

PATTERSON-KELLEY CO.

MODU-FIRE MODELS N-750 & N-1000

DES. **J. ROBERSON**

SHEET

1

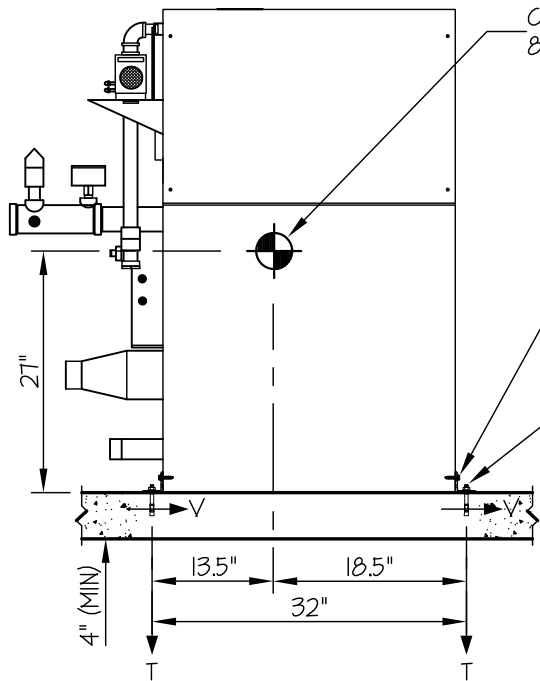
JOB NO. **11-0825**

DATE **3/29/11**

OF **1** SHEET

SEISMIC ANCHORAGE

SLAB ON GRADE



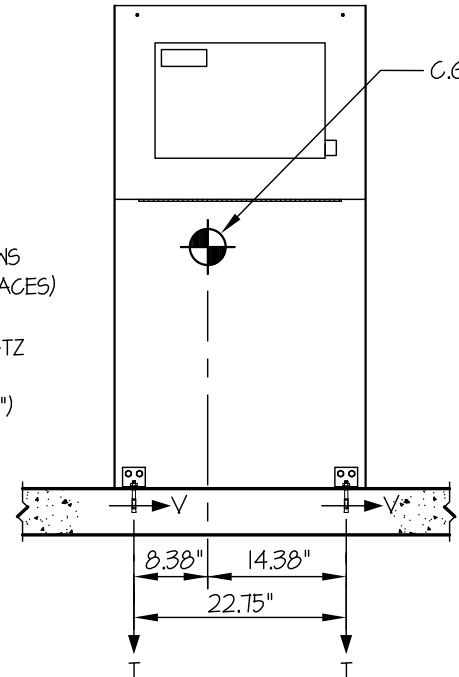
FRONT ELEVATION

C.G. WT. =
800 LBS

L 3 X 3 X 1/4" X 3"
W/2- 1/4"Φ S.M. SCREWS
TO UNIT FRAME (4 PLACES)

USE 4- 3/8" HILTI KB-TZ
EXPANSION ANCHORS
(MIN. EMBED. (h_{ef}) = 2")

T_{MAX} = 463 LBS/BOLT
V_{MAX} = 227 LBS/BOLT



SIDE ELEVATION

LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13.

WEIGHT = 800 LBS

HORIZONTAL FORCE (E_h) = 0.90W_p = 720 LBS

VERTICAL FORCE (E_v) = 0.40W_p = 320 LBS

BOLT FORCES:

TENSION (T)

$$T_{\text{MAXIMUM}} = \left[\frac{720\#(27\")(14.38\"){}}{1_{\text{BOLT}}(32\")(22.75\")} \times (0.3) \right] + \frac{720\#(27\")(18.50\"){}}{1_{\text{BOLT}}(22.75\")(32\")} - \frac{(800\#(0.9) - 320\#)(18.5\")(14.38\"){}}{1_{\text{BOLT}}(32\")(22.75\")} = 463 \text{ LBS/BOLT (MAX)}$$

(HORIZ - SIDE TO SIDE) (HORIZ - FRONT TO BACK) (WEIGHT (0.9) - E_v)

SHEAR (V)

$$V_{\text{MAXIMUM}} = \frac{720\#(14.38\"){}}{2_{\text{BOLTS}}(22.75\")} = 227 \text{ LBS/BOLT (MAX)}$$

NOTE:

ENGINEER OF RECORD SHALL PROVIDE WALL STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN.



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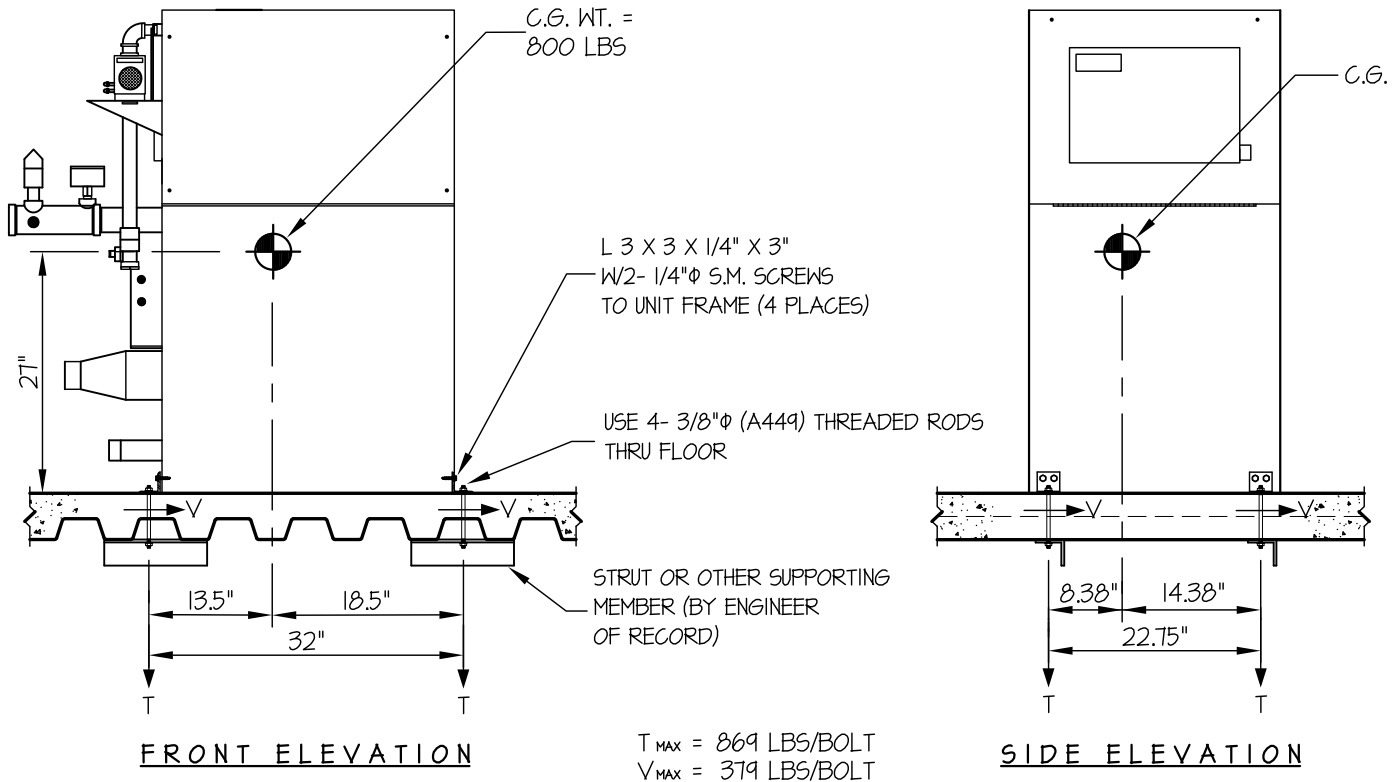
SHEET

1

OF **1** SHEET

SEISMIC ANCHORAGE

ELEVATED FLOOR



LOADS: PER 2010 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13.

WEIGHT = 800 LBS

HORIZONTAL FORCE (E_h) = $1.50W_p = 1200 \text{ LBS}$

VERTICAL FORCE (E_v) = $0.40W_p = 320 \text{ LBS}$

BOLT FORCES:

TENSION (T)

$$T_{MAXIMUM} = \left[\frac{1200\#(27\")(14.38\"){}}{1_{BOLT} (32\")(22.75\")} \times (0.3) \right] + \frac{1200\#(27\")(18.50\"){}}{1_{BOLT} (22.75\")(32\")} - \frac{(800\#(0.9) - 320\#)(18.5\")(14.38\"){}}{1_{BOLT}(32\")(22.75\")} = 869 \text{ LBS/BOLT (MAX)}$$

(HORIZ. - SIDE TO SIDE) (HORIZ. - FRONT TO BACK) (WEIGHT (0.9) - E_v)

SHEAR (V)

$$V_{MAXIMUM} = \frac{1200\#(14.38\"){}}{2_{BOLTS} (22.75\")} = 379 \text{ LBS/BOLT (MAX)}$$

NOTE:

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