



BM B1 -

SPAN = 0'0"  $W = (40+15)(16/2+2) + 12(2) = 594 \rightarrow 600 \text{ psf}$

$V_M = 2400 \text{ k}$   $M_M = 4000 \text{ in-k}$   $\Delta_{EF} = 5.53 \times 10^{-7} \text{ in}$

(3) - 2 x 12  $V_A = 5241 \text{ k}$   $M_A = 9153 \text{ in-k}$   $I = 534 \text{ in}^4$   $\Delta = .07 \text{ in}$

(3) - 2 x 12  $\frac{1}{2}$  (SPF)

LAFEM DESIGN

$WL = 16.3 \text{ psf}$

GND A + B  $\Rightarrow R = 16.3(4.5 + 5.2)(20.17/2) = 1595 \text{ k}$

GND 1 + 2  $\Rightarrow R = 16.3(4.5 + 1.73)(16/2) = 813 \text{ k}$

GND A + B

$R = 1595 \text{ k}$  panels  $\Rightarrow$  (2) - 5.5' TOTAL = 11'0"

$V_{SW} = 1595/11 = 145 \text{ psf}$   $\leftarrow$  (TYPE B SW)

$M_{br} = 145(5.5)(9) = 7178 \text{ in-k}$   $M_{w} = .6[(6(6) + 108)(5.5^2/2) + 90(5.5)] = 1604 \text{ in-k}$

NET WT = 5574  $\text{in-k}$   $R = 1013 \text{ k}$   $\leftarrow$  (HOW 2)

GND 1 -

$R_1 = 813 \text{ k}$  panels  $\Rightarrow$  4.67 7.5' TOTAL = 12.17'

$V_{SW} = 813/12.17 = 67 \text{ psf}$   $\leftarrow$  (15) 32 u+w/edge 6" x 6"

4.67

$M_{br} = 67(4.67)(9) = 2816 \text{ in-k}$   $M_{w} = .6[(6(10) + 108)(4.67^2/2) + 240(4.67)] = 1772 \text{ in-k}$

NET WT = 1044  $\text{in-k}$   $R = 224 \text{ k} < 500 \text{ k}$  NO STS

GND 2 -

SAME AS GND 1 BY INSPECTION - SAME WORK + MORE WALL