheets must be broken beneath expansion/control joints and wire tied into place. Create breaks in all lath that bridge over dissimilar surfaces, across expansion joints in structure.

a. If not specified on the drawings, metal lath used for a plaster base shall be divided into rectangular panels with expansion joints placed every 100 sq. ft. for ceilings, 144 sq. ft. for walls, with no dimension exceeding 18 feet, with a maximum length/width ratio of 2 to 1.