

# STRUCTA WIRE CORP

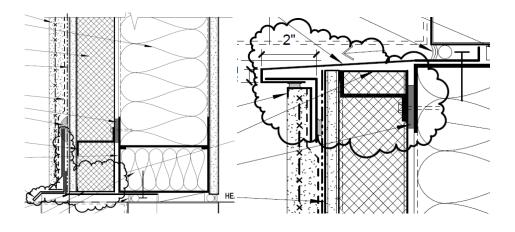
# **CASE STUDY: Vertical Mega Lath**

Project: Contractor: Requirement: Solution: Kaiser Permanente Medical Office Bldg. Lancaster, CA Nevell Group

"Net Zero" Ext. Envelope R-19 — 3 coat stucco and FCP Rain Screen Cladding Thermally Isolated & Furred Insulation Cavity with Vertically Oriented Mega Lath Achieved an R19 Exterior Envelope



Nevell Group Incorporated (Brea, CA) contracted the exterior and interior walls and ceilings at the Kaiser Permanente Medical Office Building in Lancaster, CA. The 136,000 square-foot facility is the largest medical office building in Lancaster, CA.

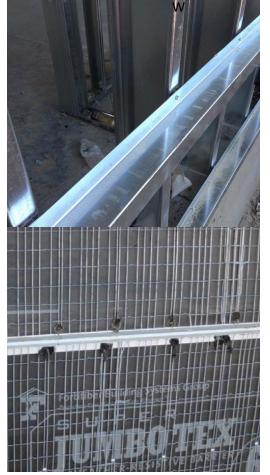




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#### **Summary:**

Kaiser required a sustainable design and achieved LEED platinum certification with the U.S. Green Building Council, by incorporating photovoltaic modules, solar water heating, reclaimed irrigation and continuous insulation behind the 3 coat, Portland cement-based plaster cladding and composite rain screen. CI was achieved by utilizing Z girt furring and 2.5" rigid insulation.



## Wall Systems:

The IECC compliant exterior envelope included a 3 coat plaster assembly utilizing GP Dens Glass Gold sheathing, fluid applied air/water barrier, grade "D" paper and Structa Wire Mega Lath. The assembly successfully "disconnected" the traditional thermal short circuit through the metal studs by horizontally cross furring 16 gauge Z girts and thermally decoupling the connection intersection with plastic "horse-shoe" shims.

Since the Z girt furring that supports the lath was ran horizontally, the lath had to be ran vertically. To comply with the specification, the contractor needed a lath with a performance equivalence to the specified 3.4 lb/sy expanded metal lath and approval for vertical or horizontal application. Structa Wire Mega Lath exceeded the specification.

## Mega Lath:

ASTM C1063 requires that lath be applied with the long dimension at right angles to the supports. The vertical lath installation provision allowed the Mega Lath to be ran continuously from the parapet to the weep screed. According to the lathing foreman, the installation proved to be "very productive giving us no installation problems or call backs." The vertical installation eliminates the

horizontal laps and, since the Mega Lath has no cups or directional grain, embedment, and the ability for the scratch coat to "hang" was not compromised by the vertical orientation.

#### **Installation Requirements:**

When installing Mega Lath vertically the twin track wires are oriented vertically - to ensure positive engagement rather than a friction fit between the fastener and the lath, 75% of the fasteners much be located below a horizontal cross wire. The cross wire layout falls perfectly on a 16 or 24 inch framing support layout. Carefully maintaining the layout of the Z girt furring is essential to guaranty that the horizontal cross wires land on the upper half of the Z girt.

Prepared March 2015