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

OFFICE USE ONLY

APPLICATION #: OPM-0733

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: [X] New [ ] Renewal/Update

Manufacturer Information

Manufacturer: Mamava

Manufacturer's Technical Representative: Jeff Hartnett

Mailing Address: 180 Battery Street #210, Burlington, VT 05401

Telephone: (518) 669-9707 Email: jeffh@mamava.com

Product Information

Product Name: Mamava XL Lactation Pod

Product Type: Lactation Pod

Product Model Number: XL

General Description: Privacy pod for breastfeeding

Applicant Information

Applicant Company Name: Mamava

Contact Person: Jeff Hartnett

Mailing Address: 180 Battery Street #210, Burlington, VT 05401

Telephone: (518) 669-9707 Email: jeffh@mamava.com

Title: Director of Engineering

Registered Design Professonal Preparing Engineering Recommendations

Company Name: ZFA STRUCTURAL ENGINEERS

Name: Ryan Bogart California License Number: S6104

Mailing Address: 601 Montgomery Street Suite 1450, San Francisco, CA 94111

Telephone: (415) 269-0660 Email: ryanb@zfa.com

HCAI Special Seismic Certification Preapproval (OSP)

☐ Special Seismic Certification is preapproved under OSP OSP Number:

Certification Method

Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950-16

☐ Other(s) (Please Specify):

*Use of criteria other than those adopted by the California Building Standards Code, 2022 (CBSC 2022) 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 2022 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: 10/6/2024

Name: William Staehlin Title: Senior Structural Engineer

Condition of Approval (if applicable):

MAMAVA XL

EQUIPMENT MANUFACTURER: MAMAVA MANUFACTURING
EQUIPMENT TYPE: NURSING PODS

GENERAL NOTES

1. THIS HCAI PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2022. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2022.

2. HORIZONTAL FORCES (E_h) AND VERTICAL FORCES (E_v) ARE DETERMINED PER ASCE 7-16 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2, 13.3-3, WHERE $a_P = 1.0$, $R_P = 1.5$, $I_P = 1.5$, $\Omega = 2.0$. S_{DS} & z/h ARE PER NOTE 3.

3. THE DETAILS IN THIS PRE-APPROVAL MAY BE USED IN THE FOLLOWING SCENARIOS.
   $S_{DS} \leq 2.50g$ & $z/h \leq 0.33$ ($E_h = 1.66W_p$, $E_v = 0.50W_p$)
   $S_{DS} \leq 2.00g$ & $z/h \leq 0.5$ ($E_h = 1.60W_p$, $E_v = 0.40W_p$)
   $S_{DS} \leq 1.60g$ & $z/h \leq 0.75$ ($E_h = 1.60W_p$, $E_v = 0.32W_p$)
   $S_{DS} \leq 1.40g$ & $z/h \leq 1.0$ ($E_h = 1.68W_p$, $E_v = 0.28W_p$)

4. ALL SEISMIC AND ANCHOR FORCES SHOWN IN THIS OPM ARE BASED ON STRENGTH DESIGN. SEE MAXIMUM TENSION (T_u) AND SHEAR (V_u) FORCES (INCLUDES Ω_o) ON SHEET 5.

5. THE PRE-APPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.

6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS AND COORDINATE ALL DETAILS AND DIMENSIONS SHOWN ON THE COMPONENT DRAWINGS WITH RELATED REQUIREMENTS ON ARCHITECTURAL, MECHANICAL, ELECTRICAL AND/OR CIVIL DRAWINGS FOR THE BUILDING INTO WHICH THE COMPONENT IS BEING INSTALLED.

RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD (SEOR)
THE SEOR SHALL ALSO VERIFY:

1. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST FORCES AND WEIGHTS SPECIFIED FOR THE UNIT IN ADDITION TO ALL OTHER LOADS. PROVIDE AND DESIGN SUPPLEMENTARY MEMBERS AS REQUIRED.

2. THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2022 CBC AND WITH THE DETAILS SHOWN IN THIS DOCUMENT.

3. THAT THE ACTUAL COMPONENT'S WEIGHT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS AND ANCHOR DETAILS AGREE WITH THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.

4. THAT THE COMBINATION OF S_{DS} & z/h RESULT IN SEISMIC FORCES (E_h , E_v) THAT ARE NOT GREATER THAN THE VALUES IN NOTE 3.

5. THE 28 DAY STRENGTH OF THE CONCRETE IS AT LEAST 3000 PSI.

6. THAT THE ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY END OR EDGE OF CONCRETE SLAB PER ICC REPORT. ADDITIONALLY, VERIFY THAT THE MINIMUM THICKNESS OF THE CONCRETE IS SUFFICIENT FOR THE EMBEDMENT OF THE POST-INSTALLED ANCHORS.

	OPM: OPM-0733-22	STAMP: REGISTERED PROFESSIONAL ENGINEER — RYAN S. BOGART — STRUCTURAL No. 6104 — STATE OF CALIFORNIA
	SCALE:	
SHEET NAME: GENERAL NOTES	DATE: 05/17/2024	
	JOB NO.: 23713	
ZFA STRUCTURAL ENGINEERS 601 montgomery street | suite 1450 | san francisco ca 94111 | 415.243.4091 | zfa.com	SHEET NO.: 1/5	

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POST-INSTALLED ANCHORS

1. ANCHORS SHALL BE AS LISTED BELOW AND INSTALLED PER THE REFERENCED ICC REPORT.

ANCHOR DIAMETER	CONCRETE TYPE	MIN f'_c (PSI)	ANCHOR TYPE	ICC REPORT	MIN EMBED (h_{ef})	MIN SPACING	MIN EDGE DISTANCE	MIN CONC THICKNESS	TORQUE TEST	DIRECT TENSION TEST
1/2"	CONC OVER METAL DECK (LIGHTWEIGHT)	3,000	HILTI KB-TZ2	ESR-4266	2"	6"	12"	3¼"	40 FT-LB (SS) 50 FT-LB (CS)	1,190 LBS
1/2"	CONC OVER METAL DECK (NORMAL WT)	3,000	HILTI KB-TZ2	ESR-4266	2"	6"	12"	3¼"	40 FT-LB (SS) 50 FT-LB (CS)	1,990 LBS
1/2"	CONC SLAB (LIGHTWEIGHT)	3,000	HILTI KB-TZ2	ESR-4266	2"	6"	12"	4"	40 FT-LB (SS) 50 FT-LB (CS)	1,190 LBS
1/2"	CONC SLAB (NORMAL WT)	3,000	HILTI KB-TZ2	ESR-4266	2"	6"	12"	4"	40 FT-LB (SS) 50 FT-LB (CS)	1,990 LBS

2. TEST ANCHORS TO THE SPECIFIED TORQUE OR TENSION LOAD NOTED IN THE ANCHOR TABLE (STAINLESS STEEL = "SS", CARBON STEEL = "CS").

3. IF ANY ANCHOR FAILS TESTING, ALL ANCHORS OF THE SAME TYPE SHALL BE TESTED, WHICH ARE INSTALLED BY THE SAME TRADE, NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME THE INITIAL TEST FREQUENCY.

4. 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.

5. ANCHOR TESTING FREQUENCY: AFTER AT LEAST 24 HOURS HAVE ELAPSED SINCE INSTALLATION TEST 50 PERCENT OR ALTERNATE ANCHORS IN A GROUP, INCLUDING AT LEAST ONE-HALF (½) THE ANCHORS IN EACH GROUP.

6. TEST ACCEPTANCE CRITERIA: FIELD TEST SHALL SATISFY THE MINIMUM REQUIREMENTS OF ONE OF THE FOLLOWING:

   A. HYDRAULIC RAM METHOD:
   ANCHORS TESTED WITH A HYDRAULIC JACK OR SPRING LOADED DEVICES SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNIBLE MOVEMENT DURING THE TENSION TEST, E.G., AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT.

   THE TESTING APPARATUS SUPPORT LOCATIONS SHALL NOT BE WITHIN 1.5 TIMES THE ANCHOR'S EMBEDMENT TO AVOID RESTRICTING THE CONCRETE SHEAR CONE TYPE FAILURE MECHANISM FROM OCCURRING.

   B. TORQUE WRENCH METHOD:
   ANCHORS TESTED WITH A CALIBRATED TORQUE WRENCH MUST ATTAIN THE SPECIFIED TORQUE WITHIN ½ TURN OF THE NUT.

OPM:	OPM-0733-22
SCALE:	1 : 1
DATE:	05/17/2024
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SHEET NO.:	2/5

SHEET NAME: GENERAL NOTES CONT

STAMP: REGISTERED PROFESSIONAL ENGINEER — RYAN S. BOGART — STRUCTURAL No. 6104 — STATE OF CALIFORNIA

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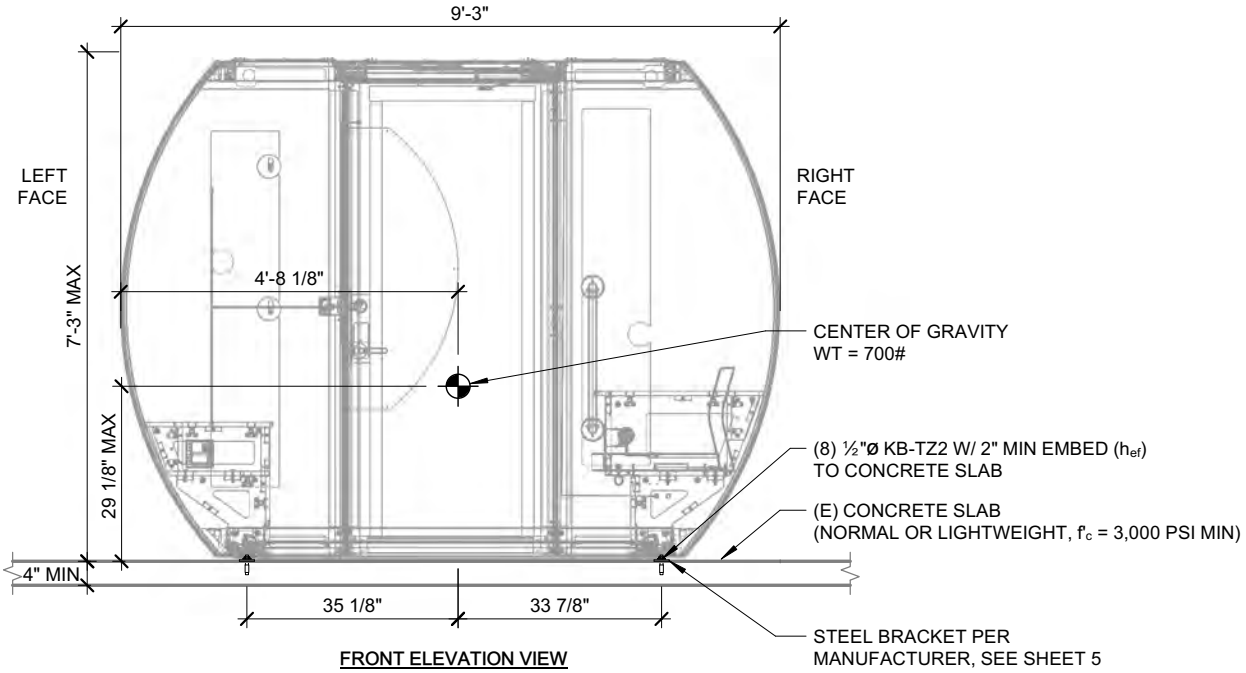
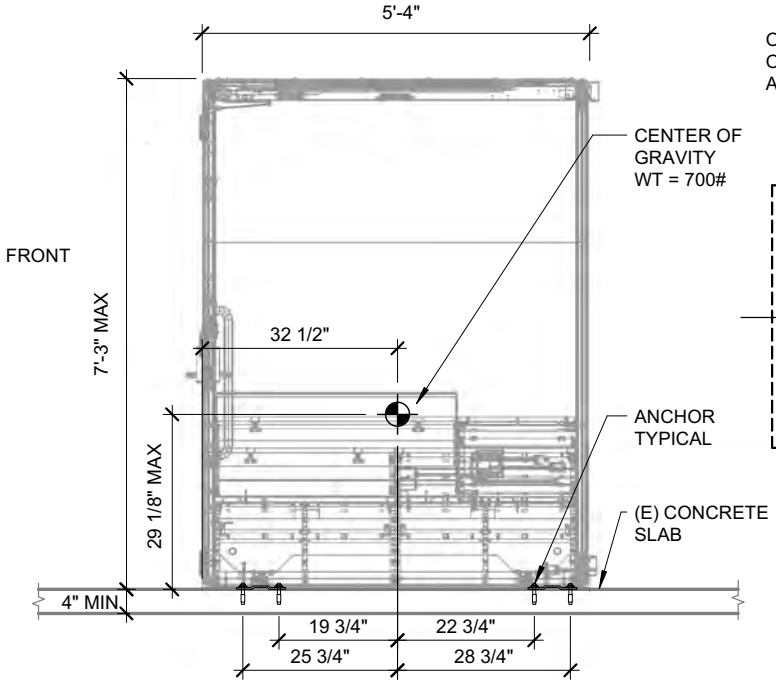
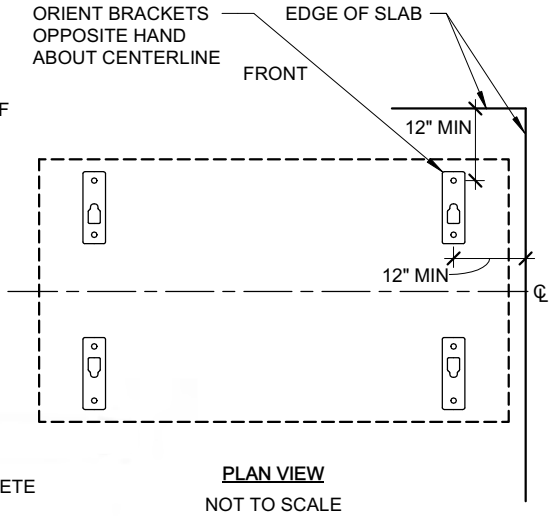


FRONT ELEVATION VIEW



SIDE ELEVATION VIEW



PLAN VIEW

NOT TO SCALE

NOTES:

1. SEE SHEET 1 AND 2 FOR GENERAL NOTES.

OPM:	OPM-0733-22
SCALE:	3/8" = 1'-0"
DATE:	05/17/2024
JOB NO.:	23713
SHEET NO.:	3/5

STAMP:

REGISTERED PROFESSIONAL ENGINEER
RYAN S. BOGART
STRUCTURAL
No. 6104
STATE OF CALIFORNIA

SHEET NAME:

CONCRETE SLAB - SUSPENDED OR ON GRADE

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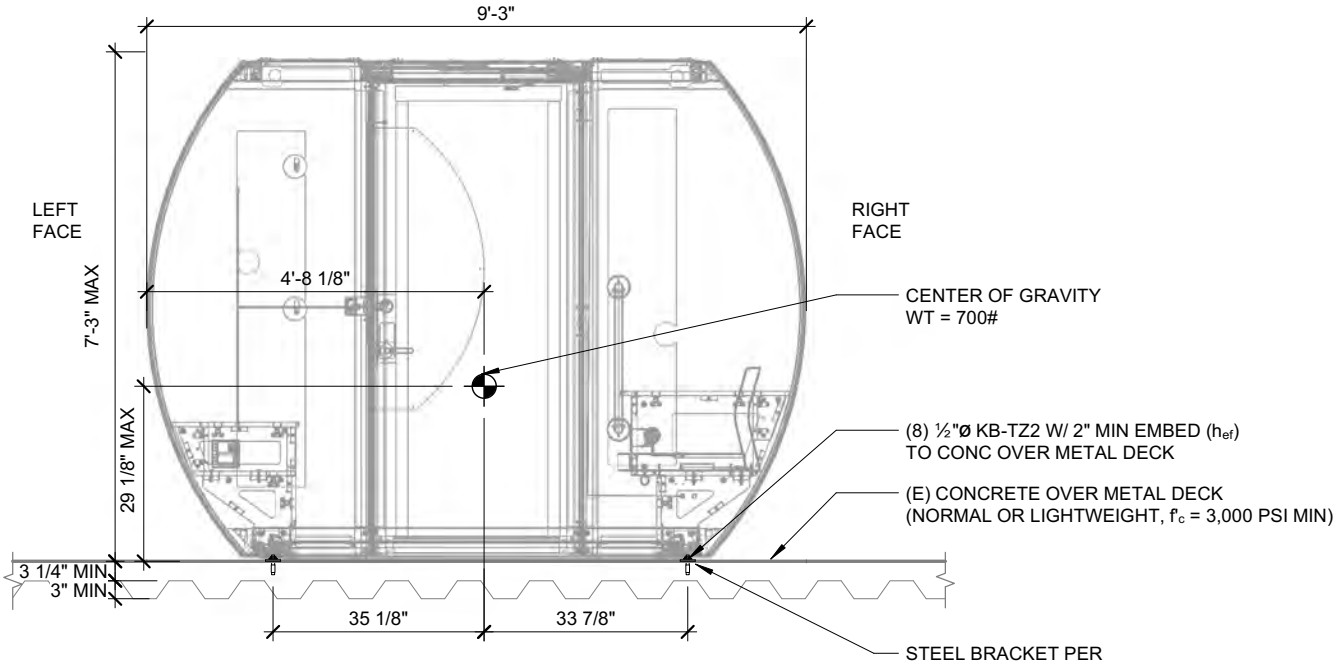
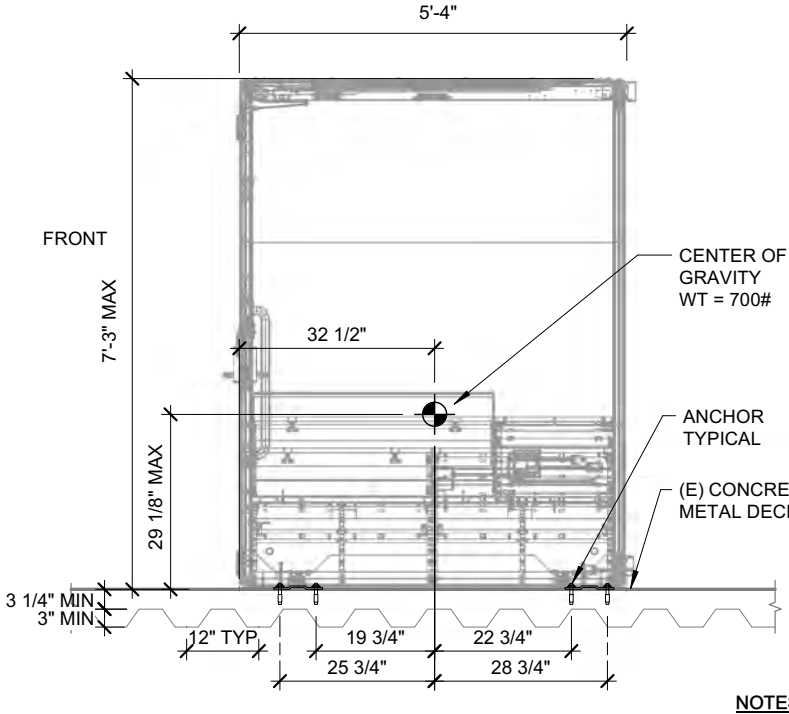
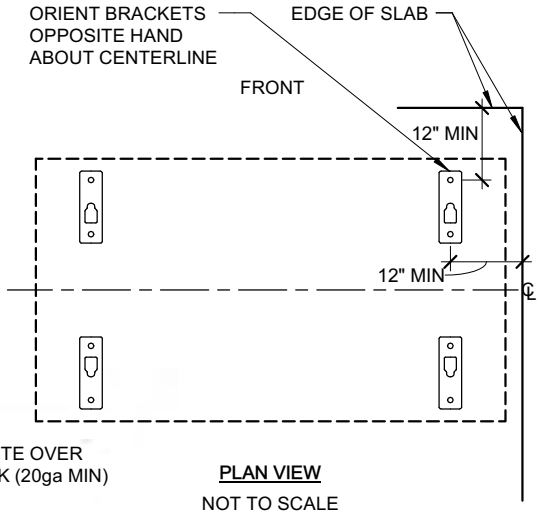


FRONT ELEVATION VIEW



SIDE ELEVATION VIEW



PLAN VIEW

NOT TO SCALE

NOTES:

1. SEE SHEET 1 AND 2 FOR GENERAL NOTES.

OPM:	OPM-0733-22
SCALE:	3/8" = 1'-0"
DATE:	05/17/2024
JOB NO.:	23713
SHEET NO.:	4/5

STAMP:

REGISTERED PROFESSIONAL ENGINEER
RYAN S. BOGART
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No. 6104
STATE OF CALIFORNIA

SHEET NAME:

CONCRETE OVER METAL DECK

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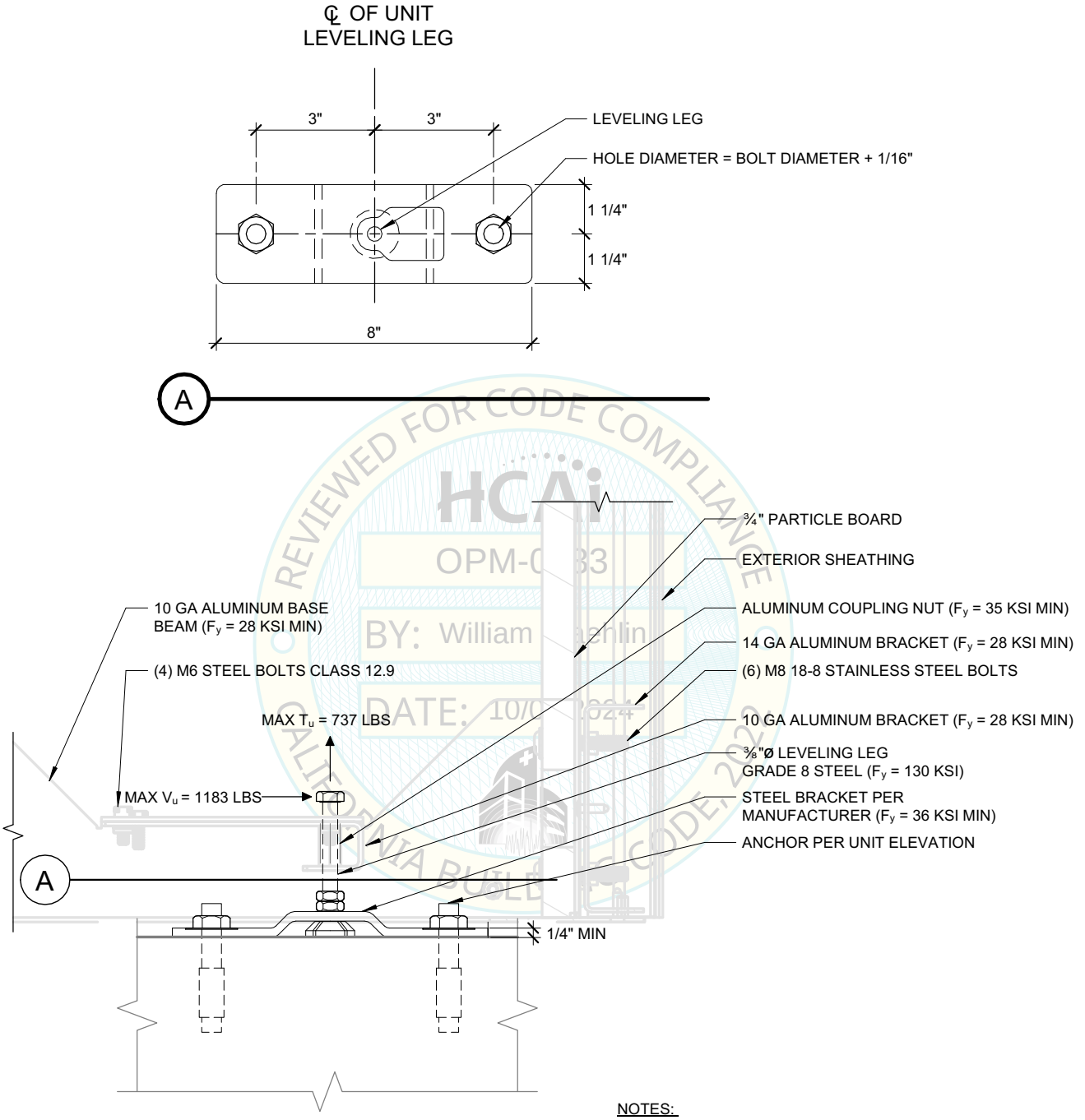

BRACKET ELEVATION

NOTES:
1. SEE SHEET 1 AND 2 FOR GENERAL NOTES.

OPM: OPM-0733-22	STAMP: REGISTERED PROFESSIONAL ENGINEER — RYAN S. BOGART — STRUCTURAL No. 6104 — STATE OF CALIFORNIA
SCALE: 3" = 1'-0"	
SHEET NAME: BRACKET ELEVATION	DATE: 05/17/2024
	JOB NO.: 23713
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