

HOW TO INSTALL METAL LATH

These installation recommendations are intended to be instructional and accurate. This is first a guideline, providing a general overview and also equips the new steel lather with specific installation details, based on ASTM C 1063-99 Standard Specification for Installation of Metal Lath.

Always consult your area building official before beginning any project to familiarize yourself with any local code requirements. This guide should not replace the designs and judgments of a qualified engineer and/or architect.

Lath Installation

Begin at the right hand bottom corner of the wall. If paper backing behind the lath is required, leave the paper over hanging at the top and to the left of the sheet. Offset paper backing has the paper overlapping 1-1/2" on one end and one side and corresponding retracted on the opposite end and side, the sheets should always be installed in a horizontal application perpendicular to the framing.

Laps: Minimum of 1" at edges with ends nested paper to paper, metal to metal. Apply the second sheet to the left of the first sheet lapping paper over paper and lath over lath. Place the third sheet centered above the first two sheets. This process is similar to that of laying brick. This staggers the vertical butt joint seams and allows a more uniform dispersal of stress.

Nailing Methods

On horizontal applications all nails shall be driven flush with base (driven home). On vertical applications nails shall be bent over to engage at least 3 strands over and through rib on rib lath and bridge ribs with staples.

Lath Fasteners

To concrete: use (3/8" diameter shank, 3/4" in length)

To wood framing: use 11 gauge 1-1/2" length, 7/16" head nails (roofing nails 4d 1-1/2" x1/4 head)

To sheathing wood: use 14 gauge, 1.5" leg, 3/4" crown staples

To metal framing: use self drilling, self tapping #12 x 3/4" wafer head screws. Use of powder actuated or power actuated fasteners is acceptable, but may cause spalling when shot to the substrate; follow manufacturers instructions carefully.

Fastener Spacing

Spacing of nails, staples or screws is 6" on center maximum along the framing member (horizontal or vertical).

*Note: Staples are not permitted on ceiling applications.

Span Limitations

Every finish material is subject to span limitations, which is the maximum distance between frame members. When sheathing is not required, 16" on center is the maximum spacing of framing to prevent

undue sagging. Then self-furring lath is installed over sheathing or solid surface, the maximum spacing of supports maybe 24" on center.

*Note: Lath shall be furred away from vertical supports or solid surfaces at least 1/4". Self-furring lath "dimples" "V-grooved" or "ribbed" lath meets these furring requirements. See chart "Support Spacing for Metal Lath" on page 3 (Rib Lath).

Cut and Trim to Fit

Standard sheet shears or metal cutting scissors are effectively used for notching and snipping. A conventional circular saw equipped with a metal cutting blade easily zips through steel lath to cut to desired lengths.

Wire Tie

Lath is to be wire tied at 9" on center at edges, ends and at laps between framing members. On plywood sheathing only, lath may be nailed or stapled in lieu of tying at the same center spacing noted above.

Accessories

Corner beads shall be used to protect all external corners with a plumb and true edge. Flashing shall be used where lath and stucco is to be applied on walls. Intersection of roof plane (i.e.: bulkheads, sidewalls, headwalls), a stucco stop, flashing/ counter flashing shall be carried over the flashing to terminate the stucco.

Important Installation Note

Lath accessories are designed to make plaster jobs easier, more efficient and provide the final product a more professional look. To ensure this, accessories should be attached every 18" with nails, staples or tie wires. For expansion joint, corner and casing beads, the nose can be used as a screed for the stucco brown coat, but must be embedded by 1/8 inch thickness of plaster on the final coat.

Jointing for Cracking Control

It is difficult to anticipate or prevent plaster cracks, but they can be largely controlled by means of expansion joints. The expansion joints should be installed between lath. The lath is to be broken underneath the expansion joint to function properly. Fasten the joints to the lath using info found under "Lath Fasteners" section.

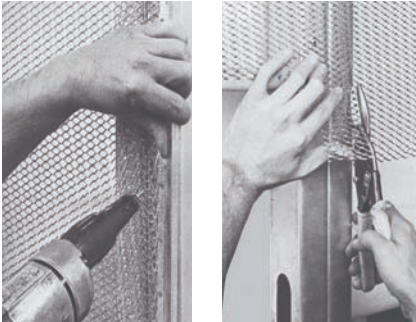
Walls and ceilings that use metal lath for the plaster base should be divided into rectangular panels with an expansion type control joint at least every 18 feet or at the juncture of a dissimilar wall, or in either direction in a length to width ratio of 2½ to 1, or in ceilings or walls exceeding 144' in area.

Expansion or control joints shall be formed by using the single #15 expansion joint accessory or by installing casing bead back with a flexible barrier membrane behind the casing bead. The separation spacing shall be not less than 1/8". An expansion control joint shall be installed where an expansion joint occurs in the base exterior wall.

INSTALLATION DETAIL PHOTOS

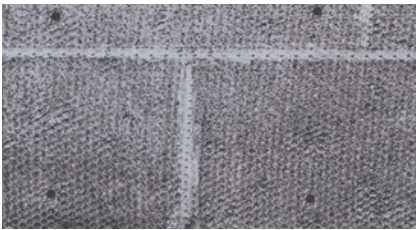
Attachment of Lath to studs

- 1) Wafer head screws are power driven to allow quick and easy attachment of Diamond Mesh Lath to framing members.
- 2) Diamond Mesh Lath can be cut to size with hand tools.



Attachment to solid surfaces

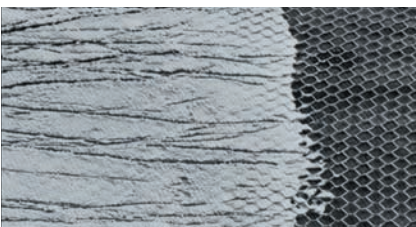
- 1) Self-Furred Diamond Mesh Lath is secured to masonry surfaces with hardened concrete nails and power driven fasteners at the furring dimples. Paper backed lath is often used in this type of application as a bond breaker.



- 2) The scratch coat is applied with complete embedment of the self-furred lath in the plaster.

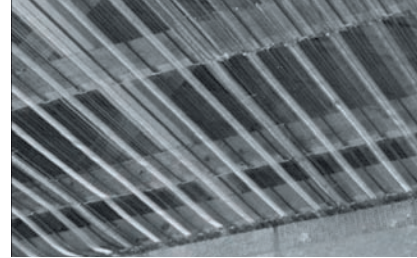


- 3) Scratch coat is fully embedded in the lath and is isolated from supporting structure. Water resistant backing paper allows controlled and uniform curing of this plaster foundation.



Attachment of Rib Lath to ceilings

- 1) High (3/8") Rib Lath attached to ceiling joist, spaced at 24" o/c max. Flat Rib Lath can span up to 16" o/c.

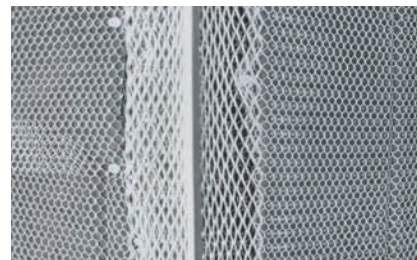


Attachment of trims/joints

- 1) Type "M" Expansion Joint is installed vertically over the window opening allowing for expansion and contraction.



- 2) AMICO X-1 Corner Bead provides protection for outside corners and a reliable straight ground for screeding.



- 3) X-66 Expanded Casing Bead is typically installed at door and window openings as a plaster stop.

