

DAMMON ENGINEERING, INC.

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ARCHITECTS

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EXPERT WITNESS

554 Old Spanish Trail
Slidell, LA 70458

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Slidell, LA 70459

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Roof attachment design for Casey Civil

Assumptions:

- All DL is transferred to existing Vulcraft 20ga. deck below
- roof panels are DuraRib 3' x 10'

Load: Wind = 32.6 psf (sin 5) = 2.84 psf ↑

Fastener: Self drilling 12-24 TEK 5 screws
ult. pull-out strength = 662 lbs.

Worst case load @ mid-panel screws

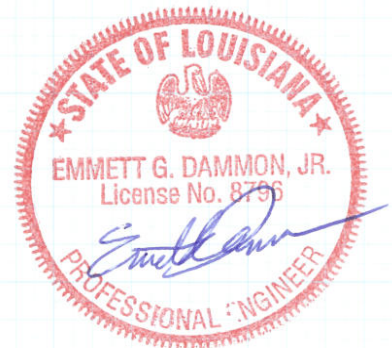
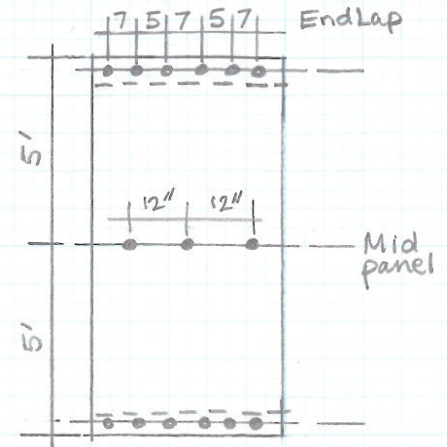
$A_{trib} = 5' \times 1' = 5 \text{ sf}$ (center screw)

$P = 2.84 (5) = 14 \text{ lb}$.

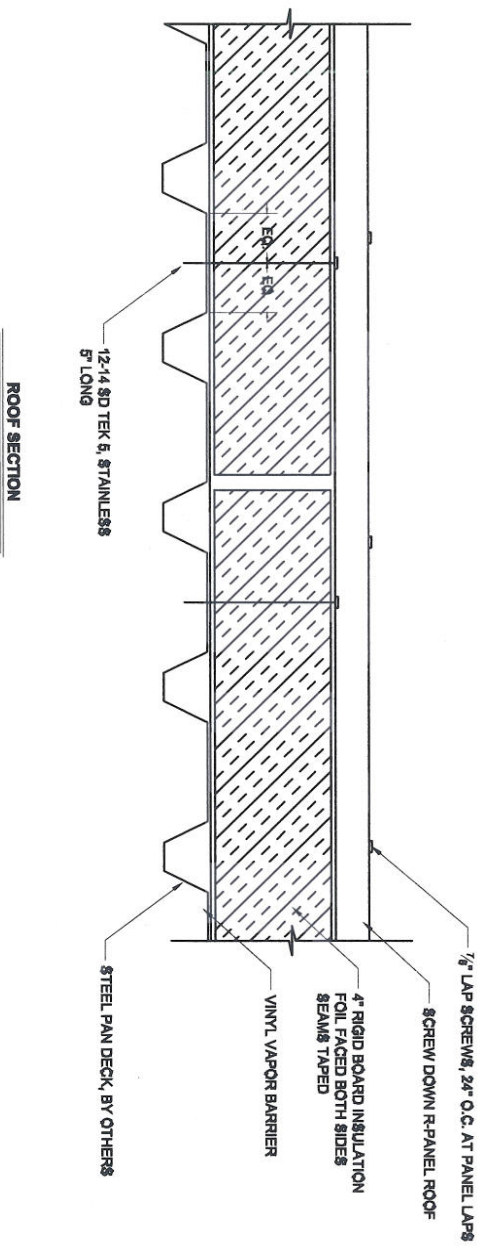
$A_{trib} = 5' \times 1.5' = 7.5 \text{ sf}$.

$P = 21.3 \text{ lb}$

$P_u < R_n$ OK



GENERAL NOTES:
 1. FASTENERS SPACINGS TO BE AS PER MANUFACTURERS RECOMMENDATIONS



CASEY CIVIL
 1000 Old Spanish Trail
 Suite 600 Metairie, LA 70002

PNK PINNACLE CASINO
MANHATTAN CONSTRUCTION CO
 BATON ROUGE, LOUISIANA

CENTRAL PLANT - ROOF ATTACHMENT

PROJECT NO.	DATE	SCALE
001	12/1/2011	AS SHOWN
SHEET NO.		TOTAL SHEETS
001		1 OF 1