



**STUCCO & MASONRY**

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**STUCCO OVER EXPANDED METAL LATH**  
**The Most Common Errors and Mistakes**

**Requirements for Lath and Accessories**

- Lath:** Minimum weight 2.5lbs/yd<sup>2</sup> actual; G-60 Galvanized and 97-inch min. length.
- Lath:** Installed perpendicular to framing members
- Lath Laps:** ½ inch on the long dimension (side lap) and 1 inch on the end lap.  
Wire-tied between framing members @ 9-inches on center.
- Weather-Resistant Barriers (WRBs) Laps:** End laps – 2inch minimum  
Side Laps – installed per the manufacturer’s instructions.
- Fasteners for various substrates<sup>A</sup>:** 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” o.c. 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” o.c. vertical
	Screws	#12 X ¾ wafer head sharp	⅝ inch	
	<b>Staples</b>	<b>1½ leg X ¾ crown galvanized</b>	<b>¾ inch</b>	<b>7” o.c. vertical</b>
Sheathing over Metal Framing	Screws	#12 X ¾ wafer head Self-tapping	⅜ inch	
Solid (concrete, block, brick, stone or tile) <sup>B</sup>	Stub Nails	¾ stub nail ⅝ head	¾ inch	7” o.c. vertical & 16” o.c. horizontal
	Power/powder Actuated Nails <sup>C</sup>	¾ long X ⅝ head	¾ inch	Each corner & midpoint of long side (6 points) – infill with stubs as above

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

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" o.c. configuration or you may use a combination as described above.

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

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

**Furring:** ¼ inch off ALL SUBSTRATES. Use either self-furred lath or furring strips.

**Accessories (other than Control Joints):** fastened 7" o.c. 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" o.c.

Lath must be cut behind control joints

Spacing: 144sft for walls; 100 ft<sup>2</sup> 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 ⅛ 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/yd<sup>2</sup>) or G-40 galvanized or less than 97 inches long.

**Over Attachment of Lath:** Fasteners into sheathing between framing members. This inhibits 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.

For further information, contact In-Spex, LLC at [www.in-spexllc.com](http://www.in-spexllc.com) or (407) 588-2561.