



Project: Kaiser Permanente Medical Office Bldg. Lancaster, CA

Contractor: Nevell Group

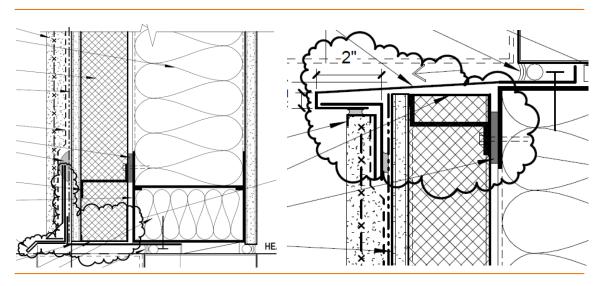
Requirement: "Net Zero" Ext. Envelope R-19 3 coat stucco and

**FCP Rain Screen Cladding** 

Solution: Thermally Isolated & Furred Insulation Cavity with Vertically

Oriented Mega Lath Achieved with a R19 Exterior Envelope

Nevell Group Incorporated (Brea, CA) contracted the exterior and interior walls and ceilings of the Kaiser Permanente Medical Office Building in Lancaster, CA. The 136,000 square-foot facility, which is scheduled to open late in 2014, is the largest medical office building in Lancaster, CA.



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.



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 equivalent to the specified 3.4 lbs/sy expanded metal lath and approval for vertical or horizontal application. Structa Wire Mega Lath exceeded the specification.

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 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.

When installing Mega Lath vertically, the Twin Trac wires are oriented vertically — to ensure positive engagement rather than a friction fit between the fastener and the lath, 75% of the fasteners must 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 guarantee that the horizontal cross wires land on the upper half of the Z girt.

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