EASE

EQUIPMENT **ANCHORAGE** & SEISMIC ENGINEERING
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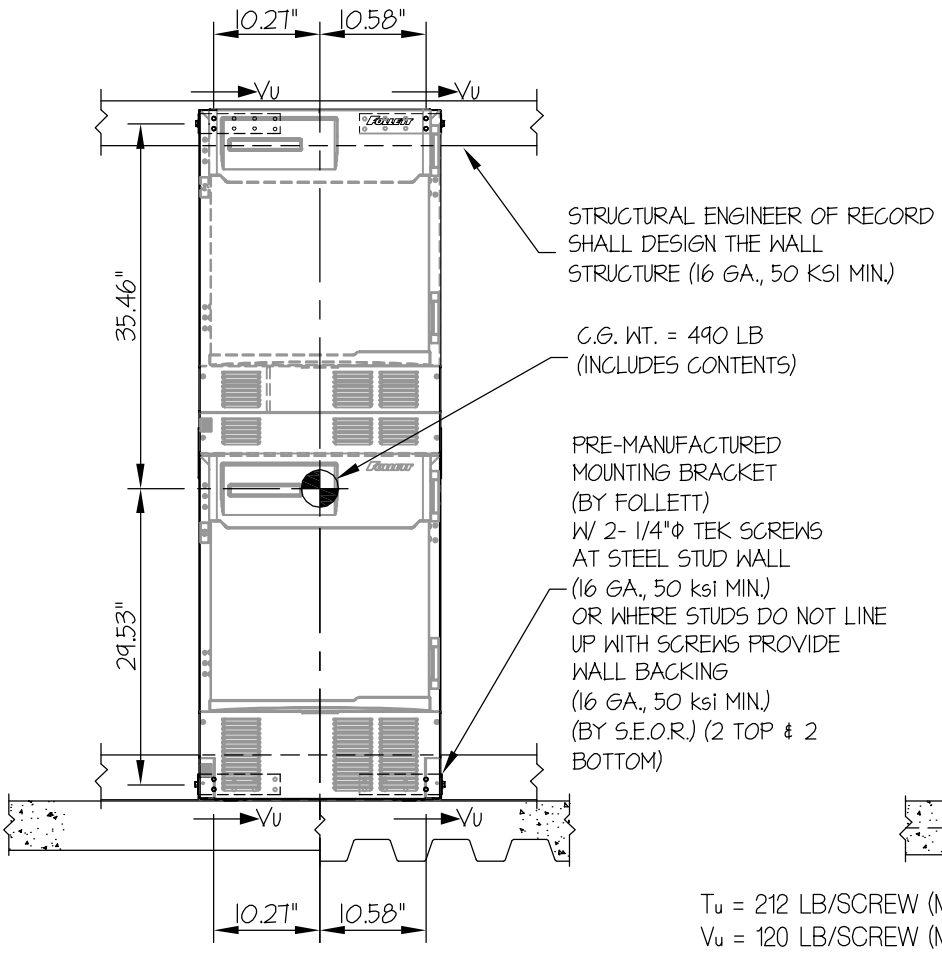
FOLLETT CORPORATION

STACKING REFRIGERATORS AND FREEZERS

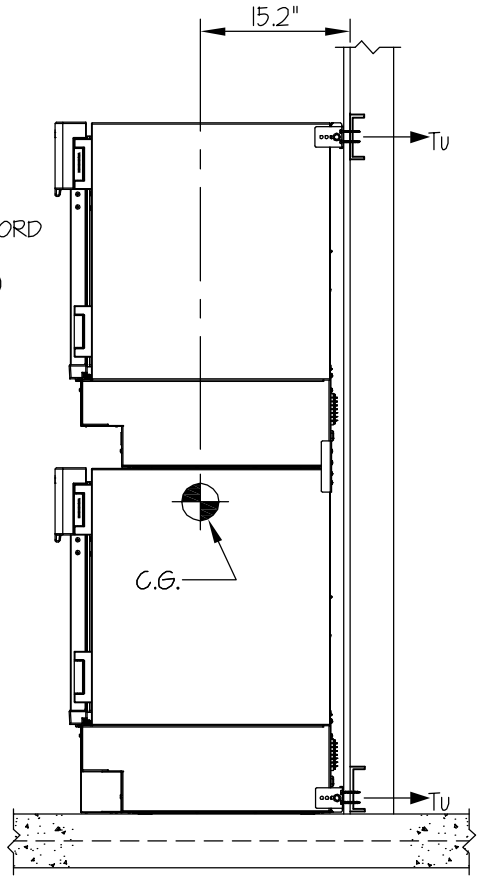
DES.	J. ROBERSON
JOB NO.	11-1420
DATE	4/23/14

SHEET 1 OF 1 SHEETS

SEISMIC ANCHORAGE



SLAB ON GRADE/UPPER FLOOR



T_u = 212 LB/SCREW (MAX)
V_u = 120 LB/SCREW (MAX)

LOADS: PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10.
(STRENGTH DESIGN IS USED) (S_{DS} = 2.5, a_p = 1.0, I_p = 1.5, R_p = 2.5, $z/h \leq 1$)
WEIGHT = 490 LB (INCLUDES CONTENTS)
HORIZONTAL FORCE (E_h) = 1.80 W_p = 882 LB
VERTICAL FORCE (E_v) = 0.50 W_p = 245 LB

1/4"ϕ TEK SCREWS TO 16 GAGE, 50 KSI
ϕT= 418 LB/SCREW (TENSION)
ϕV= 362 LB/SCREW (SHEAR)

SCREW FORCES:

TENSION (T)

$$T_{u\ PARALLEL} = \frac{882\#(35.46'')(15.2'')}{2\ SCREWS(64.99'')(20.85')} = 176\ LB/SCREW$$

$$T_{u\ PERP.} = \frac{882\#(35.46'')}{4\ SCREWS(64.99'')} = 120\ LB/SCREW$$

$$T_{u\ MAX} = 120\#(0.3) + 176 = 212\ LB/SCREW\ (MAX)$$

SHEAR (V)

$$V_{u\ MAX} = \frac{882\#(35.46'')}{4\ SCREWS(64.99'')} = 120\ LB/SCREW\ (MAX)$$

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2014
STRUCTURAL
STATE OF CALIFORNIA
4/23/14

NOT STRUCTURALLY CHECKED

NOTE:
STRUCTURAL ENGINEER OF RECORD SHALL PROVIDE SLAB OR OTHER SUPPORT STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.