

STUCCO OVER EXPANDED METAL LATH The Most Common Errors and Mistakes

Requirements for Lath and Accessories

- **Lath:** Minimum weight 2.5lbs/yd² actual; G-60 Galvanized and 97 inch min. length.
- Lath: installed perpendicular to framing members
- Lath Laps: 1/2 inch on the long dimension (side lap) and 1 inch on the end lap. Wire-tied between framing members @ 9 inches on center.
- **Laps:** on Weather-Resistant Barriers (WRBs): End laps 2inch minimum Side Laps installed according to the manufacturer's instructions.

Fasteners for various substrates^A: must engage at least 3 strands of lath

Base or Substrate	Fastener Type	Fastener specifics (minimum)	Depth - Framing Member or Base	Spacing Not to Exceed (NTE)
Wood Framing	Nails	11ga (6d), 1.5in long, 7/16 head, galvanized	¾ inch	7"oc vertical
	Screws	#12 X ¾ wafer head sharp		
Sheathing over Wood Framing	Nails	11ga (4d), 1.5in long, 7/16 head, galvanized	¾ inch	7"oc vertical
	Screws	#12 X ¾ wafer head sharp	⁵‰ inch	
	Staples	1¼ leg X ¾ crown galvanized	¾ inch	7"oc vertical
Sheathing over Metal Framing	Screws	#12 X ¾ wafer head Self-tapping	¾ inch	
Solid (concrete, block, brick, stone or tile) ^B	Stub Nails	¾ stub nail ¾ head	¾ inch	7"oc vertical & 16"oc horizontal
	Power/powder Actuated Nails ^c	¾ long X ¾ head	³ ⁄ ₄ inch	Each corner & midpoint of long side (6 points) – infill with stubs as above

A. For complete requirements for fasteners see ASTM C-1063.

Span Limitations: 16" oc without sheathing, 24" oc with sheathing (per footnote C, Table 3, C-1063).

A Titan Group Business

B. Lath should only be used over solid bases as a last resort to achieving bond as described in Section 5.2 of ASTM C 926. C. You may use either all power/powder actuated fasteners in the 7" X 16"oc configuration or you may use a combination as described above.

Wire-Tying: side and end laps between framing members not to exceed 9"oc with 18ga, galvanized annealed wire.

Furring: ¹/₄ inch off ALL SUBSTRATES. Use either self-furred lath or furring strips.

Accessories (other than Control Joints): fastened 7"oc as required of lath and embedded in stucco.

End or butt joints to be embedded in sealant.

Control Joints: Tied to lath at spacing NTE 7"oc

Lath must be cut behind control joints

Spacing: 144sft for walls; 100 sft for ceilings

NTE 18ft in any direction

NTE length to width ratio of 2½ to 1

Locations: where dissimilar materials abut (i.e. block to frame) Where there is an expansion joint in the base wall

Common Errors

- **Under Spec Wood Sheathing:** 7/16 sheathing stood on end rather than perpendicular to framing members
- **Improper Placement of Wood Sheathing:** A ¹/₈ inch gap shall be left around all sheathing pieces to accommodate thermal expansion and contraction.
- **Under Spec Lath:** "Nominal" or "Utility" labeled lath not made to comply with ASTM C 847 requirement of +/- 10% of design weight (minimum 4.5 lbs/yd²) or G-40 galvanized or less than 97 inches long.
- **Over Attachment of Lath:** Fasteners into sheathing between framing members. This mitigates the embedment capability of the stucco and causes more rapid deterioration of the lath.
- **Improperly Furred Lath:** Results in poor or no embedment by the stucco. The ¼ inch furring requirement of C 926 encourages proper embedment and prevention of premature failure of the lath due to exposure.
- Improper or no Flashing: Mill finish aluminum or no flashing around all penetrations (head, sills & jambs of doors and windows, pipes, vents, etc...)
- Improper Lapping of WRBs and Lath: Paper must lap paper and metal must lap metal in a ship-lap method. Don't sandwich paper backing and metal lath. All WRB laps should be placed so as to shed water down the surface to where it can

weep. **Missing, Incorrect or Poorly Maintained Sealants:** Sealants must be exterior grade, compatible with area of use and UV protected.

Sealants must be visually inspected with cracks or separations of the bead repaired annually.

Improper Spacing/Location/Attachment of Control Joints: CJs fastened to base rather than tied to lath.

CJs exceeding the spacing requirements of C 1063

Lath continuous behind the CJ

Improper Weep Mechanisms: Using Plasterstops with holes rather than weep screeds or failure to place the WRB over the flange of the weep screed.

A Titan Group Business