EASE EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING
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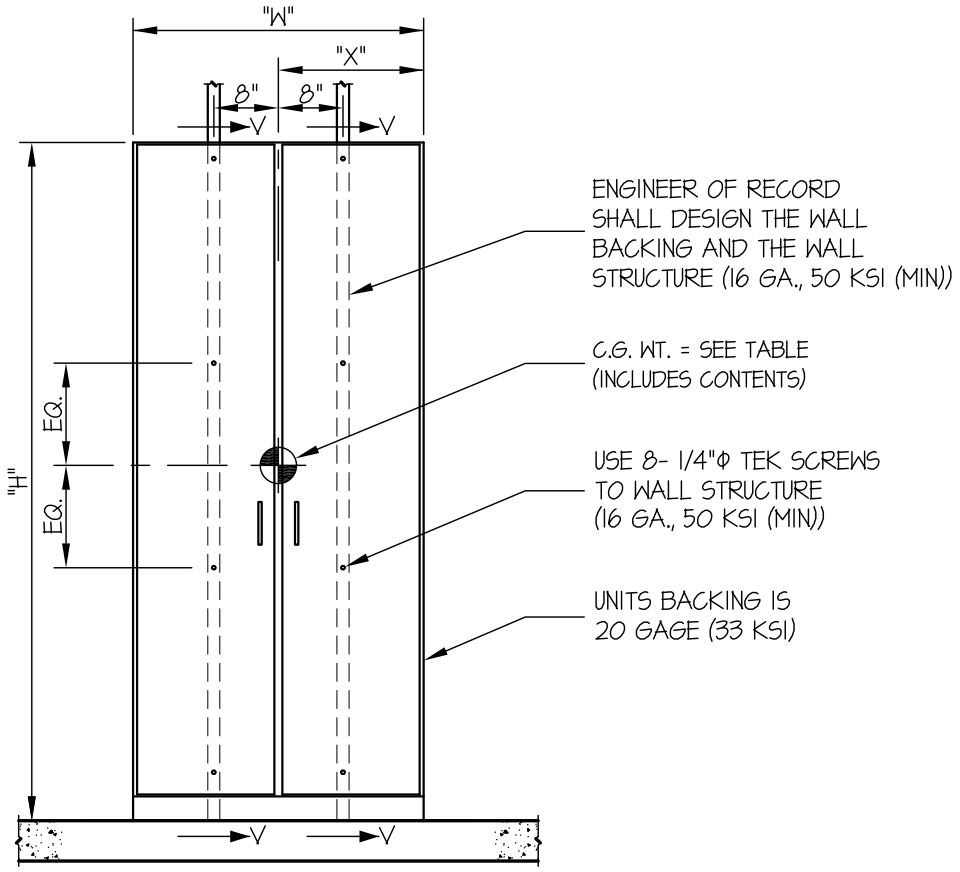
MIDMARK CORPORATION

TALL CABINETS

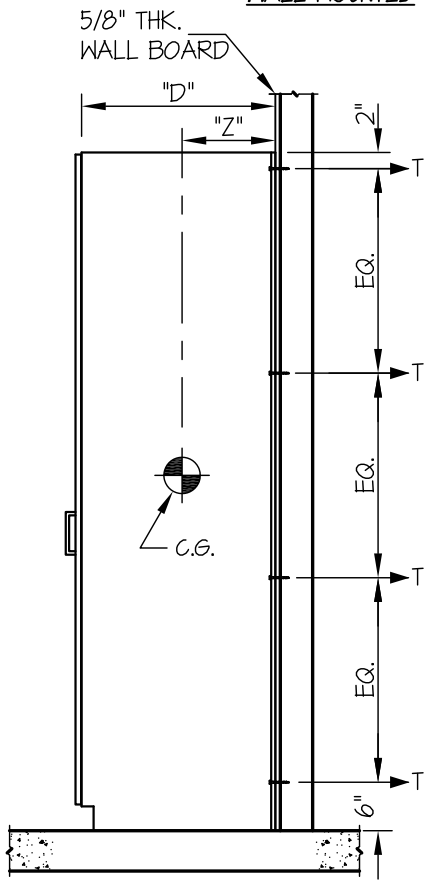
DES. R. LA BRIE
EASE JOB NO. 11-0927
DATE 10/13/09
SHEET 1 OF 2 SHEETS

SEISMIC ANCHORAGE



FRONT ELEVATION

WALL MOUNTED



SIDE ELEVATION

NOTES:

1. FORCES ARE DETERMINED PER 2007 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 12 AND 13. ALLOWABLE STRESS DESIGN IS USED.

   HORIZONTAL FORCE (E_h) = 0.97 W_p (S_{DS} = 1.93, a_p = 1.0, I_p = 1.5, R_p = 2.5
   VERTICAL FORCE (E_v) = 0.27 W_p

2. CENTER OF GRAVITY (C.G.) WEIGHT IS A MAXIMUM. THIS CALCULATION ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.

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

REGISTERED PROFESSIONAL ENGINEER
JOSEPH LA BRIE
No. 3566
EXP. 3-31-2010
10/13/09
STRUCTURAL
STATE OF CALIFORNIA

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SHEET 2 OF 2 SHEETS

SEISMIC ANCHORAGE — WALL MOUNTED

	UNIT NAME	MAX WEIGHT (LBS.)	W (in.)	H (in.)	D (in.)	X (in.)	Z (in.)	T_{MAX} (LBS/BOLT)	V_{MAX} (LBS/BOLT)
*	TP032	1150	48	84	24	24	11.4	171	140
	TP003	741	36	69	24	18	11.7	121	90
	TZ054	564	30	84	24	15	11.8	98	68

* THIS UNIT IS USED IN THE CALCULATION BELOW.

LOADS:

WEIGHT = 1150 LBS
HORIZONTAL FORCE (E_h) = 0.97 W_p = 1116 LBS
VERTICAL FORCE (E_v) = 0.27 W_p = 311 LBS

SCREW FORCES:

TENSION (T)

$$T_{PARALLEL} = \frac{1116\#(11.4'')}{4 \text{ SCREWS } (32'')} = 99 \text{ LBS/SCREW}$$

$$T_{PERP.} = \frac{1116\#}{8 \text{ SCREWS}} = 140 \text{ LBS/SCREW}$$

$$T_{MAX.} = \sqrt{99^2 + 140^2} = 171 \text{ LBS/SCREW (MAX)}$$

SHEAR (V)

$$V_{MAX.} = \frac{1116\#}{8 \text{ SCREWS}} = 140 \text{ LBS/SCREW (MAX)}$$

1/4"ø TEK SCREWS
IN 16 GA., 50 KSI STEEL

$T_{ALLOW.}$ = 260 LBS
$V_{ALLOW.}$ = 612 LBS