

CHATSWORTH PRODUCTS, INC.

**CEILING MOUNTED ZONE ENCLOSURE
2 FT. X 2 FT.**

DES. J. ROBERSON

JOB NO. 11-1131

DATE 7/30/12

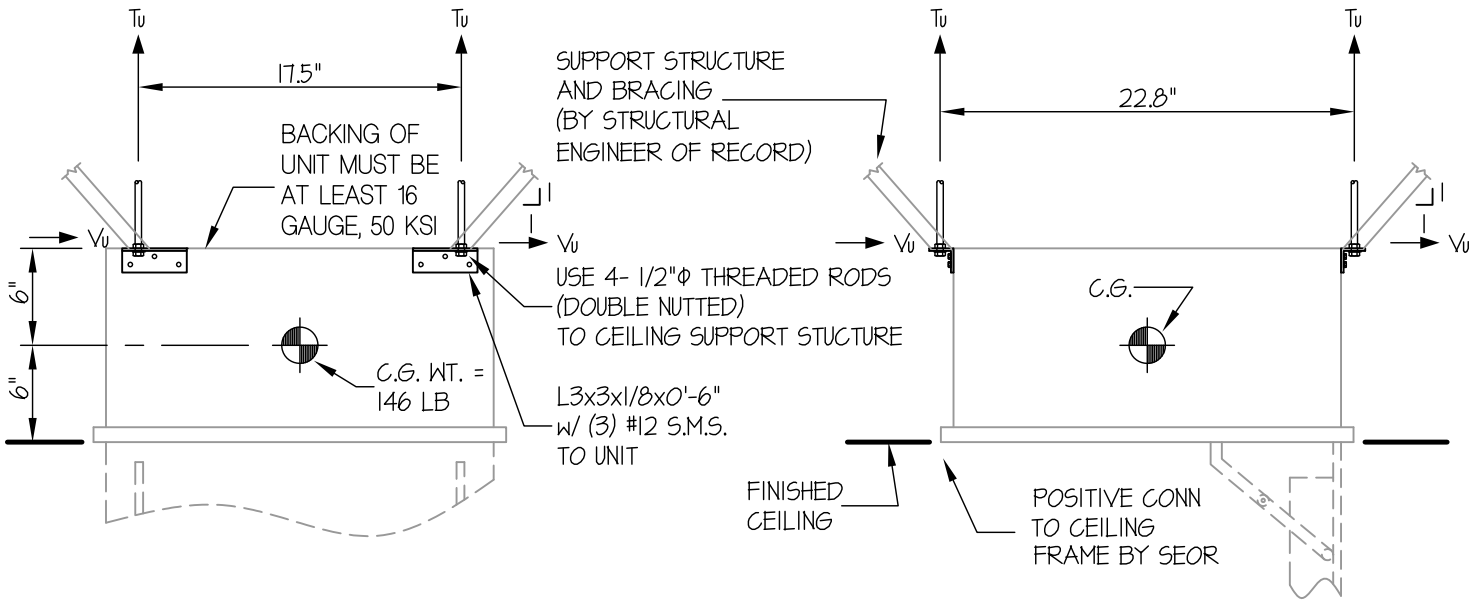
SHEET

1

OF **1** SHEET

SEISMIC ANCHORAGE

CEILING MOUNTED



FRONT ELEVATION

SIDE ELEVATION

T_u = 169 LB/THREADED ROD
V_u = 55 LB. TO EA. BRACE

LOADS: PER 2010 CALIFORNIA BUILDING CODE AND ASCE 7-05.

(STRENGTH DESIGN IS USED) (S_{ds} = 2.00, a_p = 2.5, I_p = 1.5, R_p = 2.5, z/h ≤ 1.0)

WEIGHT = 146 LB

HORIZONTAL FORCE (E_h) = 3.60W_p = 526 LB

VERTICAL FORCE (E_v) = 0.40W_p = 58 LB

BOLT FORCES:

TENSION (T)

$$T_{u \text{ MAXIMUM}} = \frac{526\#(6")}{2 \text{ BOLTS}(17.5")} + \left[\frac{526\#(6")}{2 \text{ BOLTS}(22.8")} \times (0.3) \right] + \frac{12(146\#) + 58\#}{4 \text{ BOLTS}} = 169 \text{ LB/BOLT (MAX)}$$

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

SHEAR (V)

$$V_{u \text{ MAXIMUM}} = \frac{526\#}{4 \text{ BOLTS}} = 132 \text{ LB/BOLT (MAX) (PER AISC J3.7, LESS THAN 20% STRESS)}$$

NOTE:

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

