DETAIL 4 ENGINEERING

June 9, 2014

BF4-008

To Whom It May Concern

Subject: Diamond-Furr Lath System
Brand X Metals

Dear Sir or Madam:

This is to give my evaluation of the recent testing performed on the subject product. Specifically I have reviewed the testing done by RADCO (and viewed some of the testing in person) summarized in their June 6, 2014 test report RAD-5490 (Project no. C2868A). It is my opinion that the testing performed is an accurate depiction of the Diamond-Furr system when installed over 3 inch thick foam insulation and supported by either steel or wood framing.

The attached calculations show that the Diamond-Furr system is capable of withstanding the anticipated gravity loading by a factor of safety exceeding six.

It is my conclusion that the Diamond-Furr system is acceptable to be installed in the manner described in the test report and in accordance with the manufacturer's installation instructions.

Sincerely,

Detail 4 Engineering

W.C. "Bill" Farish, P.E

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DETAIL 4 ENGINEERING

Gravity Loads for *Diamond-Furr* Lath System
Brand X Metals

Worst Case - 3/4 in thick stucco = 12 psf dead load

Stud spacing = 16 in. oc
Screw spacing = 16 in. oc

Allowable Load per Screw:

$$\frac{12 \text{ lbs}}{\text{sq.ft.}} \times \frac{16 \text{ in.}}{\text{screw}} \times \frac{16 \text{ in.}}{\text{studs}} \times \frac{\text{sq.ft.}}{144 \text{ sq.in.}} = \frac{21.3 \text{ lbs}}{\text{screw}}$$

Allowable Load on Test Assembly:

$$\frac{4 \text{ screws}}{\text{assembly}} \times \frac{21.3 \text{ lbs}}{\text{screw}} = \frac{85.3 \text{ lbs}}{\text{assembly}}$$

Test Results:

RADCO Report RAD-5490, Project C2868A, June 6, 2014

Metal Stud Average = 573 lbs.
Wood Stud Average = 574 lbs.

Worst Case -

$$\frac{573 \text{ lbs.}}{\text{test}} \times \frac{\text{assembly}}{85.3 \text{ lbs}} = \textbf{6.7 factor of safety}$$

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