EASE

EQUIPMENT **ANCHORAGE** & SEISMIC ENGINEERING
www.EquipmentAnchorage.com

FOLLETT CORPORATION

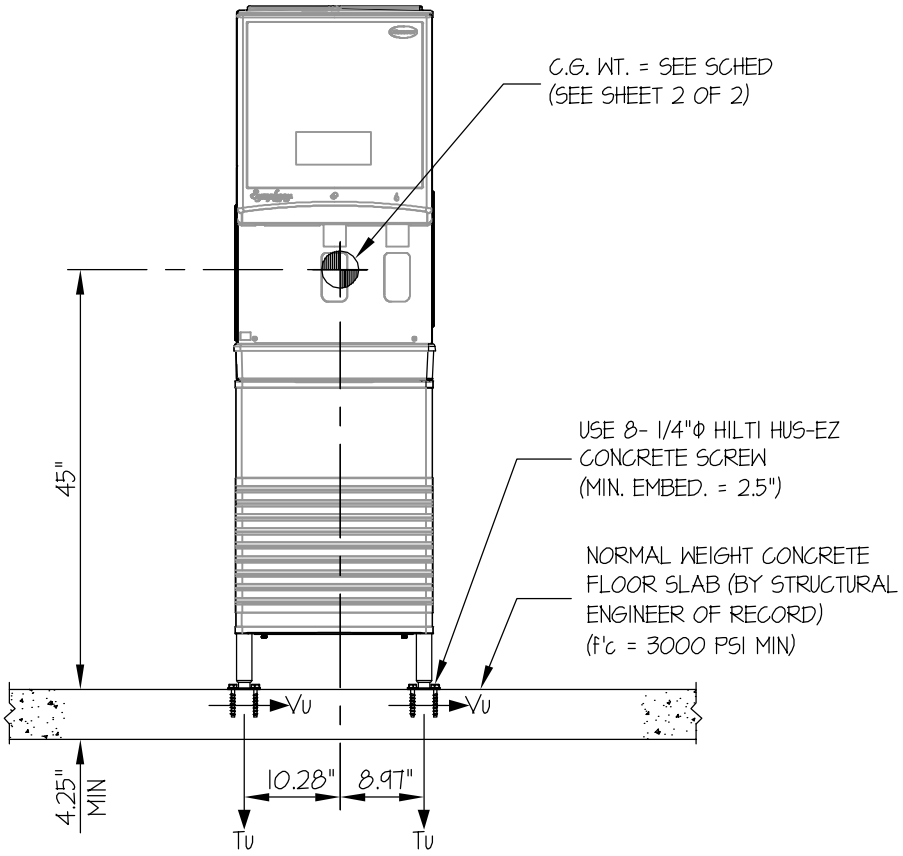
25/50 CI425 A/W DISPENSERS

DES.	J. ROBERSON
JOB NO.	11-1420
DATE	6/10/14

SHEET 1 OF 2 SHEETS

SEISMIC ANCHORAGE

SLAB ON GRADE



FRONT ELEVATION

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10
   STRENGTH DESIGN IS USED. (S_{DS} = 2.30, a_p = 1.0, I_p = 1.5, R_p = 2.5, Ω_o = 2.5, z/h = 0)

   HORIZONTAL FORCE (E_h) = 1.035 W_p
   HORIZONTAL FORCE (E_{mh}) = 2.59 W_p (FOR CONCRETE ANCHORAGE)
   VERTICAL FORCE (E_v) = 0.46 W_p

2. CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THESE CALCULATIONS ENCOMPASS ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.

3. STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2016
STRUCTURAL
STATE OF CALIFORNIA
6/10/14

NOT STRUCTURE ENGINEERED

FOLLETT CORPORATION

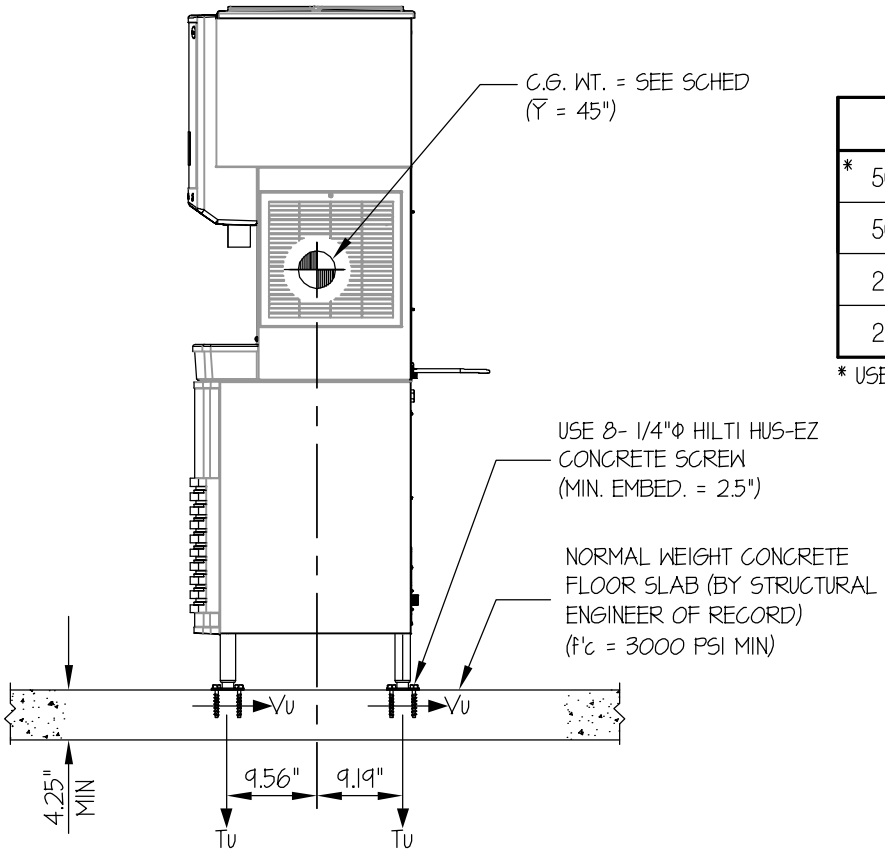
25/50 CI425 A/W DISPENSERS

DES. J. ROBERSON
JOB NO. 11-1420
DATE 6/10/14

SHEET 2 OF 2 SHEETS

SEISMIC ANCHORAGE

SLAB ON GRADE



SIDE ELEVATION

MODEL	MAX WT	Tu	Vu
* 50CI425W	276	569	95
50CI425A	271	559	94
25CI425W	249	514	86
25CI425A	244	503	84

* USED IN CALCULATION

LOADS: PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10.
(STRENGTH DESIGN IS USED) (S_{DS} = 2.30, a_p = 1.0, I_p = 1.5, R_p = 2.5, Ω_0 = 2.5, z/h = 0)
WEIGHT = 276 LB
HORIZONTAL FORCE (E_{mh}) = 2.59 W_p = 715 LB
VERTICAL FORCE (E_v) = 0.46 W_p = 127 LB

BOLT FORCES:

BOLT SPEC: 1/4"ϕ HILTI HUS -EZ
$\phi T = 0.75\phi Nn$ = 623 LB/BOLT (TENSION)
$\phi V = \phi Vn$ = 836 LB/BOLT (SHEAR)

TENSION (T)

$$T_{u\ MAXIMUM} = \left[\frac{715\#(45'')(9.56'')}{2\ BOLTS(19.25'')(18.75'')} \times (0.3)\right] + \frac{715\#(45'')(10.28'')}{2\ BOLTS(18.75'')(19.25'')} - \frac{(276\#(0.9) - 127\#)(10.28'')(9.56'')}{2\ BOLTS(19.25'')(18.75'')} = 569\ LB/BOLT\ (MAX)$$

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

SHEAR (V)

$$V_{u\ MAXIMUM} = \frac{715\#(10.28'')}{4\ BOLTS(19.25'')} = 95\ LB/BOLT\ (MAX)$$

EASE

EQUIPMENT **ANCHORAGE** & SEISMIC ENGINEERING
www.EquipmentAnchorage.com

FOLLETT CORPORATION

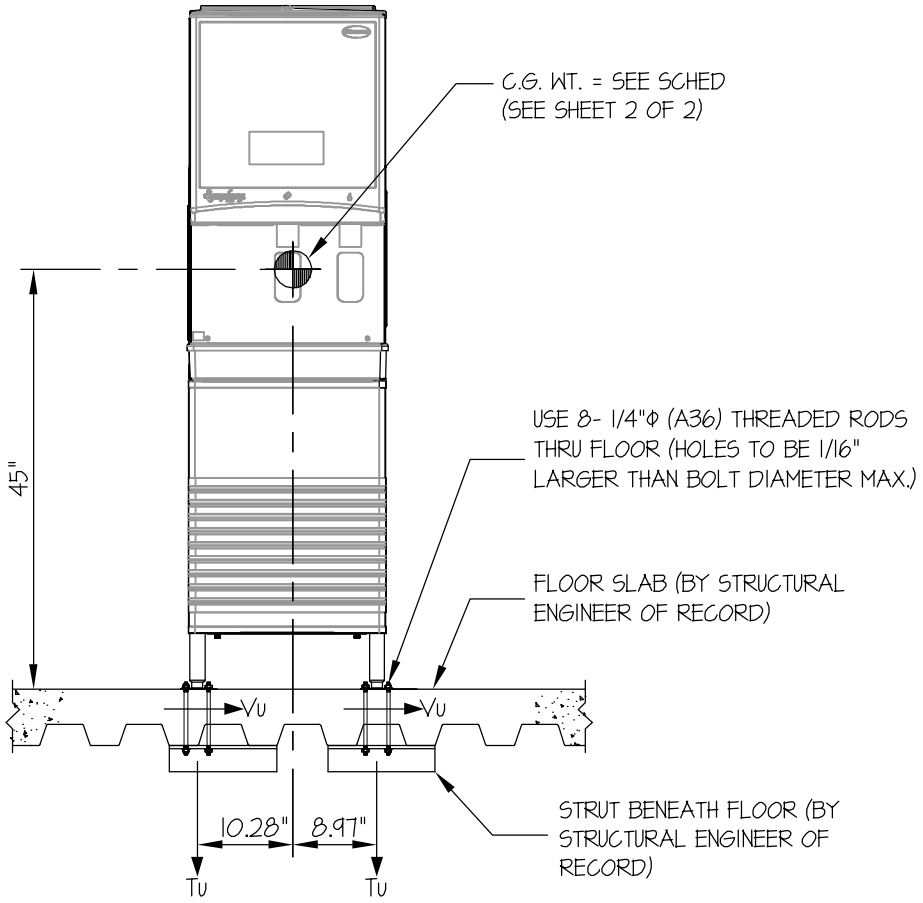
25/50 CI425 A/W DISPENSERS

DES.	J. ROBERSON
JOB NO.	11-1420
DATE	6/10/14

SHEET 1 OF 2 SHEETS

SEISMIC ANCHORAGE

UPPER FLOOR



FRONT ELEVATION

NOTES:

1. FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10 STRENGTH DESIGN IS USED. (S_{DS} = 2.50, a_p = 1.0, I_p = 1.5, R_p = 2.5, Ω_0 = 2.5, $z/h \leq 1$)

   HORIZONTAL FORCE (E_h) = 1.80 W_p
   VERTICAL FORCE (E_v) = 0.50 W_p

2. CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THESE CALCULATIONS ENCOMPASS ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.

3. STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.

REGISTERED PROFESSIONAL ENGINEER
JONATHAN ROBERSON
No. 4197
EXP. 6-30-2016
STRUCTURAL
STATE OF CALIFORNIA
6/10/14

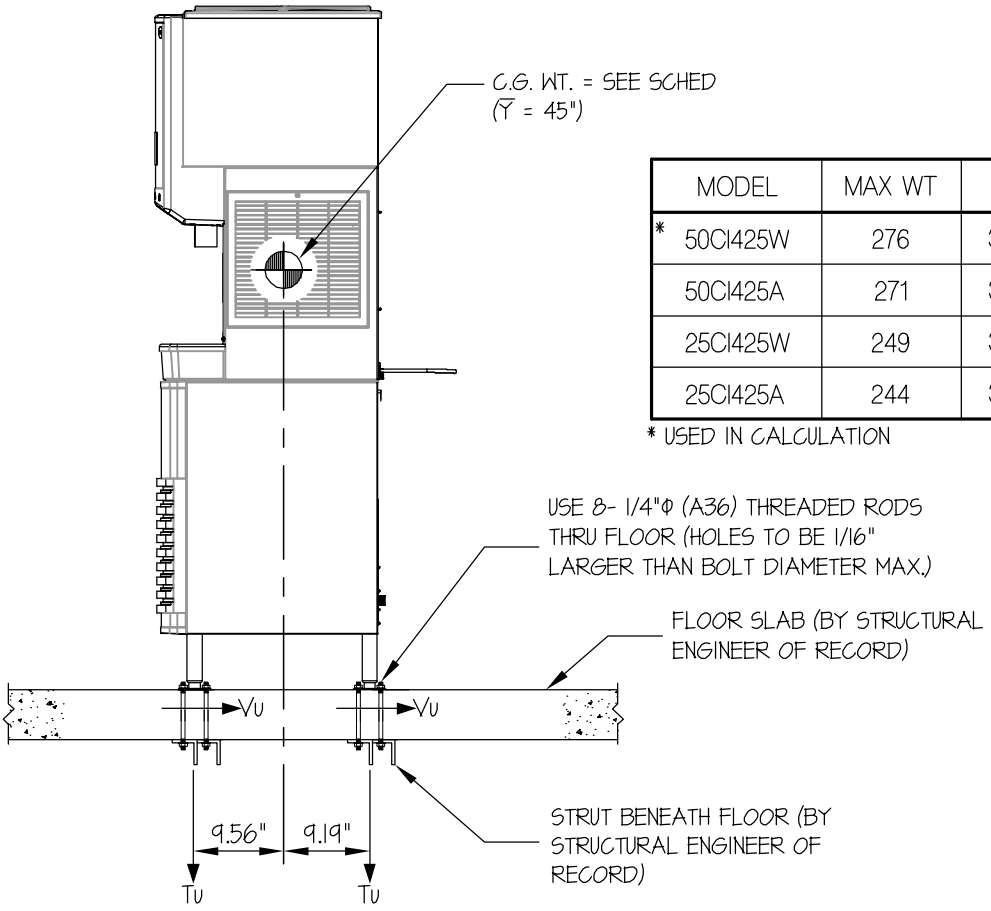
NOT STRUCTURE ENGINEERED

FOLLETT CORPORATION

25/50 CI425 A/W DISPENSERS

DES. J. ROBERSON | JOB NO. 11-1420 | DATE 6/10/14 | SHEET 2 OF 2 SHEETS

SEISMIC ANCHORAGE — UPPER FLOOR



SIDE ELEVATION

MODEL	MAX WT	Tu	Vu
* 50CI425W	276	392	66
50CI425A	271	385	65
25CI425W	249	354	60
25CI425A	244	347	59

* USED IN CALCULATION

LOADS: PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10.
(STRENGTH DESIGN IS USED) (S_{DS} = 2.5, a_p = 1.0, I_p = 2.5, R_p = 2.5, $z/h \leq 1$)

WEIGHT = 276 LB

HORIZONTAL FORCE (E_h) = 1.80 W_p = 497 LB

VERTICAL FORCE (E_v) = 0.50 W_p = 138 LB

BOLT FORCES:

BOLT SPEC: 1/4"φ (A36) THREADED ROD
ΦT= 1599 LB/BOLT
ΦV= 853 LB/BOLT

TENSION (T)

$$T_{u\ MAXIMUM} = \left[\frac{497\#(45'')(9.56'')}{2\ BOLTS(19.25'')(18.75'')} \times (0.3)\right] + \frac{497\#(45'')(10.28'')}{2\ BOLTS(18.75'')(19.25'')} - \frac{(276\#(0.9) - 138\#)(10.28'')(9.56'')}{2\ BOLTS(19.25'')(18.75'')} = 392\ LB/BOLT\ (MAX)$$

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

SHEAR (V)

$$V_{u\ MAXIMUM} = \frac{497\#(10.28'')}{4\ BOLTS(19.25'')} = 66\ LB/BOLT\ (MAX)$$