



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

APPLICATION FOR HCAI PREAPPROVAL OF
MANUFACTURER'S CERTIFICATION (OPM)

OFFICE USE ONLY

APPLICATION #: OPM-0208

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: ☐ New ☒ Renewal/Update

Manufacturer Information

Manufacturer: BD

Manufacturer's Technical Representative: Jared Zamaloff

Mailing Address: 10020 Pacific Mesa Blvd, San Diego, CA 92121

Telephone: (858) 617-4340

Email: jared.zamaloff@bd.com

Product Information

Product Name: PYXIS DUOSTATION, MEDFLEX 1000 & MEDFLEX 2000

Product Type: Other electrical and mechanical components

Product Model Number: Pyxis DuoStation, MEDFLEX 1000, MEDFLEX 2000

General Description: Systems that allow clinicians to safely and accurately dispense both medications and medical supplies from single dispensing machine

Applicant Information

Applicant Company Name: EASE LLC.

Contact Person: Tiffany Tonn

Mailing Address: 1515 FAIRVIEW AVE, STE 205, MISSOULA, MT 59801

Telephone: (406) 541-3273

Email: tiffany@easeco.com

Title: Office Assistant

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

Registered Design Professional Preparing Engineering Recommendations

Company Name: EASE LLC

Name: Jonathan Roberson

California License Number: S4197

Mailing Address: 5877 Pine Ave., Suite 210, Chino Hills, CA 91709

Telephone: (951) 295-1892

Email: jon@EASECo.com

Certification Method

Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950 ☐ ASHRAE 171 ☐ FEMA 461

☐ Other(s) (Please Specify):

*Use of criteria other than those adopted by the California Building Standards Code, 2025 (CBSC 2025) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBSC 2025 may be used when approved by HCAI prior to testing.

☒ Analysis

☐ Experience Data

☐ Combination of Testing, Analysis, and/or Experience Data (Please Specify):

HCAI Approval

Date: 6/29/2026

Name: William Staehlin

Title: Senior Structural Engineer

Condition of Approval (if applicable):

"A healthier California where all receive equitable, affordable, and quality health care"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





**EQUIPMENT ANCHORAGE
& SEISMIC ENGINEERING**

5877 Pine Ave, Ste. 210
Chino Hills, CA. 91709
Phn: (909) 606-7622

The Department of Health Care Access and Information
PREAPPROVAL OF MANUFACTURER'S CERTIFICATION
OPM-0208

THIS PREAPPROVAL CONFORMS TO THE 2025 CALIFORNIA BUILDING CODE

MANUFACTURER: **BD**
EQUIPMENT NAME: **PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000**

Sheet: 1 of 11

Date: 6/25/26

GENERAL NOTES

1. THIS HCAI PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2025 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2025 CBC
2. THIS DOCUMENT MAY ONLY BE USED WITH THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER LISTED ABOVE FOR THE SPECIFIC PROJECT SITE AND INSTALLATION LOCATION. THIS DOCUMENT IS INVALID WITHOUT SUCH CONSENT.
3. THIS PREAPPROVAL CONFORMS TO THE 2025 CALIFORNIA BUILDING CODE WHERE SDS IS NOT GREATER THAN 0.90, 1.30, 1.50 & 2.20.
4. FORCES PER ASCE 7-22 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3,
WHERE $SDS=0.90, I_p=1.5, C_{AR}=1.0, R_{po}=1.5, z/h=0, (R_u=1.0, H_f=1.0)$ AT CONCRETE SLAB AT OR BELOW GRADE. SEE FOLLOWING SHEETS FOR Ω_{op}
WHERE $SDS=1.50, I_p=1.5, C_{AR}=1.0, R_{po}=1.5, z/h=0, (R_u=1.0, H_f=1.0)$ AT CONCRETE SLAB AT OR BELOW GRADE. SEE FOLLOWING SHEETS FOR Ω_{op}
WHERE $SDS=1.30, I_p=1.5, C_{AR}=1.0, R_{po}=1.5, z/h=0.95, (R_u=1.3, H_f=3.375)$ AT CONCRETE SLAB ON METAL DECK.
WHERE $SDS=2.20, I_p=1.5, C_{AR}=1.0, R_{po}=1.5, z/h=0.95, (R_u=1.3, H_f=3.375)$ AT CONCRETE SLAB ON METAL DECK.
SEE FOLLOWING SHEETS FOR Ω_{op}
5. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
6. ALL DESIGN FORCES SHOWN ON THE DRAWINGS ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN.
7. CONCRETE SLAB ON METAL DECK DETAIL VALID FOR DEMANDS SHOWN AT ANY ELEVATION IN THE BUILDING. (i.e. $z/h = 0.95$)
8. CONCRETE SLAB DETAIL VALID FOR DEMANDS SHOWN AT OR BELOW GRADE. (i.e. $z/h = 0$)
9. **RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD OF THE BUILDING**
 - A. PROVIDE SUPPORTING STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN IN ADDITION TO ALL OTHER LOADS.
 - B. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2025 CBC AND WITH THE DETAILS, MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN ON THE PREAPPROVAL DOCUMENTS.
 - C. VERIFY THAT PROJECT SPECIFIC SEISMIC PARAMETERS RESULT IN SEISMIC FORCES (E_h, E_v) THAT DO NOT EXCEED THE VALUES IN THIS OPM.
 - D. VERIFY THAT THE CONCRETE SLAB TO WHICH THE EQUIPMENT IS ANCHORED MEETS THE REQUIREMENTS OF THE APPLICABLE ICC ESR REPORT AND THIS OPM.
 - E. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPENINGS (SEE TYPICAL DETAIL ON SHEET 2).
 - F. VERIFY THAT ALL NEW OR EXISTING ANCHORS ARE AN ADEQUATE DISTANCE FROM THE UNIT ATTACHMENTS AND CHECK FOR INTERACTION WHERE OTHER ANCHORS ARE WITHIN 18" OR $6h_{ef}$ FROM THIS UNIT'S ANCHORS.



BD

DES. J. ROBERSON

SHEET

2

JOB NO. 11-2511

DATE 6/25/26

OF 11 SHEETS

PYXIS DUOSTATION, MEDFLEX 1000
AND MEDFLEX 2000

10. EXPANSION ANCHORS:

- A. ATTACHMENT IS TO BE MADE WITH THE ANCHORS LISTED BELOW AND INSTALLED AS DESCRIBED IN THE CORRESPONDING ICC REPORT.

Anchor Diameter	Concrete Type	Min. f'c (psi)	Anchor Type	ICC Report No.	Min. Embed.	Min. Spacing	Min. Edge Dist.	Min. Conc. Thickness	Torque Test	Direct Tension Test
1/2"	Sand Light Weight	3000	Hilti Kwik Bolt TZ2 (CARBON STEEL)	ESR-4266	3.25"	9.75"	24"	See Detail "A"	50 FT-LB	N/A
1/2"	Normal Weight	3000	Hilti Kwik Bolt TZ2 (CARBON STEEL)	ESR-4266	3.25"	8"	21"	6"	50 FT-LB	3026 lb

- B. THIS PREAPPROVAL ALLOWS FOR UP TO A MAXIMUM OF 2 ADJACENT CONCRETE SLAB EDGES, 21" AWAY MINIMUM (i.e. - CORNER). SEE ADJACENT DETAIL FOR ADDITIONAL MINIMUM ALLOWABLE CONCRETE EDGE DISTANCES.

- C. TESTING AND SPECIAL INSPECTION OF EXPANSION ANCHORS SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY EMPLOYED BY THE FACILITY OWNER PER CBC 1704A & 1910A.5 AND CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER AND THE ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE.

- (i) DIRECT PULL TENSION TEST OR TORQUE TEST AT LEAST 50% OF THE ANCHORS.

- (ii) ACCEPTANCE CRITERIA:

- DIRECT TENSION TEST: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE TEST LOAD. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER BECOMES LOOSE.
- TORQUE TEST: THE APPLICABLE TORQUE MUST BE ACHIEVED WITHIN THE FOLLOWING LIMITS: WEDGE TYPE : 1/2 TURN OF THE NUT

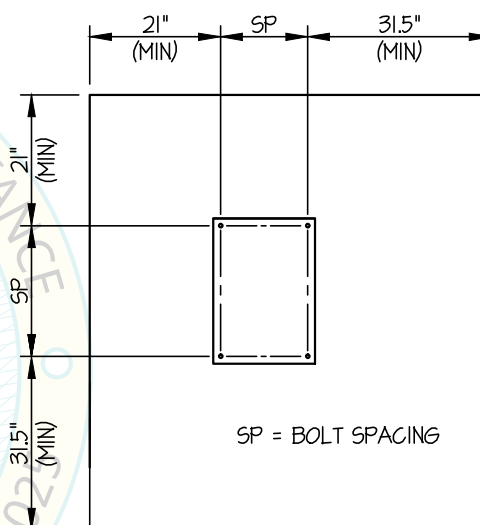
- (iii) IF ANY ANCHOR FAILS, TEST ALL ANCHORS.

- D. AVOID DAMAGING EXISTING STEEL REINFORCING IN CONCRETE SLAB WHEN INSTALLING CONCRETE EXPANSION ANCHORS.

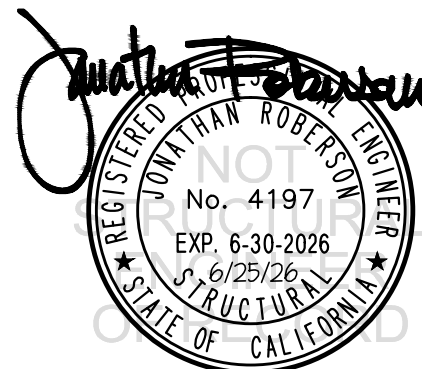
- E. PROVIDE FOR FULL THREAD ENGAGEMENT OF NUT & WASHER.

11. BOLTS THROUGH CONCRETE ON METAL DECK

- A. BOLTS SHALL BE TORQUED BY 3/4 TURN OF THE NUTS AFTER THE SNUG TIGHT (THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQUIRED TO BRING THE CONNECTED PLIES INTO FIRM CONTACT) CONDITION IS ACHIEVED, UNLESS OTHERWISE NOTED.
- B. THROUGH BOLT HOLES SHALL BE 1/16" LARGER THAN BOLT SIZE (HOLE SIZE = BOLT SIZE + 1/16) FOR CONCRETE.
- C. THROUGH-BOLTS IN CONCRETE SHALL RECEIVE SPECIAL INSPECTION AND TESTING (THROUGH BOLTS WITH STEEL TO STEEL CONNECTION IN TENSION DO NOT REQUIRE TENSION TESTING) IN ACCORDANCE WITH REQUIREMENTS FOR POST-INSTALLED ANCHORS.



TYPICAL CONCRETE EDGE DETAIL
(SLAB AT OR BELOW GRADE ONLY)



BD

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SHEET

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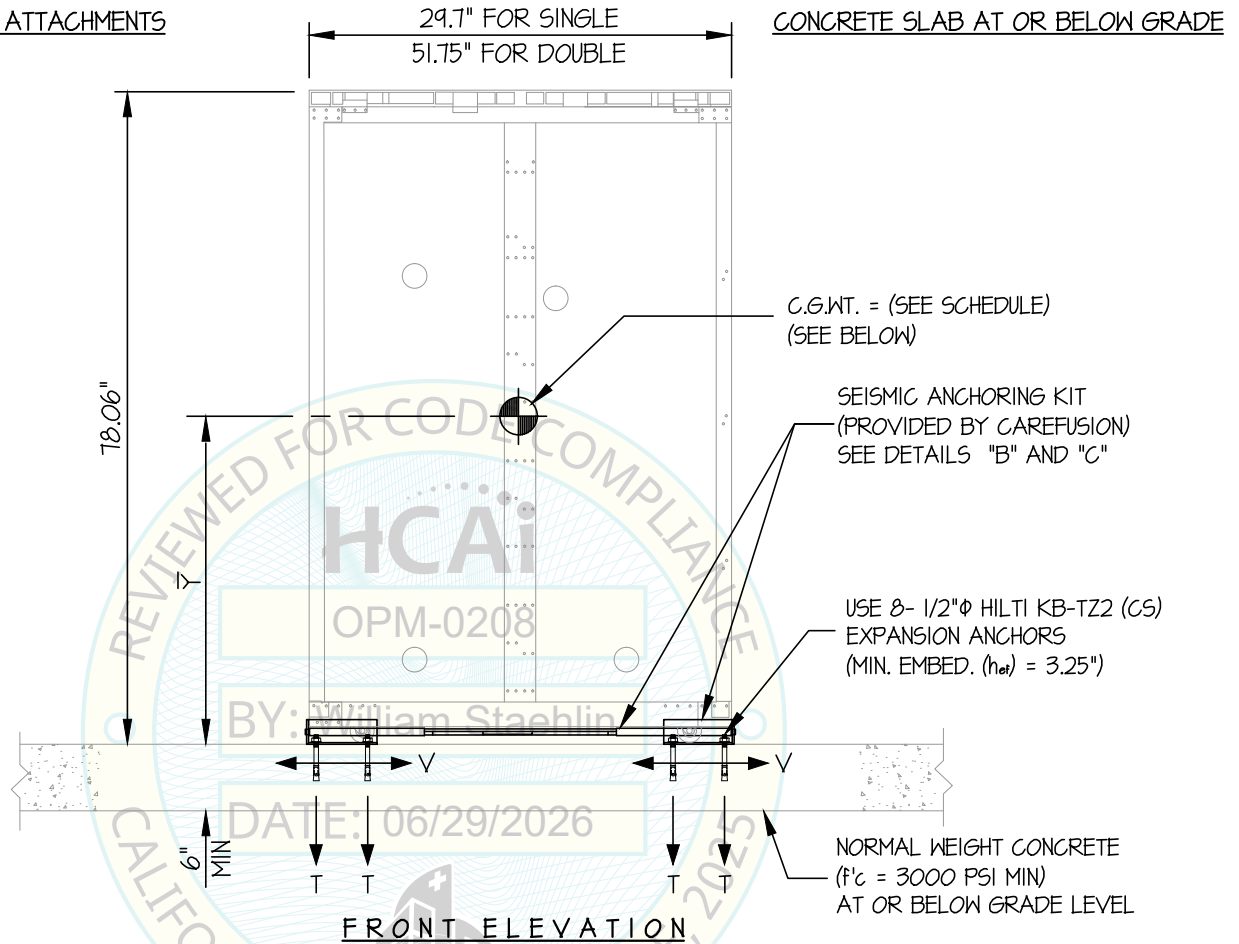
JOB NO. 11-2511

DATE 6/25/26

OF 11 SHEETS

PYXIS DUOSTATION, MEDFLEX 1000
AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS



MAX Sds	MODEL	WEIGHT (lb)	$\bar{Y}$ (in)	$^+ T_u$	$^+ V_u$
0.90	DOUBLE 6 DWR	2810	45.59	2062	773
0.90	DOUBLE 3 DWR	2873	45.07	2078	790
150	SINGLE 6 DWR	1338	45.1	2112	629
150	SINGLE 3 DWR	1425	42.94	2130	670

+ VALUES INCLUDE Ω_{sp}

NOTES:

- FORCES ARE DETERMINED PER 2025 CALIFORNIA BUILDING CODE AND ASCE 7-22. STRENGTH DESIGN IS USED. (EXAMPLE: $I_p=1.5$, $CAR=1.0$, $R_{po}=1.5$, $\Omega_{sp}=2.0$, $R_u=1.0$, $H_f=1.0$, $z/h=0$)
- THIS PREAPPROVAL ENCOMPASSES WEIGHTS AND VERTICAL C.G. POSITIONS NOT EXCEEDING VALUES SHOWN.
- THIS PREAPPROVAL WAS PREPARED WITHOUT KNOWLEDGE OF ANY SITE CONDITION. COMPATIBILITY FOR USE WITH A SITE SHALL BE EVALUATED BY THE STRUCTURAL ENGINEER OF RECORD OF THE INSTALLATION (SEOR). USE REQUIRES APPROVAL BY THE SEOR.
- STRUCTURAL ENGINEER OF RECORD FOR THE INSTALLATION SHALL VERIFY ALL CONDITIONS, EVALUATE INTERACTION WITH ADJACENT EQUIPMENT AND ANCHORS, AND PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.
- SEE GENERAL NOTES: SHEETS 1 AND 2

NOTE: VALUES ARE FOR $z/h = 0$
CONTENT WEIGHT IS BASED ON MFR PROVIDED
LOADING FOR PRESCRIPTIONS/MEDICATIONS
AND NOT SUBJECT TO 2025 CBC, TABLE 1607A.1



BD

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SHEET

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JOB NO. **11-2511**

DATE **6/25/26**

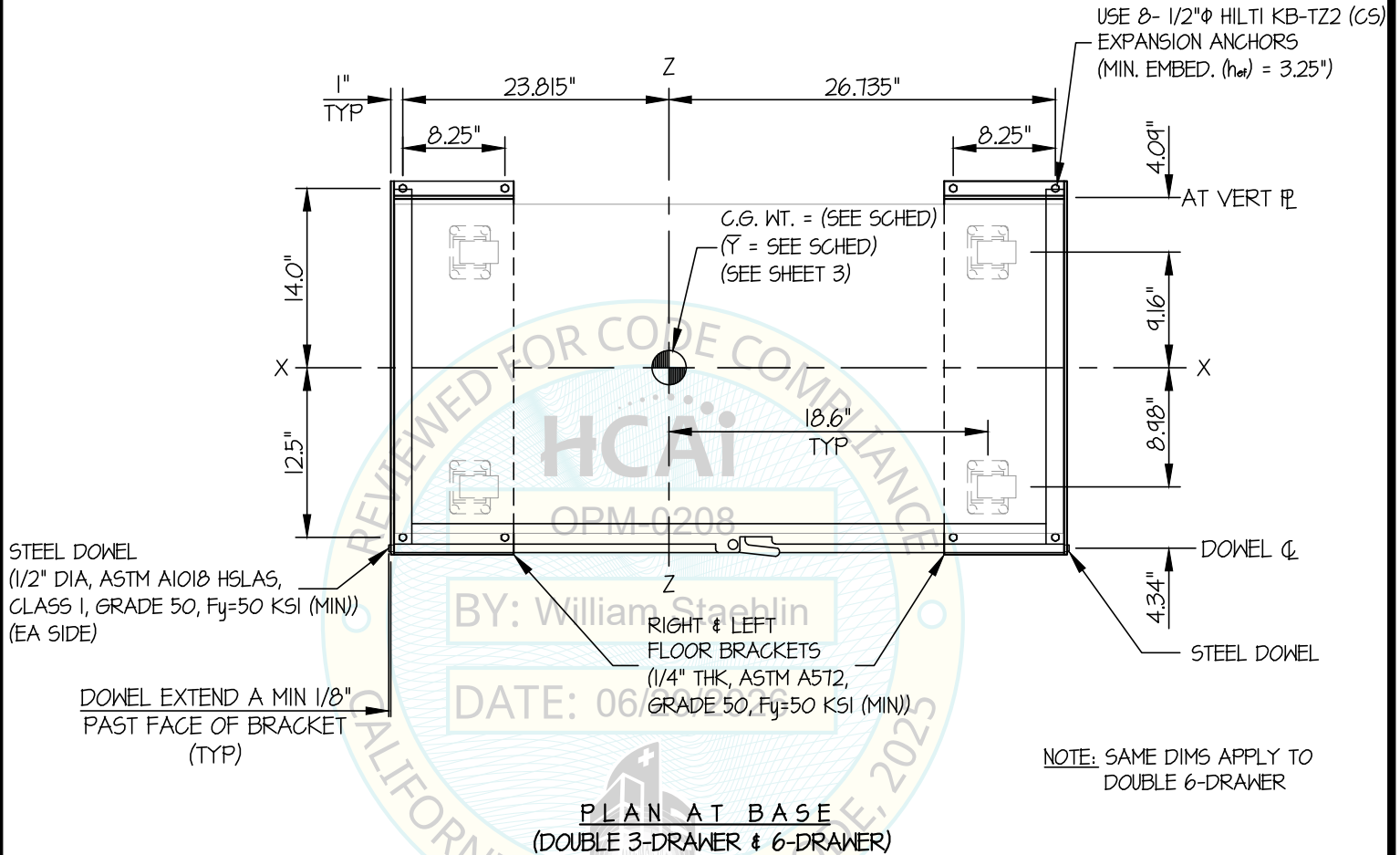
OF **11** SHEETS

PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS

$Sds \leq 0.90$

CONCRETE SLAB AT OR BELOW GRADE



BD

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SHEET

5

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DATE **6/25/26**

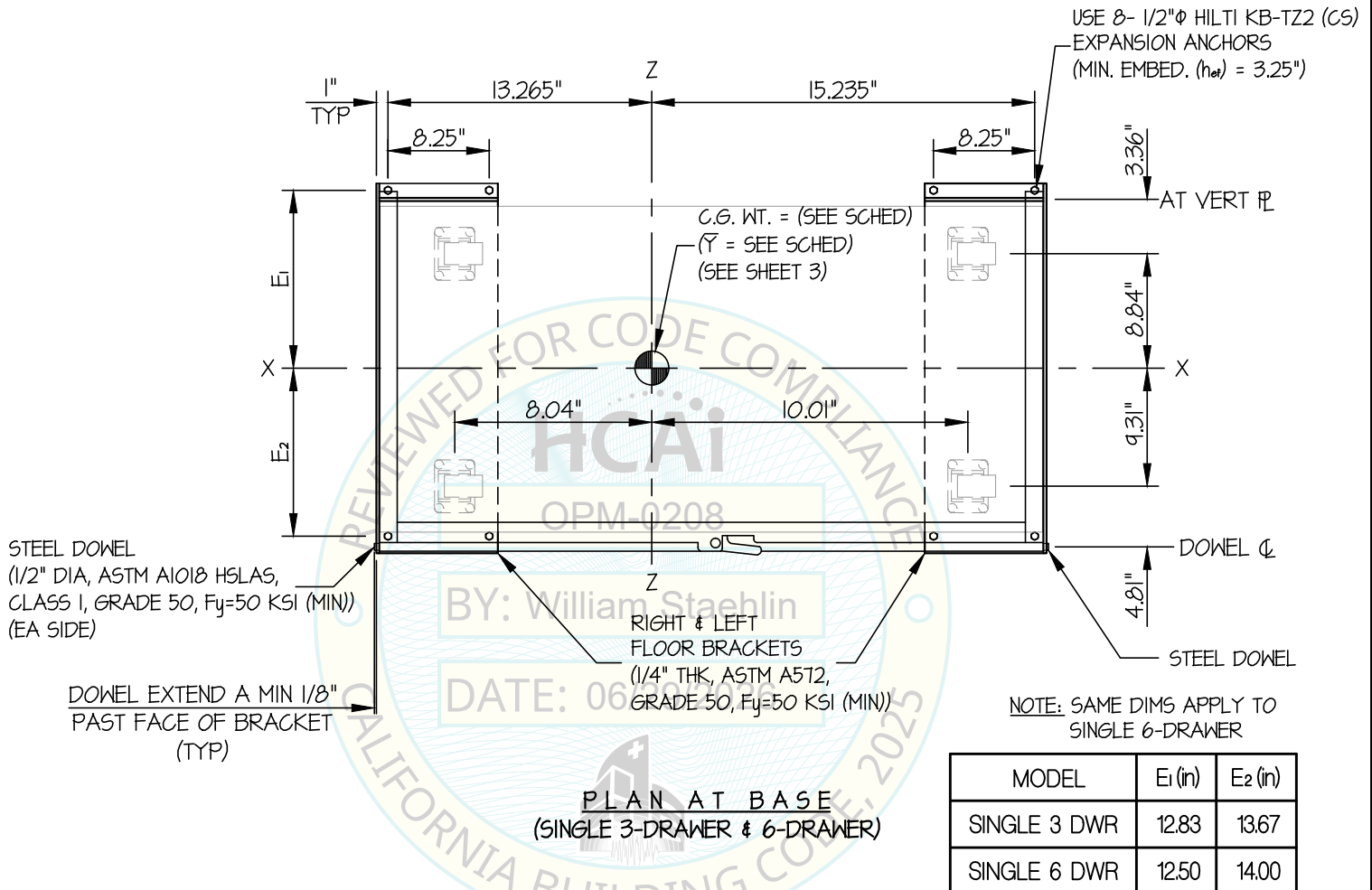
OF **11** SHEETS

PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS

$Sds \leq 1.50$

CONCRETE SLAB AT OR BELOW GRADE



BD

DES. **J. ROBERSON**

SHEET

6

JOB NO. **11-2511**

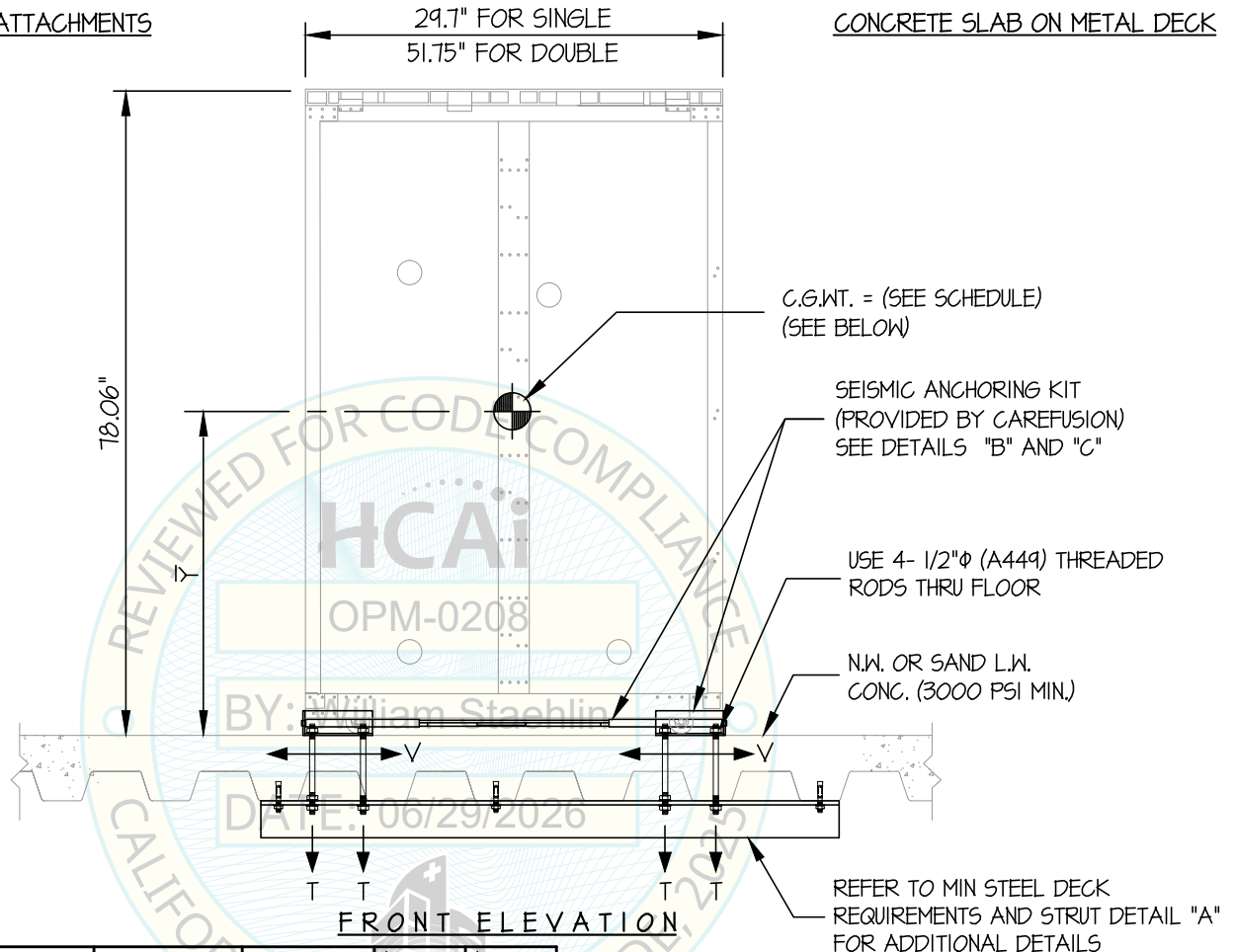
DATE **6/25/26**

OF **11** SHEETS

PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS

CONCRETE SLAB ON METAL DECK



MAX Sds	MODEL	WEIGHT (lb)	$\bar{Y}$ (in)	$^+ T_u$	$^+ V_u$
130	DOUBLE 6 DWR	2810	45.59	3902	1117
130	DOUBLE 3 DWR	2873	45.07	3938	1317
220	SINGLE 6 DWR	1338	45.1	3806	1063
220	SINGLE 3 DWR	1425	42.94	3850	1132

+ VALUES DO NOT INCLUDE Ω_{op}

NOTE: VALUES ARE FOR $z/h = 0.95$
CONTENT WEIGHT IS BASED ON MFR PROVIDED
LOADING FOR PRESCRIPTIONS/MEDICATIONS
AND NOT SUBJECT TO 2025 CBC, TABLE 1607A.1

NOTES:

- FORCES ARE DETERMINED PER 2025 CALIFORNIA BUILDING CODE AND ASCE 7-22. STRENGTH DESIGN IS USED. (EXAMPLE: $I_p=15$, $CAR=10$, $R_{po}=15$, $\Omega_{op}=2.0$, $R_D=1.3$, $H_f=3.375$, $z/h=0.95$)
- THIS PREAPPROVAL ENCOMPASSES WEIGHTS AND VERTICAL C.G. POSITIONS NOT EXCEEDING VALUES SHOWN.
- THIS PREAPPROVAL WAS PREPARED WITHOUT KNOWLEDGE OF ANY SITE CONDITION. COMPATIBILITY FOR USE WITH A SITE SHALL BE EVALUATED BY THE STRUCTURAL ENGINEER OF RECORD OF THE INSTALLATION (SEOR). USE REQUIRES APPROVAL BY THE SEOR.
- STRUCTURAL ENGINEER OF RECORD FOR THE INSTALLATION SHALL VERIFY ALL CONDITIONS, EVALUATE INTERACTION WITH ADJACENT EQUIPMENT AND ANCHORS, AND PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.
- SEE GENERAL NOTES: SHEETS 1 AND 2



BD

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SHEET

7

JOB NO. **11-2511**

DATE **6/25/26**

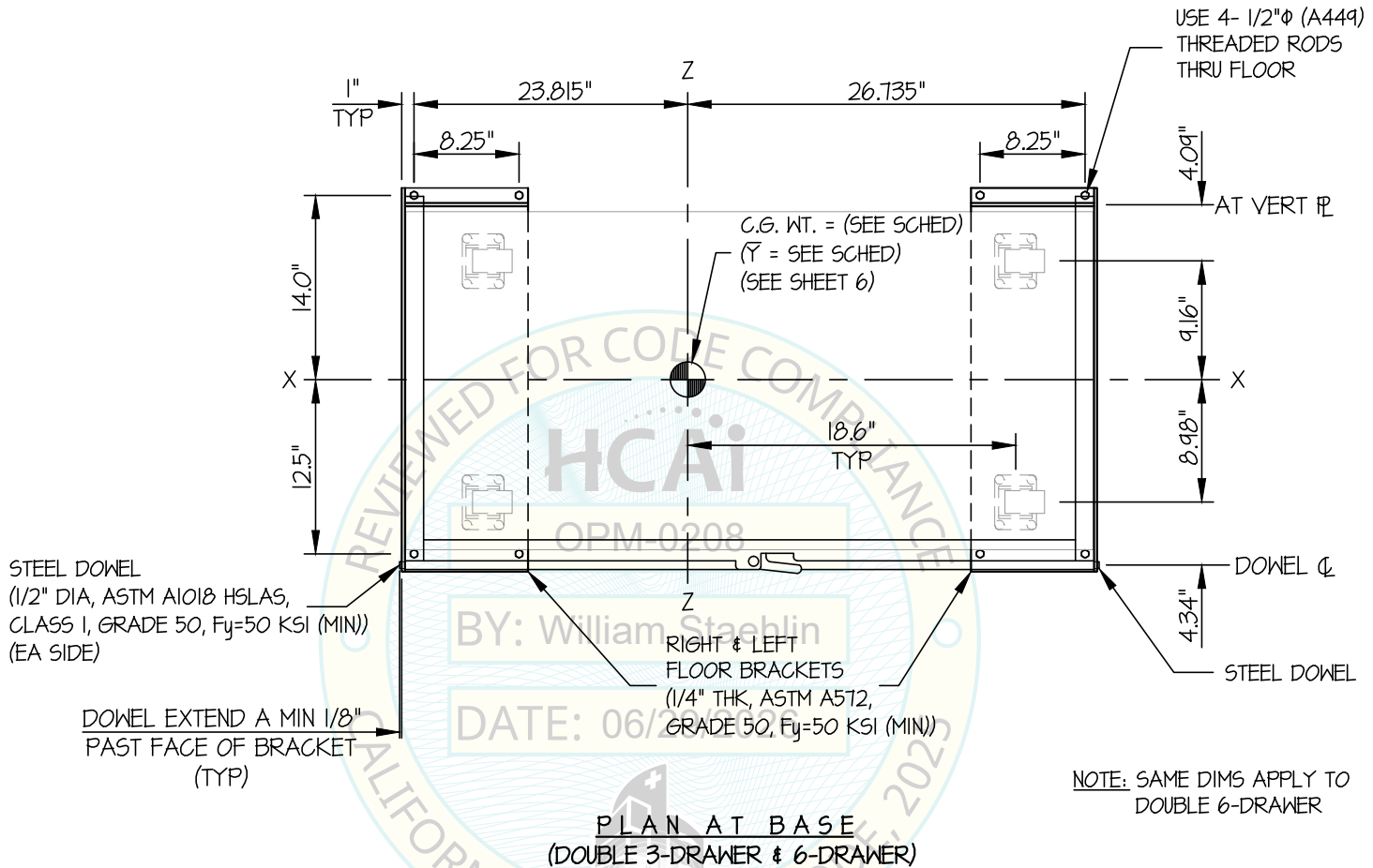
OF **11** SHEETS

PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS

$S_{DS} \leq 1.30$

CONCRETE SLAB ON METAL DECK



Jonathan Roberson

REGISTERED PROFESSIONAL ENGINEER
No. 4197
EXP. 6-30-2026
6/25/26
STRUCTURAL
STATE OF CALIFORNIA

BD

DES. **J. ROBERSON**

SHEET

8

JOB NO. **11-2511**

DATE **6/25/26**

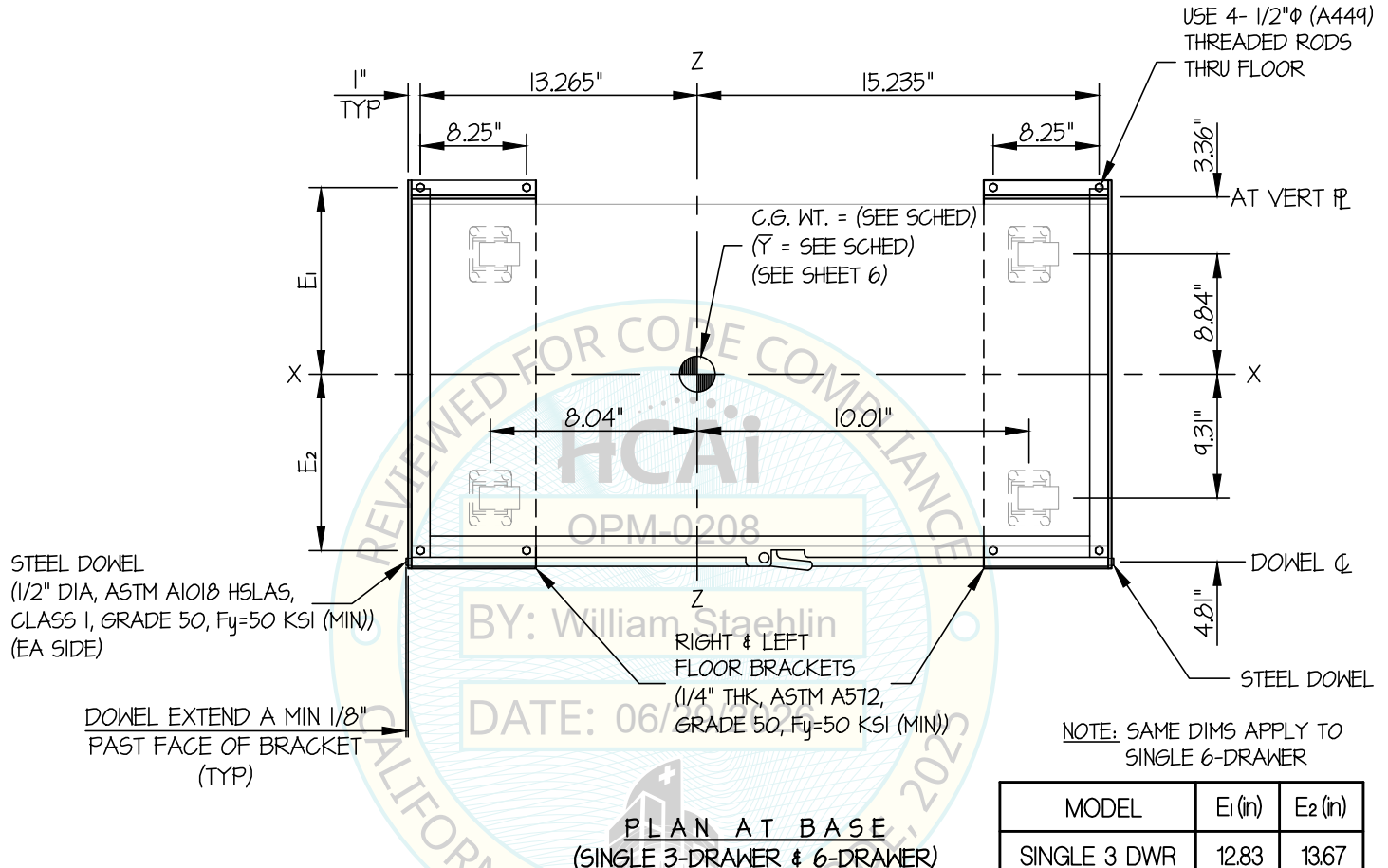
OF **11** SHEETS

PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS

Sds ≤ 2.20

CONCRETE SLAB ON METAL DECK



BD

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SHEET

9

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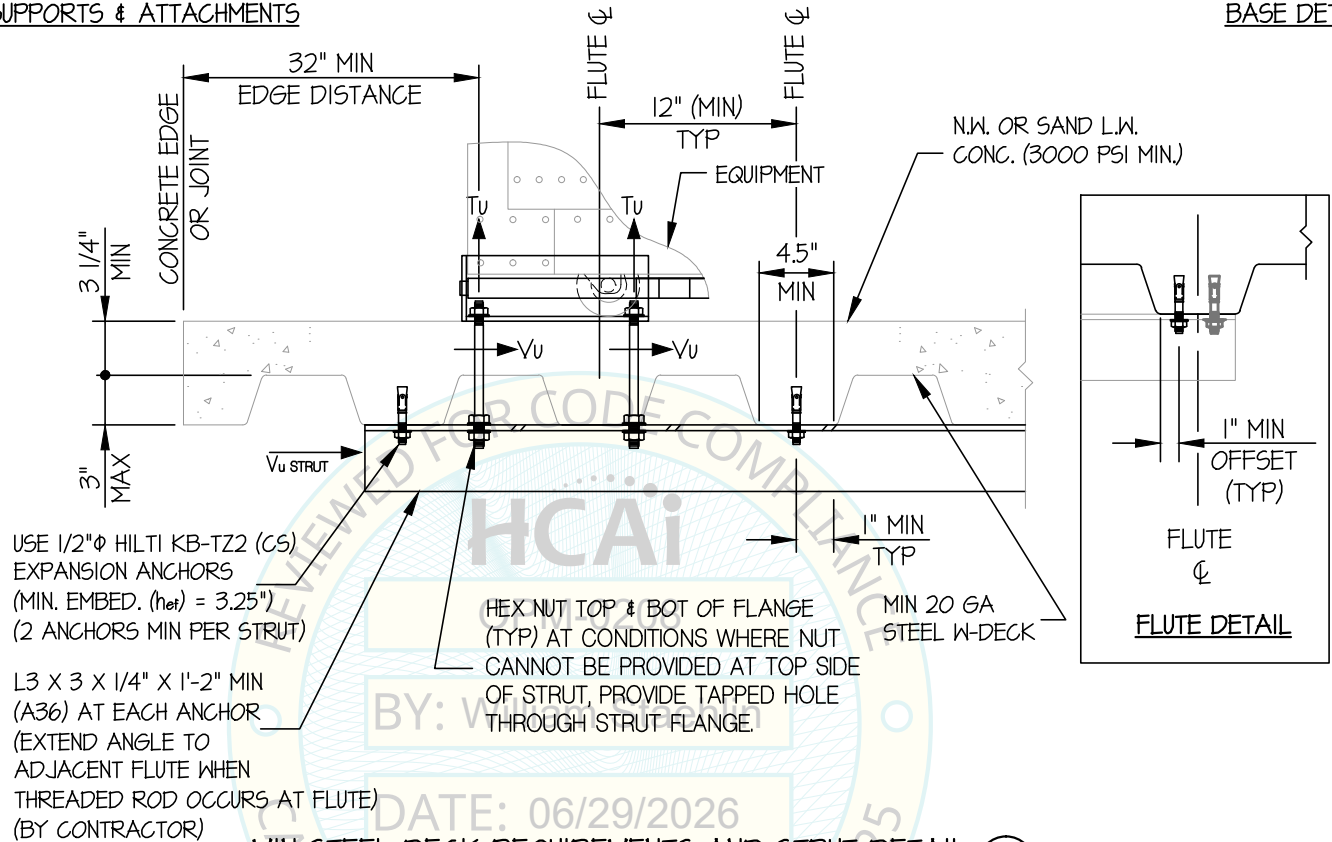
DATE **6/25/26**

OF **11** SHEETS

PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS

BASE DETAIL



NOTE: THERE IS A POSSIBILITY THAT 4
THREADED RODS CAN BE ON A SINGLE STRUT.
AN EXAMPLE CAN BE SEE ON PG 4



BD

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SHEET

10

JOB NO. **11-2511**

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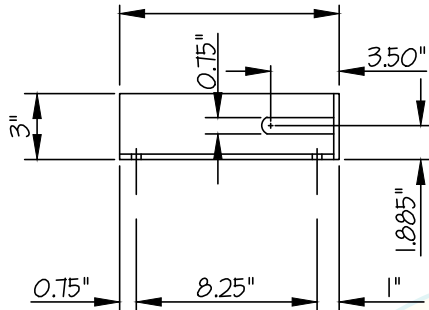
OF **11** SHEETS

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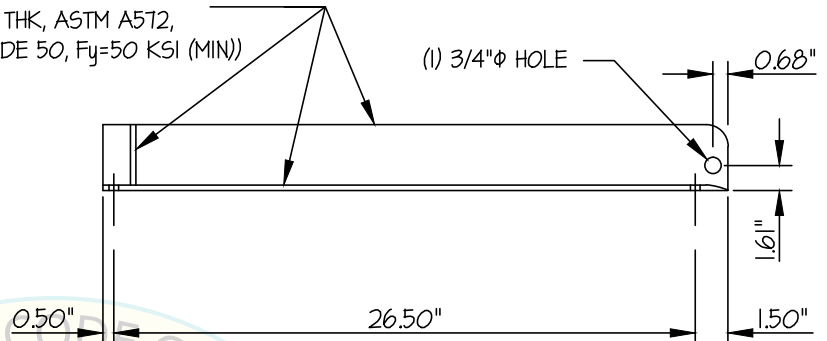
SEISMIC SUPPORTS & ATTACHMENTS

BASE DETAIL

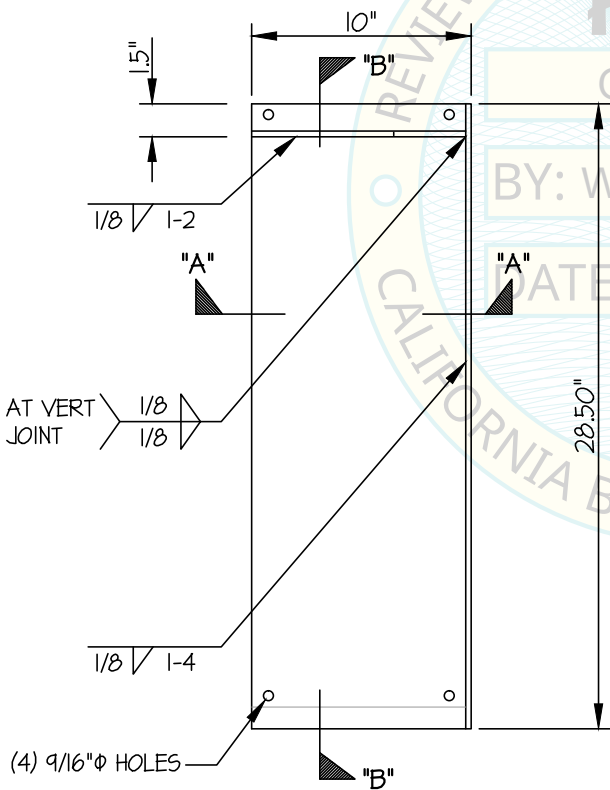
RIGHT & LEFT
FLOOR BRACKETS
(1/4" THK, ASTM A572,
GRADE 50, F_y=50 KSI (MIN))



SECTION A-A



SECTION B-B



PLAN

(RIGHT FLOOR BRACKET SHOWN)

NOTE: THE SEISMIC ANCHORING KIT CONSISTS OF TWO FLOOR BRACKETS, A RIGHT FLOOR BRACKET AND A LEFT FLOOR BRACKET (SHOWN HERE) AND FRAME ASSEMBLY (SEE DETAIL "C") (TYP)

BRACKET DETAIL (B)



BD

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SHEET

11

JOB NO. **11-2511**

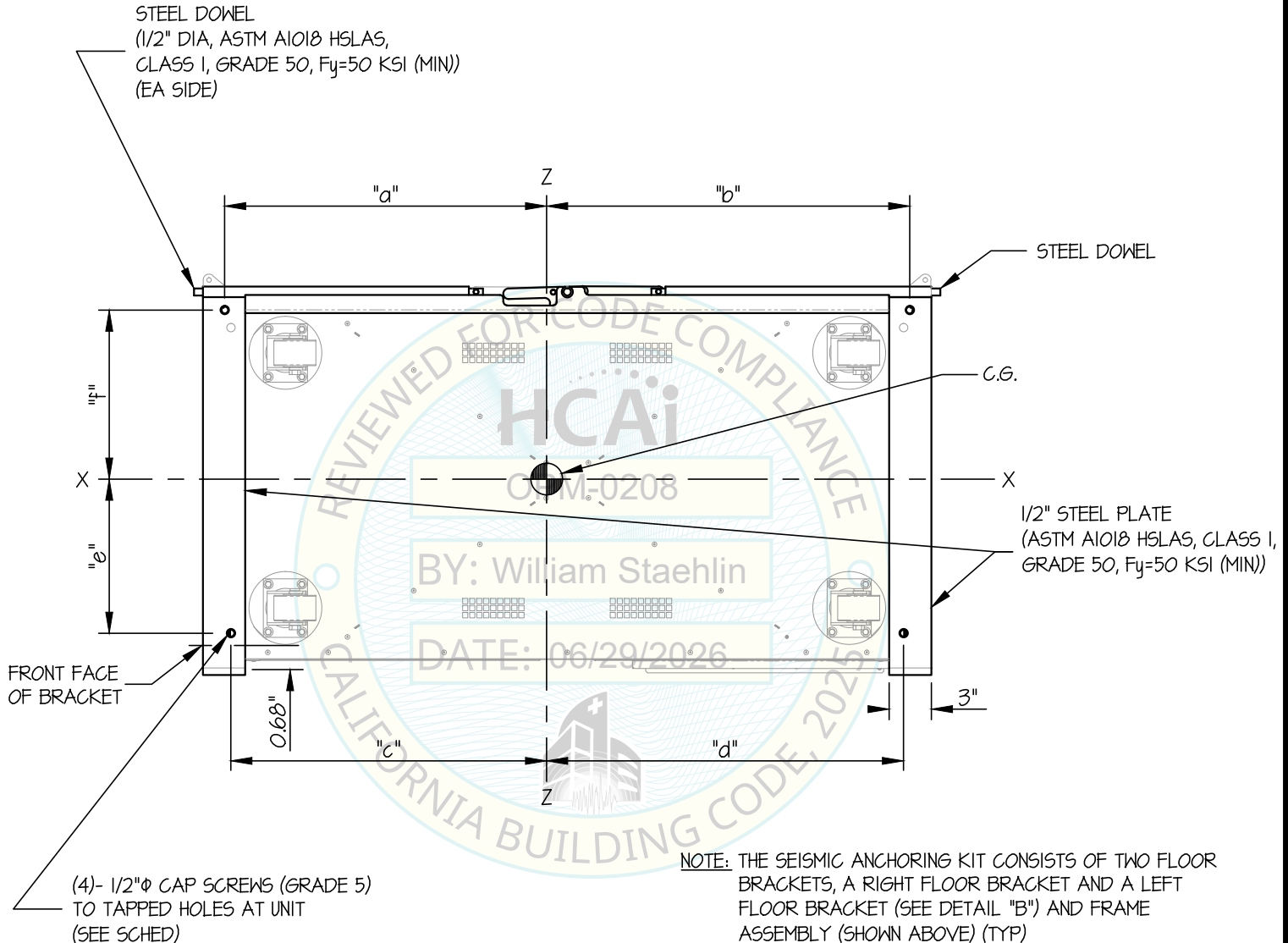
DATE **6/25/26**

OF **11** SHEETS

PYXIS DUOSTATION, MEDFLEX 1000 AND MEDFLEX 2000

SEISMIC SUPPORTS & ATTACHMENTS

BASE DETAIL



REFLECTED PLAN AT FRAME ASSEMBLY DETAIL (C)

(FRAME ASSEMBLY SHOP ATTACHED TO UNDERSIDE OF UNIT BY MFG)

MODEL	"a" (in.)	"b" (in.)	"c" (in.)	"d" (in.)	"e" (in.)	"f" (in.)
DOUBLE 6-DWR	22.90	25.82	22.46	25.38	10.95	12.03
DOUBLE 3-DWR	22.90	25.82	22.46	25.38	10.95	12.03
DOUBLE 6-DWR	12.35	14.32	11.91	13.88	12.36	10.62
DOUBLE 3-DWR	12.35	14.32	11.91	13.88	12.36	10.62

+ PYXIS DUOSTATION GOVERNS

