



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0670

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: New Renewal/Update

Manufacturer Information

Manufacturer: Sechrist Industries

Manufacturer's Technical Representative: Steven Sim

Mailing Address: 4225 E La Palma Ave, Anaheim, CA 92807

Telephone: (714) 579-8324

Email: ssim@sechristusa.com

Product Information

Product Name: Sechrist Monoplace Hyperbaric Chambers

Product Type: Other Mechanical or Electrical Components

Product Model Number: 3200, 3300H(S), 3600H(S), 4100H(S)

General Description: Floor Mounted Hyperbaric Chamber with brackets

Applicant Information

Applicant Company Name: Sechrist Industries

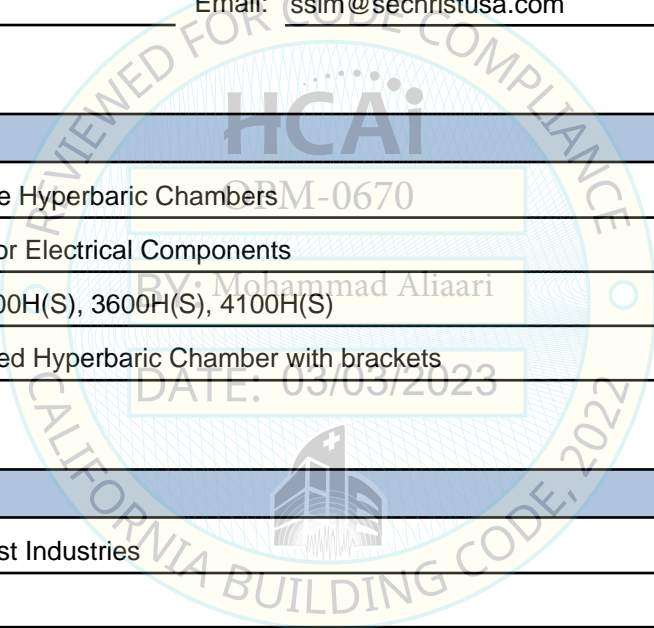
Contact Person: Steven Sim

Mailing Address: 4225 E La Palma Ave, Anaheim, CA 92807

Telephone: (714) 579-8324

Email: ssim@sechristusa.com

Title: Engineering Manager



"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION

Registered Design Professional Preparing Engineering Recommendations

Company Name: JUNKER ENGINEERING GROUP
Name: Dan Junker California License Number: S6178
Mailing Address: 8950 Jefferson Ave, La Mesa, CA 91941
Telephone: (619) 606-5058 Email: dan@junkereeng.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: 3/3/2023
Name: Mohammad Aliaari Title: Senior Structural Engineer
Condition of Approval (if applicable):

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STATE OF CALIFORNIA - HEALTH AND HUMAN SERVICES AGENCY



Sechrist Industries Inc.

Hyperbaric Chamber

The Department of Health Care

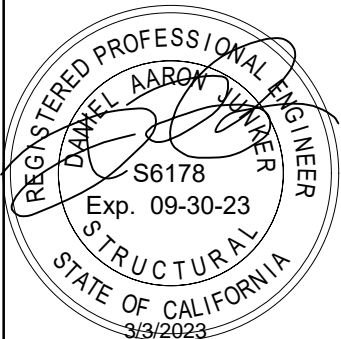
Access and Information (HCAI)


Pre-Approval of Manufacturer's Certification

OPM-0670

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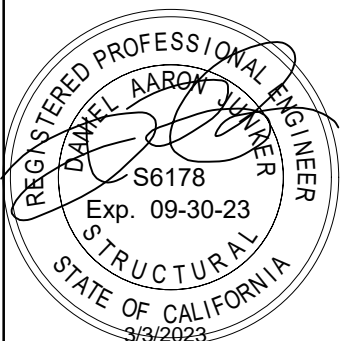
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 8950 Jefferson Ave, La Mesa, Ca 91941 designgroup@junkereeng.com www.junkereeng.com	PROJECT TITLE: SECHRIST-HYPERBARIC CHAMBERS 55 E. Huntington Dr. Suite 277, Arcadia, CA 91006	DES: CS DRW: - CHK: DJ INT. PROJECT NO.: 2022-062	
	SHEET TITLE: TABLE OF CONTENTS	DOC NO.: 2022-062-DRAW-01-02	DATE: 02-20-2023 SCALE: NTS
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GENERAL NOTES

1. THIS HCAI PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2019 CALIFORNIA BUILDING CODE (CBC). THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2019 CALIFORNIA BUILDING CODE (CBC)
2. SITE VERIFICATION IS REQUIRED. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITION IN THE AREA(S) OF WORK PRIOR TO THE BEGINNING OF THE PROJECT. DO NOT SCALE THE DRAWINGS, ALL DIMENSION MUST BE VERIFIED IN THE FIELD. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED, IMMEDIATELY, IF ANY DISCREPANCIES ARE FOUND.
3. DESIGN CRITERIA :
 - a.) CASE 1A: SLAB ON GRADE (SUPPORTS & ATTACHMENTS FOR MODEL NOS. 4100H (S))
 $Sds = 1.1g \text{ MAX.}; lp = 1.5 ; z/h = 0$ (GROUND OR SLAB ON GRADE)
CASE 1B: SLAB ON GRADE (SUPPORTS & ATTACHMENTS FOR MODEL NOS. 3200, 3300H (S), 3600H (S))
 $Sds = 1.1g \text{ MAX.}; lp = 1.5 ; z/h = 0$ (GROUND OR SLAB ON GRADE)
CASE 2A: UPPER FLOOR(SUPPORTS & ATTACHMENTS FOR MODEL NOS. 3200, 3300H (S) 3600H(S))
 $Sds = 2.5g \text{ MAX.}; lp = 1.5 ; z/h \leq 1$ (UPPER FLOOR)
CASE 2B: UPPER FLOOR(SUPPORTS & ATTACHMENTS FOR MODEL NO. 4100H (S))
 $Sds = 1.6g \text{ MAX.}; lp = 1.5 ; z/h \leq 1$ (UPPER FLOOR)
 - (b.) PER ASCE 7-16, TABLE 13.6-1 :
 $ap = 1.0 ; Rp = 1.5 ; \Omega = 2.0$ (APPLY Ω FACTOR FOR ANCHORAGE TO CONCRETE
4. CENTER OF GRAVITY (C.G) WEIGHT IS A MAXIMUM 670
5. STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL :
 - a.) CHECK THAT THE EXISTING / NEW STRUCTURE WILL BE ABLE TO SUPPORT THE MAXIMUM WEIGHTS / FORCE SHOWN IN ADDITION TO ANY OTHER LOADS TO THE STRUCTURE. PROVIDE STRENGTHENING OF STRUCTURE AS REQUIRED.
 - b.) CHECK THAT THE FLOOR OR DECK ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OF EXISTING ANCHORS. ALL MINIMUM EDGE DISTANCE AND SPACING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN THE ICC REPORT FOR THE SPECIFIC ANCHORS USED ON THE OPM.
(SEE TABLE ON NEXT PAGE FOR ANCHOR MINIMUM SPACING & EDGE DISTANCE REQUIREMENTS)
 - c.) CHECK THAT THE INSTALLATION, SUPPORT AND ATTACHMENTS OF THE UNIT COMPLIES WITH THE 2019 CALIFORNIA BUILDING CODE AND WITH THE DETAILS SHOWN IN THIS PREAPPROVAL.
 - d.) VERIFY THAT THE ACTUAL EQUIPMENT'S, MODEL NUMBER, OPERATING WEIGHT, CENTER OF GRAVITY (C.G) LOCATION, ANCHOR LAYOUT, MATERIAL & ASTM GRADE OF THE EQUIPMENTS IS THE SAME SHOWN ON THIS OPM PREAPPROVAL.
 - e.) VERIFY THAT THE PROJECT SPECIFIC Sds AND z/h VALUES RESULT IN SEISMIC FORCES DOES NOT EXCEED THE VALUE SHOWN ON THIS OPM.
6. ADHESIVE ANCHORS SHALL BE HILTI HIT-RE 500 V3 (PER ICC-ESR-3814) INSTALLED IN NORMAL WEIGHT CONCRETE & EXPANSION ANCHORS SHALL BE HILTI KB-TZ2 (PER ICC -ESR-4266) INSTALLED IN SAND LIGHT WEIGHT CONCRETE (AT UNDERSIDE OF DECK) WHERE OCCURS. CARBON STEEL FOR INDOOR APPLICATIONS. MINIMUM EMBEDMENT OF ALL BOLTS AND TEST LOADS (UNLESS NOTED OTHERWISE ON DETAIL) IS SHOWN ON THE NEXT PAGE:



<p style="font-size: small;">8950 Jefferson Ave, La Mesa, Ca 91941 designgroup@junkereng.com www.junkereng.com</p>	PROJECT TITLE:	DES: CS	DRW: -	CHK: DJ	INT. PROJECT NO.: 2022-062
	SECHRIST-HYPERBARIC CHAMBERS 55 E. Huntington Dr. Suite 277, Arcadia, CA 91006	DOC NO.: 2022-062-DRAW-01-02	DATE: 02-20-2023		SCALE: NTS
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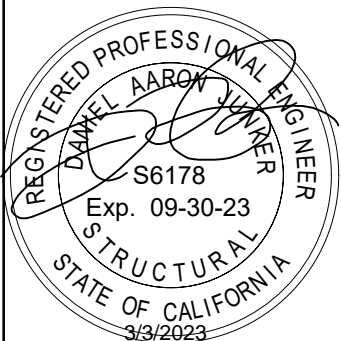
TEST LOAD FOR HILTI HIT-RE 500 V3 ANCHORS
(f_c = 4000 PSI MIN.) - INSTALLED TO N.W. CONCRETE AS OCCURRING


BOLT SIZE	APPLICATION	MINIMUM EFFECTIVE EMBEDMENT (INS.)	MINIMUM ANCHOR SPACING (INS.)	MINIMUM EDGE DISTANCE (INS.)	DIRECT TENSION (LBS.)	INSTALLATION TORQUE (LBS.-FT)
1/2"	TOP OF SOG	4.75"	2.75"	14"	5,625	N/A

TEST LOAD FOR HILTI KB-TZ2 EXPANSION ANCHORS
(f_c = 3000 PSI MIN.) - INSTALLED TO SAND L.W. CONCRETE AS OCCURRING

BOLT SIZE	APPLICATION	MINIMUM EFFECTIVE EMBEDMENT (INS.)	MINIMUM ANCHOR SPACING (INS.)	MINIMUM EDGE DISTANCE (INS.)	DIRECT TENSION (LBS.)	INSTALLATION TORQUE (LBS.-FT)
1/2"	UNDERSIDE OF DECK	2"	6"	6"	N/A	50

- a.) WHEN INSTALLING DRILLED IN ANCHORS IN EXISTING NON- PRE-STRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS.MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR.
 - b.) AFTER A MIN OF (24) HRS. HAVE ELAPSED, ALL POST INSTALLED ANCHORS (LOADED IN EITHER PULL OUT OR SHARE) SHALL BE TORQUED OR TENSION TESTED. WHEN POST - INSTALLED ANCHORS ARE USED FOR NON STRUCTURAL APPLICATIONS SUCH AS EQUIPMENT ANCHORAGE, 50% OR ALTERNATE BOLTS IN A GROUP, INCLUDING AT LEAST ONE - HALF THE ANCHORS IN EACH GROUP SHALL BE TESTED. IF THERE ARE ANY FAILURES,THE IMMEDIATELY ADJACENT BOLTS MUST THEN ALSO BE TESTED.
 - c.) THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
HYDRAULIC RAM METHOD: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE OR SLEEVE TYPE: ONE-HALF (1/2) TURN OF THE NUT ONE-QUARTER , (1/4) TURN OF THE NUT FOR 3/8" SLEEVE ANCHOR ONLY.
 - d.) OWNER'S REPRESENTATIVE IS RESPONSIBLE FOR ALL ANCHOR TESTING.
 - e.) ALL TEST SHALL BE PERFORMED IN THE PRESENCE OF THE INSPECTOR OF RECORD AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY.
7. 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 BOLTS HOLES SHALL BE 1/16 LARGER THEN 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 OF POST INSTALLED ANCHORS.



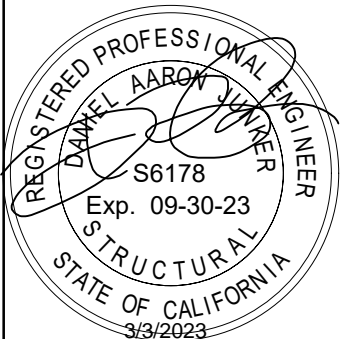
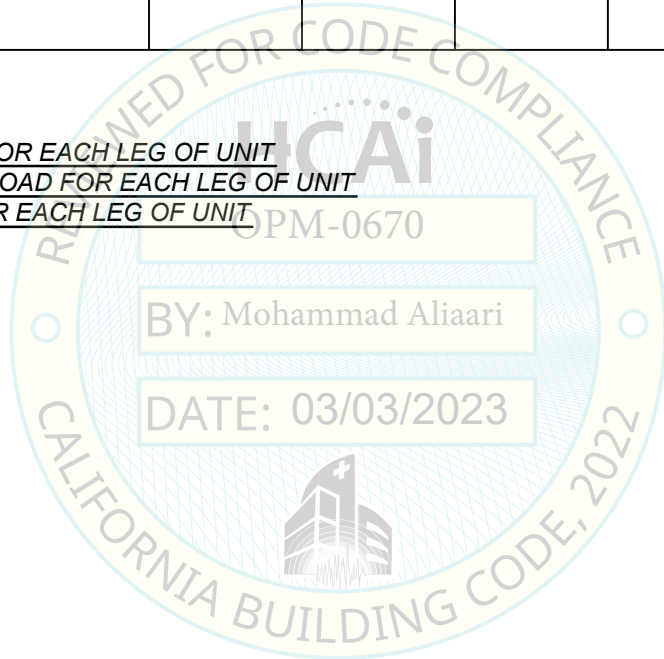
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	SECHRIST-HYPERBARIC CHAMBERS 55 E. Huntington Dr. Suite 277, Arcadia, CA 91006	DOC NO.: 2022-062-DRAW-01-02	DATE: 02-20-2023	SCALE: NTS	
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SUMMARY TABLE FOR ALL CASES								
CASE	UNIT	Z/h	SDS	Fp	Ev	Tu (k)	Cu (k)	Vu (k)
CASE-1A	4100H(S)	0	1.1	0.49Wp	0.22Wp	0.574	2.569	0.520
CASE-2A	3600H(S), 3300H(S), 3200	1	2.5	3.0Wp	0.5Wp	4.780	6.167	2.190
CASE-1B	3600H(S), 3300H(S), 3200	0	1.1	0.49Wp	0.22Wp	0.340	1.727	0.361
CASE-2B	4100H(S)	1	1.6	1.92Wp	0.32Wp	4.385	6.380	2.016

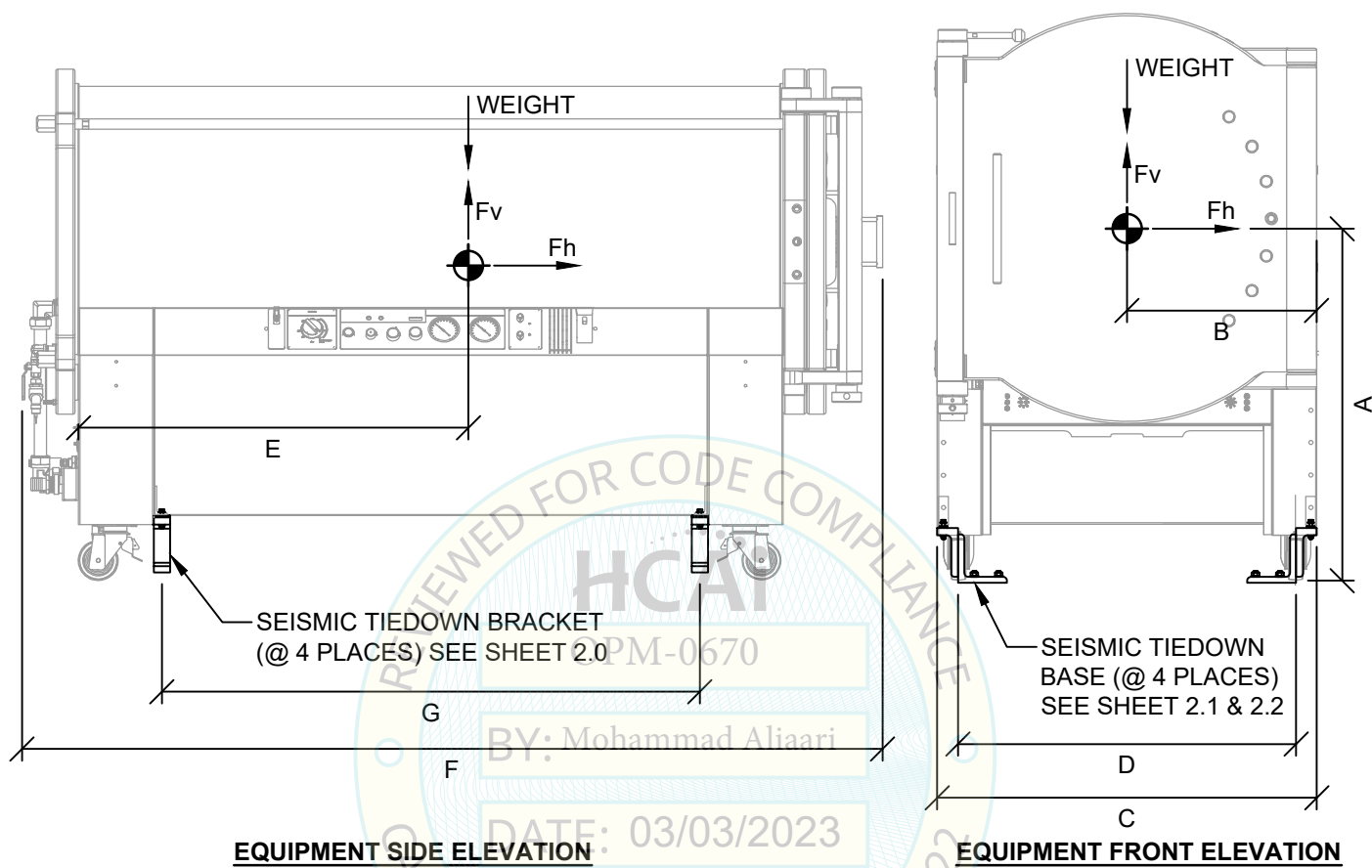
Tu: THE TENSION LOAD FOR EACH LEG OF UNIT

Cu: THE COMPRESSION LOAD FOR EACH LEG OF UNIT

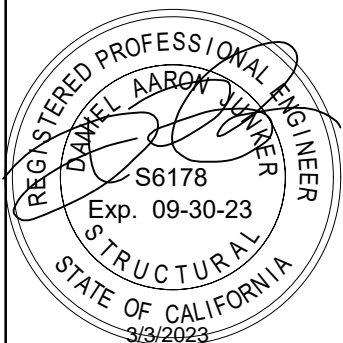
Vu: THE SHEAR LOAD FOR EACH LEG OF UNIT



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MODEL NO.	EQUIP. WEIGHT (LBS.)	MAX. PATIENT WEIGHT (LBS.)	A (INCHES.)	B (INCHES.)	C (INCHES.)	D (INCHES.)	E (INCHES.)	F (INCHES.)	G (INCHES.)
3200	1,982	500	35"	21.5"	43"	38"	47"	105.5"	68.75"
3300H(S)	2,030	500	36.6"	22.25"	44.5"	39.5"	48"	106"	66.25"
3600H(S)	2,220	700	38.8"	22.25"	44.5"	39.5"	48"	106"	66.25"
4100H(S)	3,500	700	43.25"	23.38"	46.75"	41.75"	46.5"	106"	64"



PROJECT TITLE: SECHRIST-HYPERBARIC CHAMBERS
55 E. Huntington Dr. Suite 277, Arcadia, CA 91006

SHEET TITLE: HYPERBARIC CHAMBER DIMENSIONS

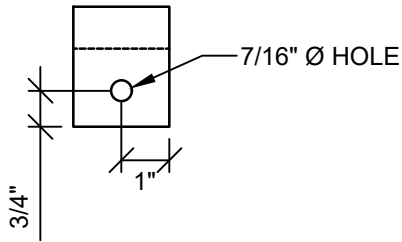
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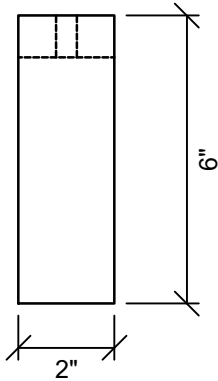
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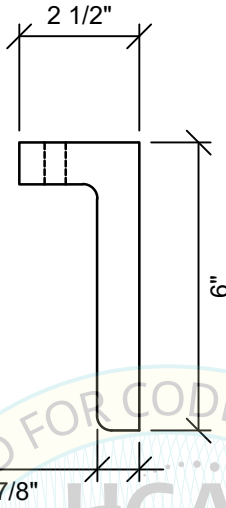
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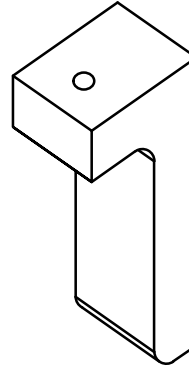
TOP VIEW



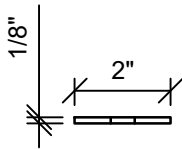
FRONT VIEW



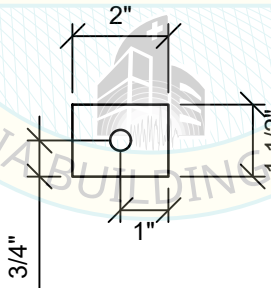
SIDE VIEW



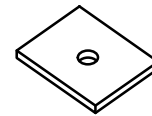
ISOMETRIC VIEW



SIDE VIEW

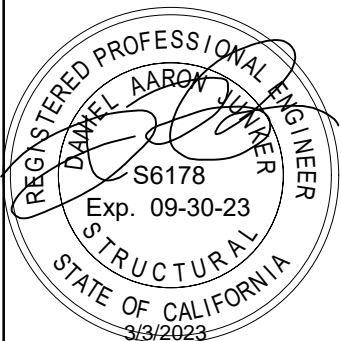
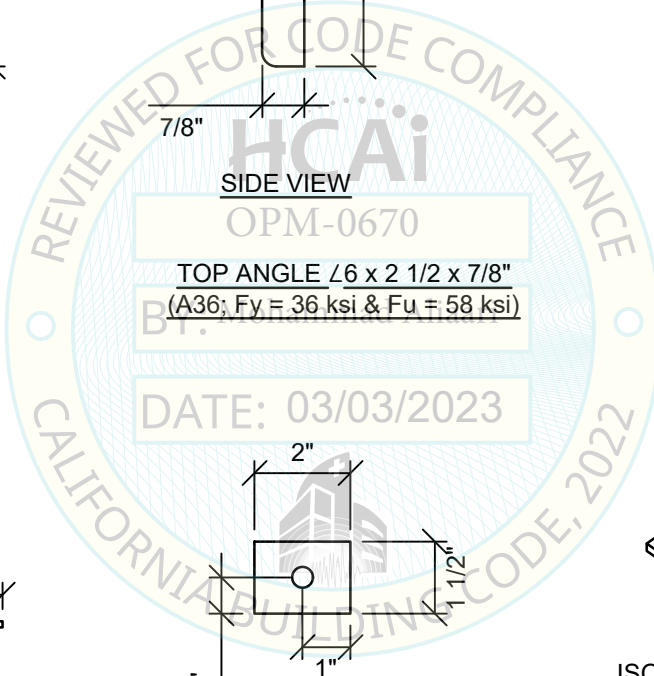


TOP VIEW



ISOMETRIC VIEW

SPACER
1 1/2" x 2" x 1/8" (ASTM A108)

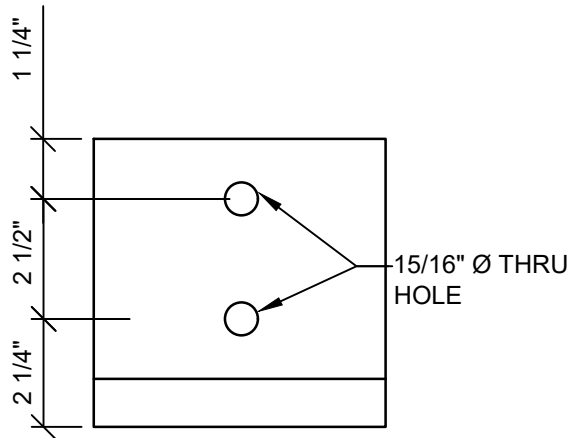


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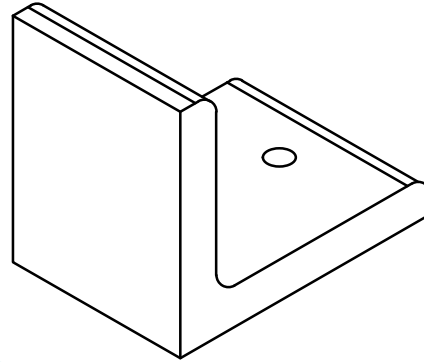
PROJECT TITLE:
SECHRIST-HYPERBARIC CHAMBERS
 55 E. Huntington Dr. Suite 277, Arcadia, CA 91006

SHEET TITLE:
TOP ANGLE & SPACER DETAIL
APPLICABLE FOR ALL CASES

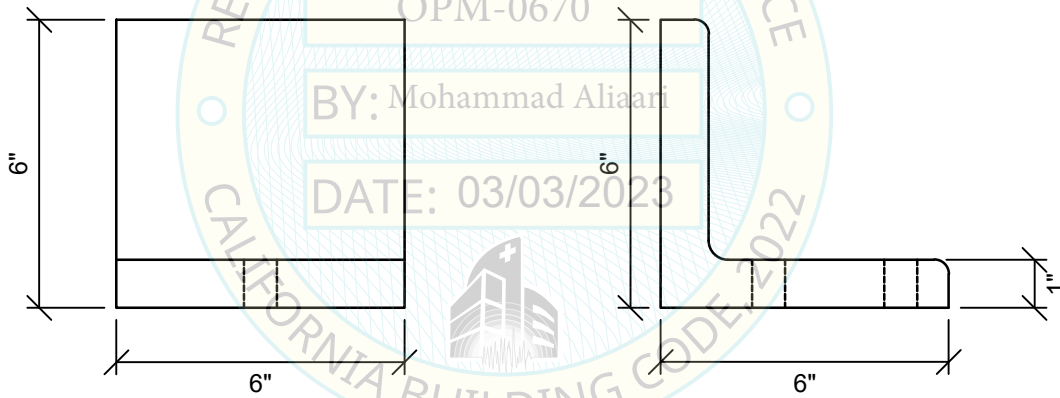
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TOP VIEW



ISOMETRIC VIEW



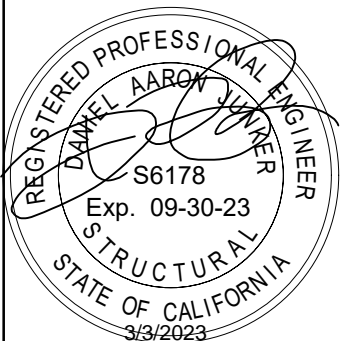
FRONT VIEW

SIDE VIEW

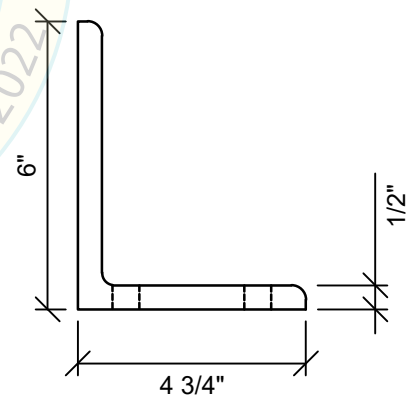
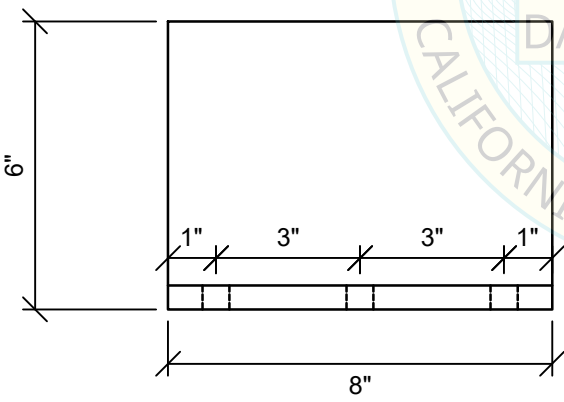
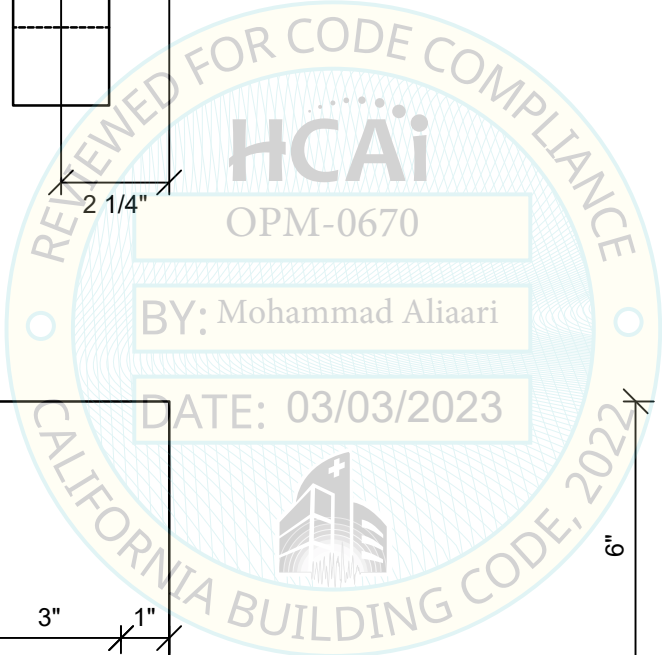
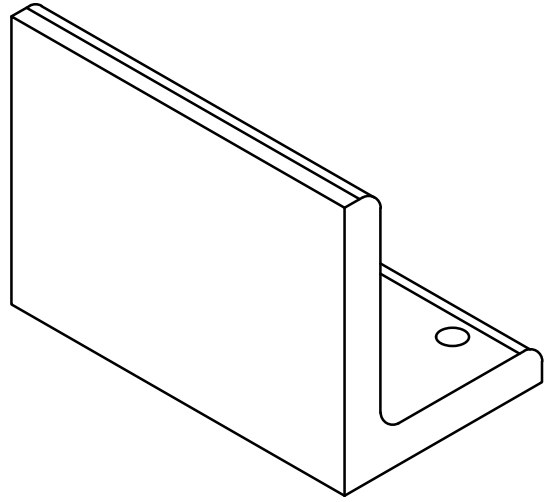
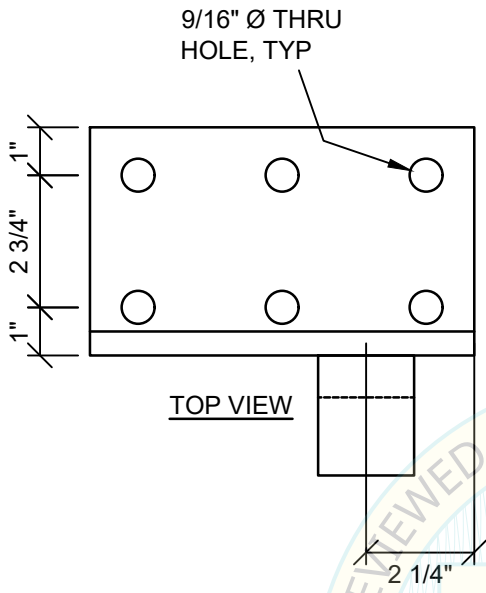
BOTTOM ANGLE IN UPPER LEVEL

∠6 x 6 x 1"

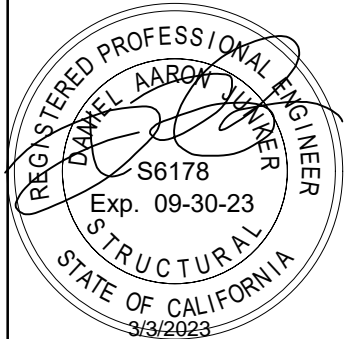
(A36; Fy = 36 ksi & Fu = 58 ksi)



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	SHEET TITLE: BOTTOM ANGLE DETAIL FOR CASES 2A&2B (Z/h > 0) OPM-0670: reviewed for Code Compliance by Mohammad Aliaari	ACTIVITY: INITIAL ISSUE	SHEET NO.: 2.1 9 of 19

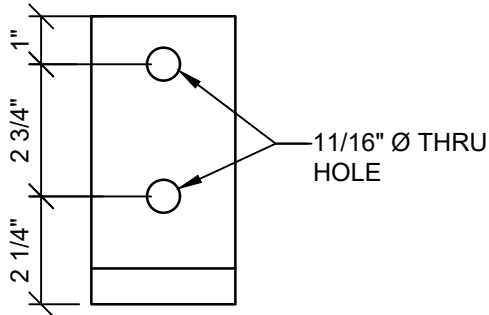


**BOTTOM ANGLE
IN SOG OR GRADE LEVEL
FOR 4100H(S)
1/2" BENDING PLATE
(A36; Fy = 36 ksi & Fu = 58 ksi)**

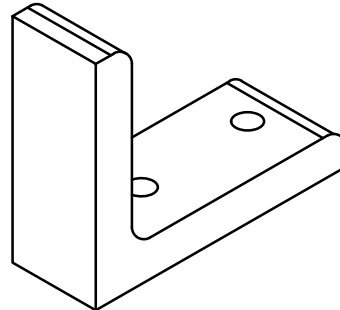


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SHEET TITLE: BOTTOM ANGLE DETAIL FOR CASE 1A (Z/h = 0)	DATE: 02-20-2023		SCALE: 3" = 1'-0"	
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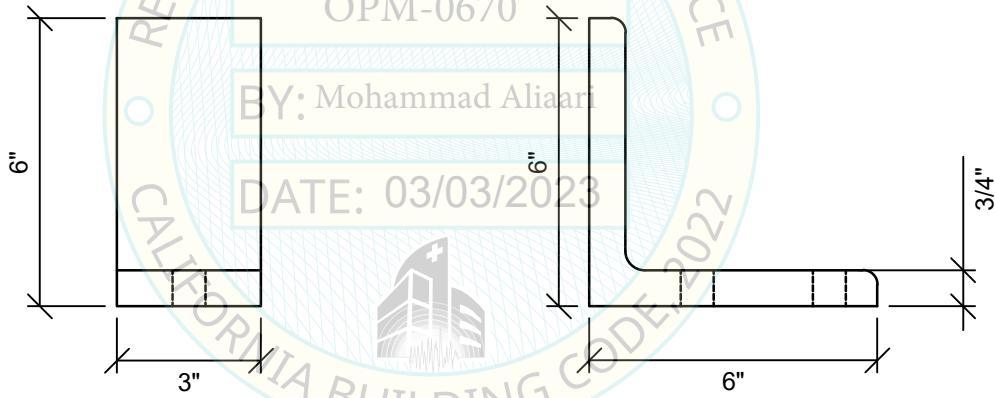
DATE: 02-20-2023	SHEET NO.: 2.2
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TOP VIEW



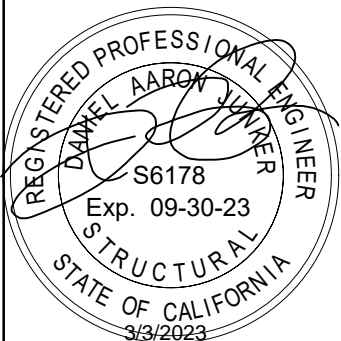
ISOMETRIC VIEW




FRONT VIEW

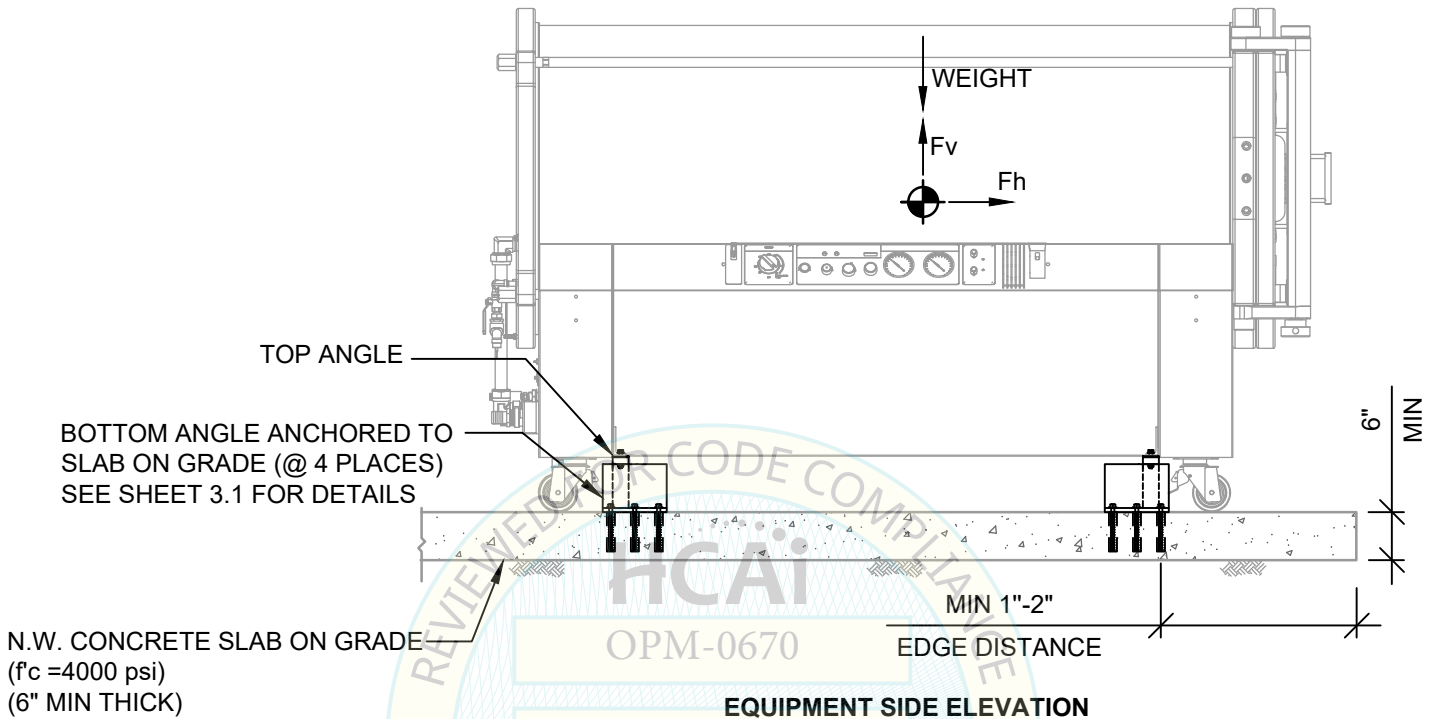
SIDE VIEW

BOTTOM ANGLE
IN SOG OR GRADE LEVEL
FOR 3200, 3300H(S), & 3600H(S)
3/4" BENDING PLATE
(A36; Fy = 36 ksi & Fu = 58 ksi)

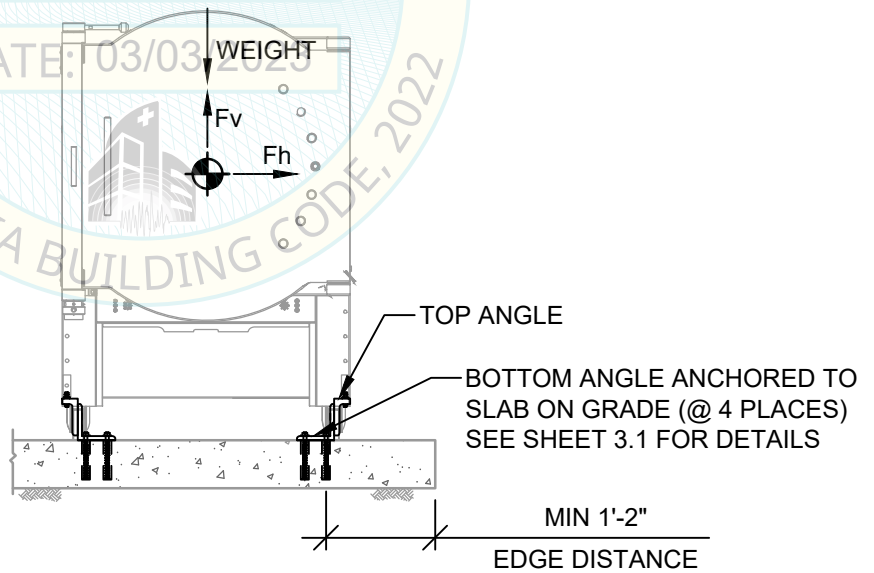


 8950 Jefferson Ave, La Mesa, Ca 91941 designgroup@junkereng.com www.junkereng.com	PROJECT TITLE: SECHRIST-HYPERBARIC CHAMBERS 55 E. Huntington Dr. Suite 277, Arcadia, CA 91006	DES: CS DRW: - CHK: DJ DOC NO.: 2022-062-DRAW-01-02	INT. PROJECT NO.: 2022-062 DATE: 02-20-2023 SCALE: 3"= 1'-0"
	SHEET TITLE: BOTTOM ANGLE DETAIL FOR CASE 1B (Z/h = 0) OPM-0670: reviewed for Code Compliance by Mohammad Aliari	ACTIVITY: INITIAL ISSUE	SHEET NO.: 2.3 1 of 19

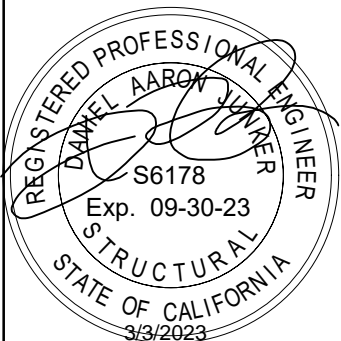
CASE-1A: SLAB ON GRADE CONDITION
[MODEL Nos. 4100H(S) : (z/h= 0; Sds =1.1g MAX)]



EQUIPMENT SIDE ELEVATION



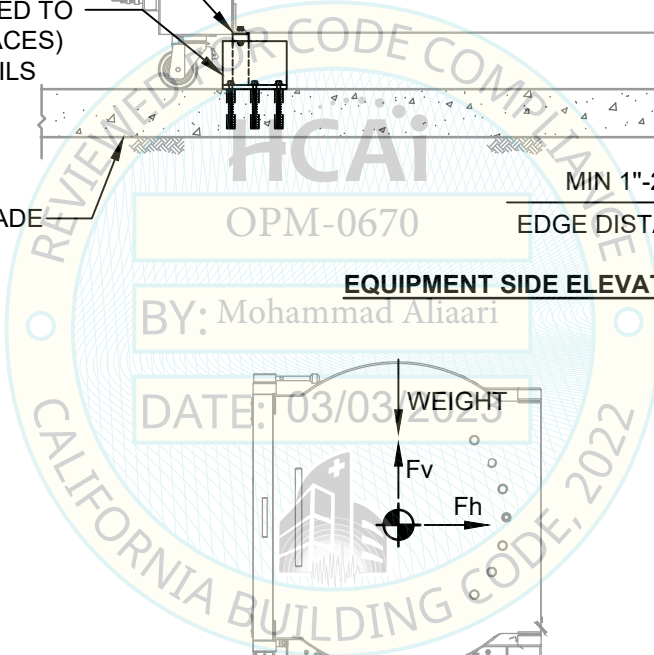
EQUIPMENT FRONT ELEVATION



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PROJECT TITLE:	SECHRIST-HYPERBARIC CHAMBERS 55 E. Huntington Dr. Suite 277, Arcadia, CA 91006
SHEET TITLE:	HYPERBARIC CHAMBER ELEVATION- SLAB ON GRADE

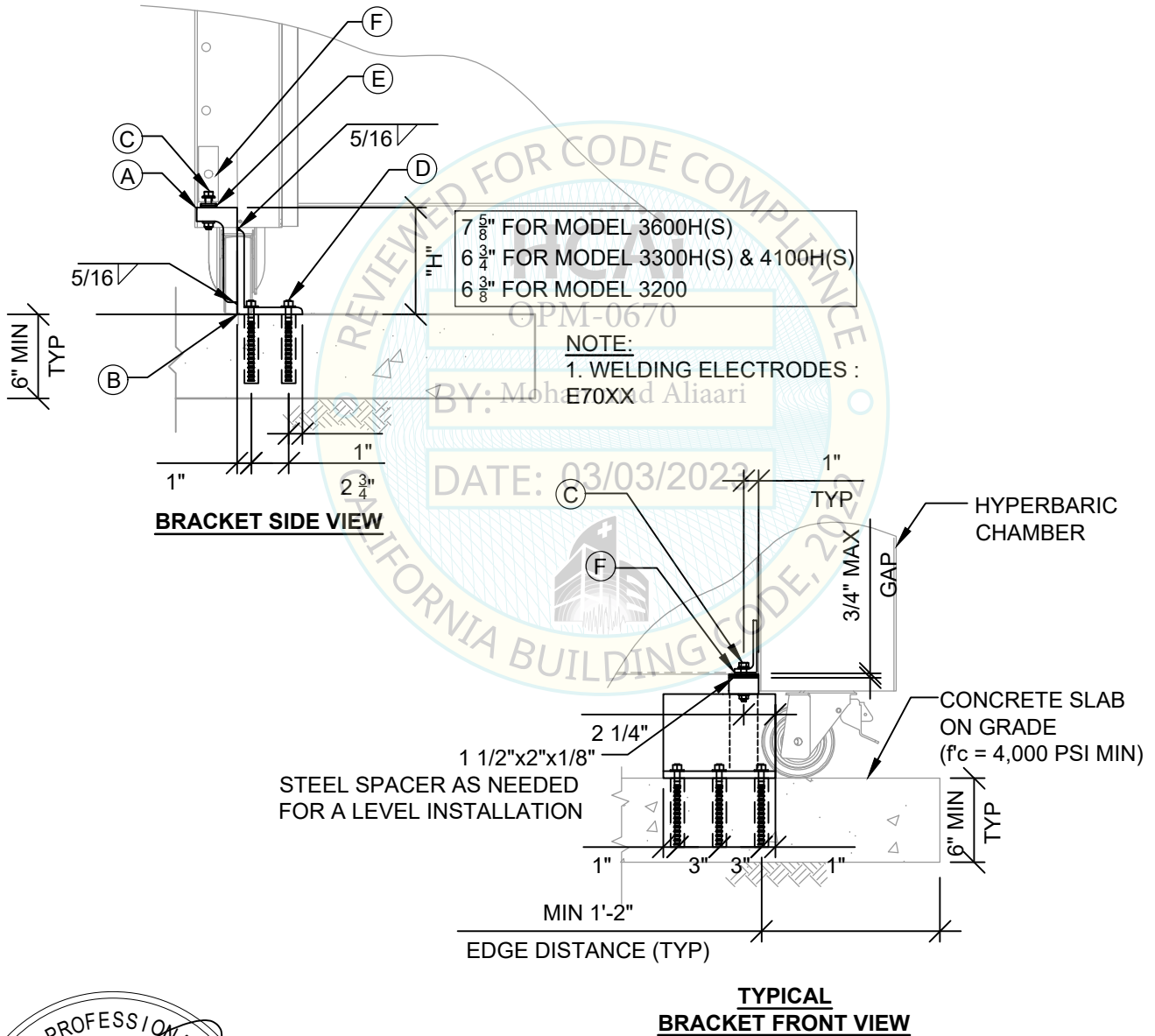
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DOC NO.: 2022-062-DRAW-01-02			DATE: 02-20-2023
ACTIVITY: INITIAL ISSUE			SCALE: NTS
SHEET NO.: 3.0			2 of 19



CASE-1A: SLAB ON GRADE CONDITION
[MODEL Nos. 4100H(S) : (z/h= 0; Sds =1.1g MAX)]

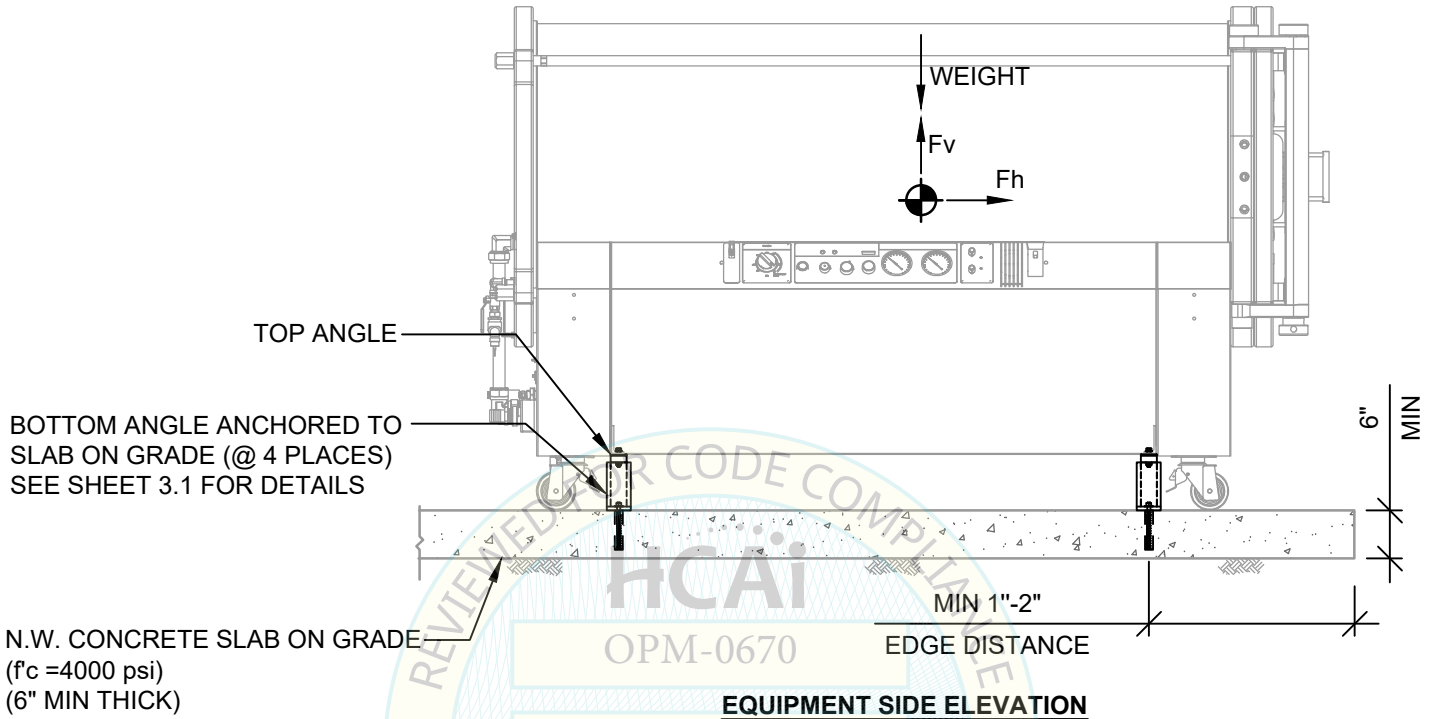
LEGEND:

- (A) TOP ANGLE L6x2 1/2 x 7/8 " (A36, Fy 36 ksi, Fu = 58 ksi)
- (B) BOTTOM ANGLE 1/2 " BENDING PLATE (A36, Fy 36 ksi, Fu = 58 ksi)
- (C) 3/8 Ø FLANGED HEX BOLT GRADE 8 ZINC PLATED MEDIUM STRENGTH STEEL (Fu = 150,000 PSI)
- (D) (6) 1/2" Ø HILTI HAS-E W/ HIT-RE 500 V3 W/ 4 3/4" EFFECTIVE EMBEDMENT (PER ICC-ES-ESR-3814)
- (E) 1 1/2 " x 2" x 1/8" ASTM A108 ZINC PLATED STEEL SPACER (W/ 7 / 16" Ø HOLE SIZE),AS NEEDED FOR A LEVEL BRACKET INSTALLATION (SEE FRONT VIEW)
- (F) ASTM A653 11 GA. GALVANIZED SHEET PANEL (Fy= 38 KSI, Fu= 50 KSI) W/ L3 1/2 x 1 1/2 x 1/4" THICK DOUBLER PLATE STIFFENER (A36, Fy = 36 ksi, Fu = 58 ksi) SEE FRONT VIEW (PART OF THE UNIT PER MANUFACTURER)



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	SHEET TITLE: BRACKET ANCHORAGE DETAIL- SLAB ON GRADE	DOC NO.: 2022-062-DRAW-01-02
OPM-0670: reviewed for Code Compliance by Mohammad Aliari	ACTIVITY: INITIAL ISSUE	SHEET NO.: 3.1 3 of 19

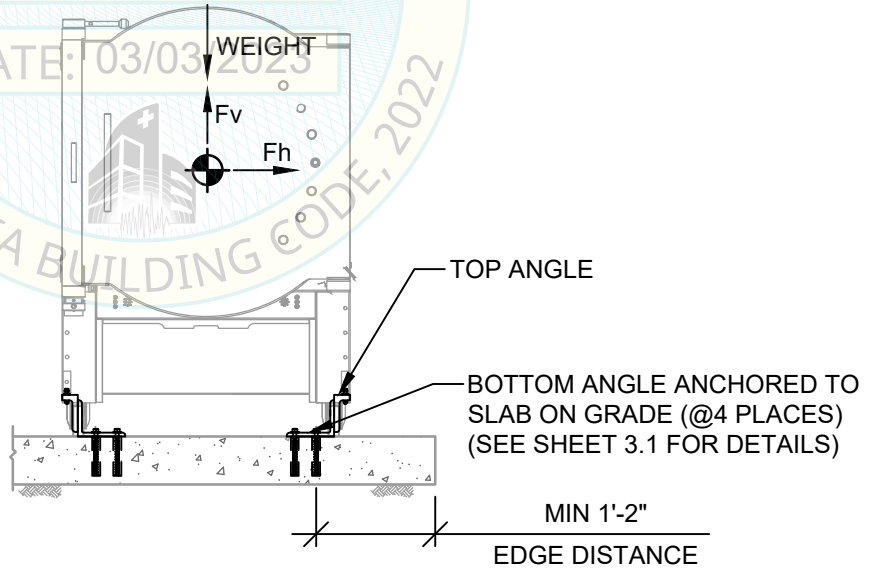
CASE-1B: SLAB ON GRADE CONDITION
 [MODEL Nos. 3200, 3300H(S), & 3600H(S) : (z/h= 0; Sds =1.1g MAX)]



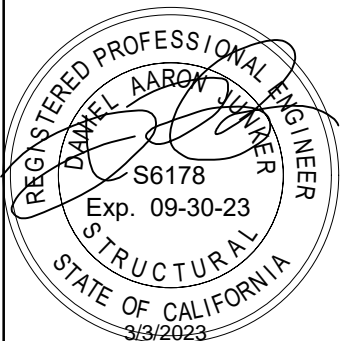
EQUIPMENT SIDE ELEVATION

BY: Mohammad Aliaari

DATE: 03/03/2023



EQUIPMENT FRONT ELEVATION



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SHEET TITLE: HYPERBARIC CHAMBER ELEVATION- SLAB ON GRADE	DOC NO.: 2022-062-DRAW-01-02	DATE: 02-20-2023
ACTIVITY: INITIAL ISSUE	SCALE: NTS	SHEET NO.: 3.2

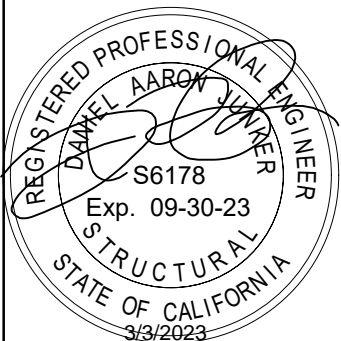
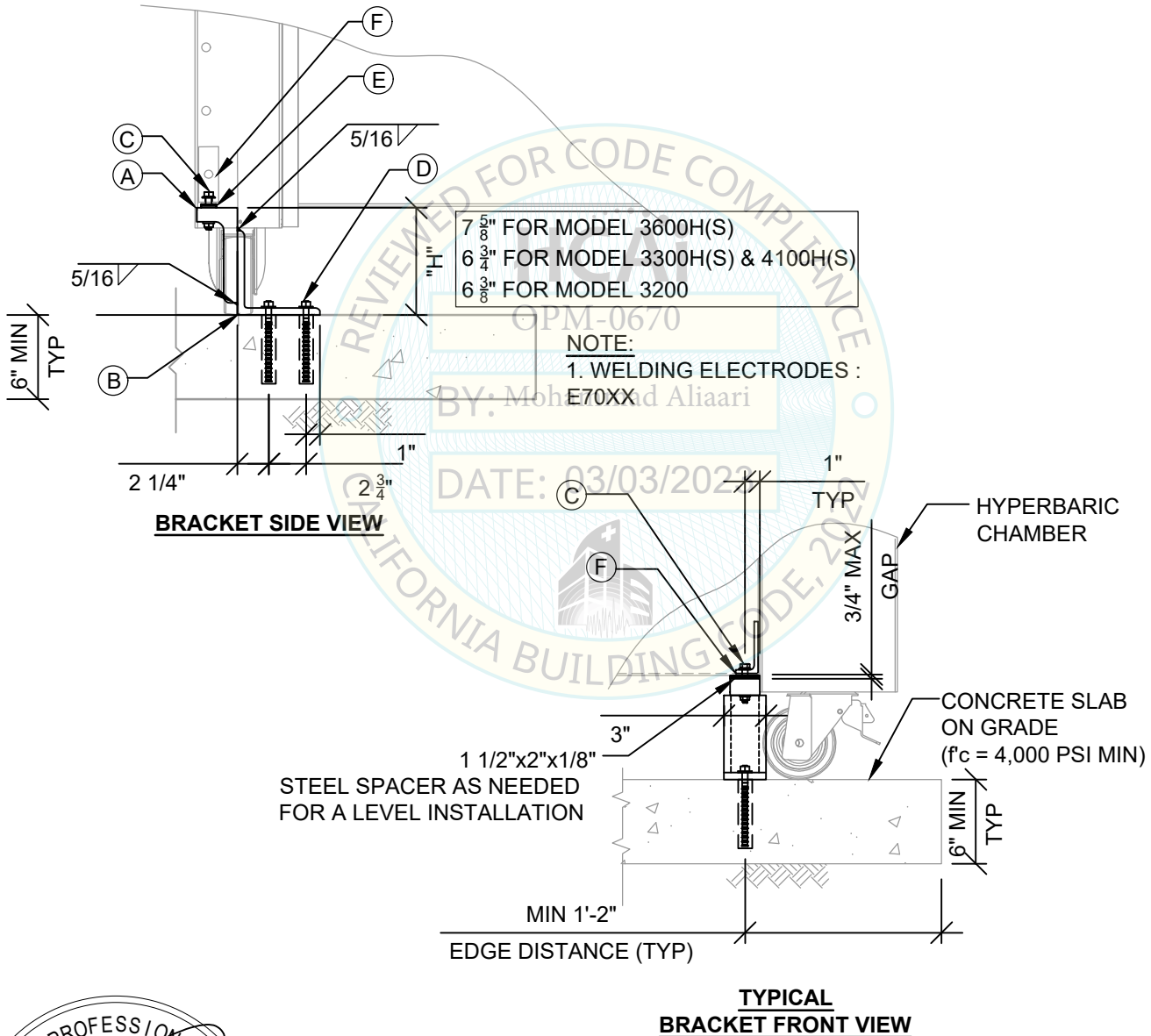
ACTIVITY: INITIAL ISSUE	SCALE: NTS	SHEET NO.: 3.2
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OPM-0670: reviewed for Code Compliance by Mohammad Aliaari

CASE-1B: SLAB ON GRADE CONDITION
 [MODEL Nos. 3200, 3300H(S), & 3600H(S) : (z/h= 0; Sds =1.1g MAX)]

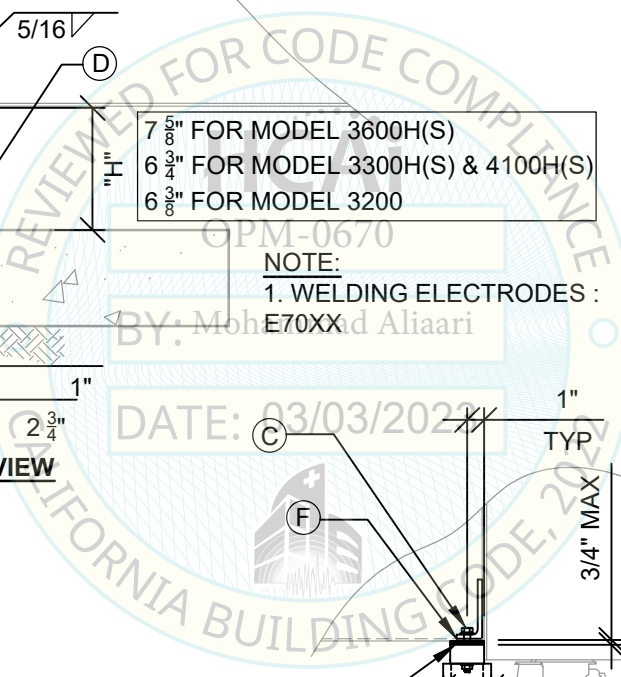
LEGEND:

- (A) TOP ANGLE $L6x 2 \frac{1}{2} x 7/8$ " (A36, Fy 36 ksi, Fu = 58 ksi)
- (B) BOTTOM ANGLE $3/4$ " BENDING PLATE (A36, Fy 36 ksi, Fu = 58 ksi)
- (C) $3/8 \text{ } \varnothing$ FLANGED HEX BOLT GRADE 8 ZINC PLATED MEDIUM STRENGTH STEEL (Fu = 150,000 PSI)
- (D) (2) $\frac{1}{2}$ " \varnothing HILTI HAS-E W/ HIT-RE 500 V3 W/ 4 $3/4$ " EFFECTIVE EMBEDMENT (PER ICC-ES-ESR-3814)
- (E) $1 \frac{1}{2}$ " x 2 " x $1/8$ " ASTM A108 ZINC PLATED STEEL SPACER (W/ $7 / 16$ " \varnothing HOLE SIZE),AS NEEDED FOR A LEVEL BRACKET INSTALLATION (SEE FRONT VIEW)
- (F) ASTM A653 11 GA. GALVANIZED SHEET PANEL (Fy= 38 KSI, Fu= 50 KSI) W/ $L3 \frac{1}{2} x 1 \frac{1}{2} x 1/4$ " THICK DOUBLER PLATE STIFFENER (A36, Fy = 36 ksi, Fu = 58 ksi) SEE FRONT VIEW (PART OF THE UNIT PER MANUFACTURER)

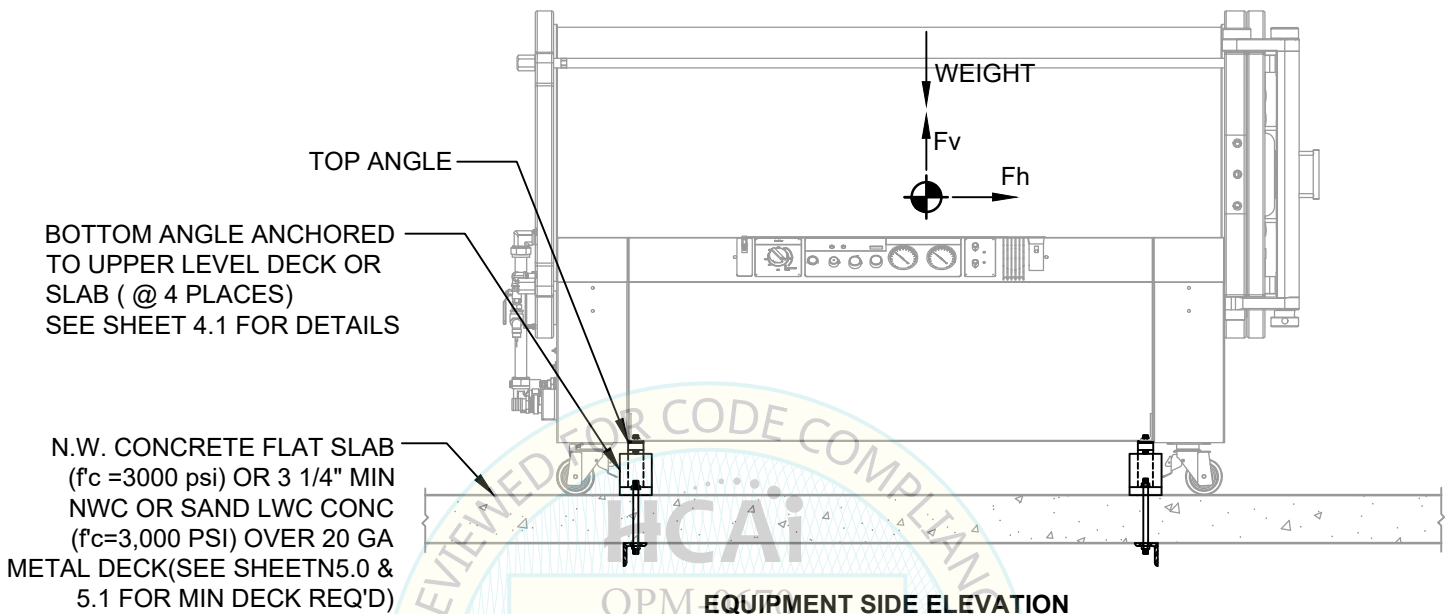


PROJECT TITLE: SECHRIST-HYPERBARIC CHAMBERS 55 E. Huntington Dr. Suite 277, Arcadia, CA 91006
SHEET TITLE: BRACKET ANCHORAGE DETAIL- SLAB ON GRADE

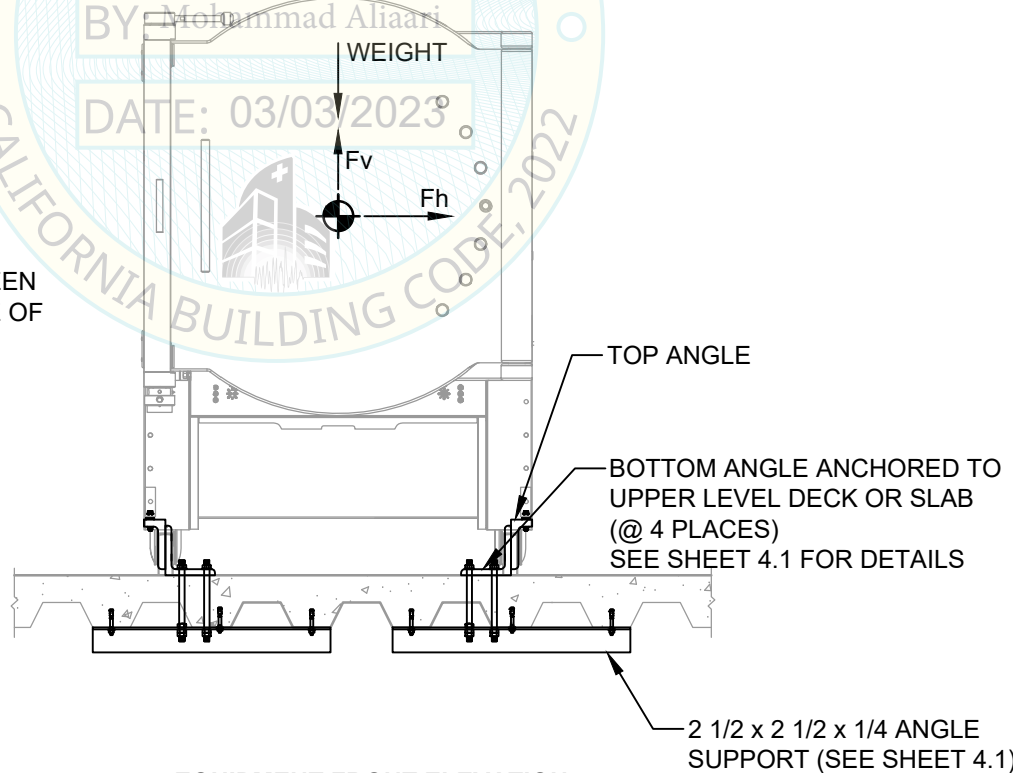
DES: CS	DRW: -	CHK: DJ	INT. PROJECT NO.: 2022-062
DOC NO.: 2022-062-DRAW-01-02			DATE: 02-20-2023
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UPPER LEVEL CONDITION
CASE-2A: [MODEL Nos. 3200, 3300H(S), 3600H(S) : (z/h <= 1; Sds =2.5g MAX)
CASE-2B: [MODEL np. 4100H(S) : (z/h <=1); Sds = 1.6g MAX]

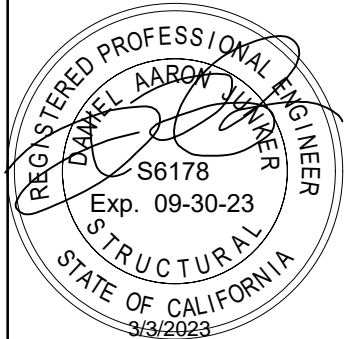
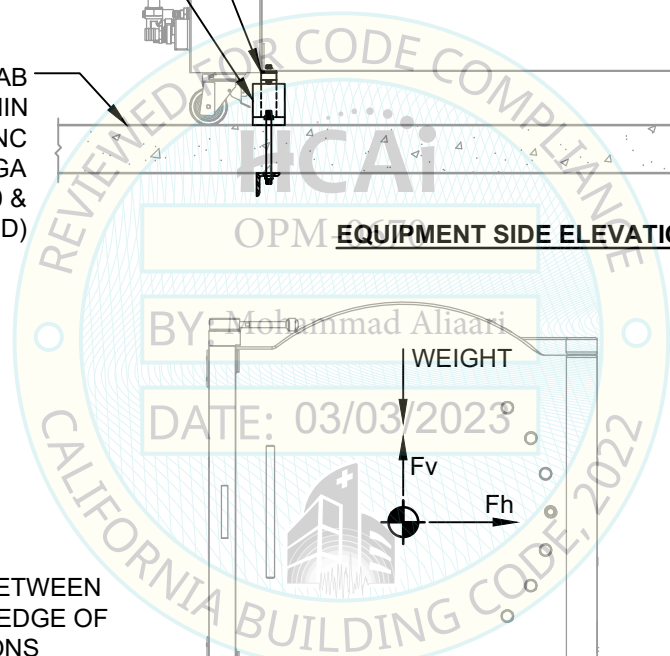


EQUIPMENT SIDE ELEVATION



EQUIPMENT FRONT ELEVATION

NOTE:
MIN 16IN EDGE DISTANCE BETWEEN THE THREADED RODS AND EDGE OF CONCRETE IN ALL DIRECTIONS



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	SHEET TITLE: HYPERBARIC CHAMBER ELEVATION-UPPER LEVEL	ACTIVITY: INITIAL ISSUE	SHEET NO.: 4.0
<small>OPM-0670: reviewed for Code Compliance by Mohammad Aliaari</small>		16 of 19	

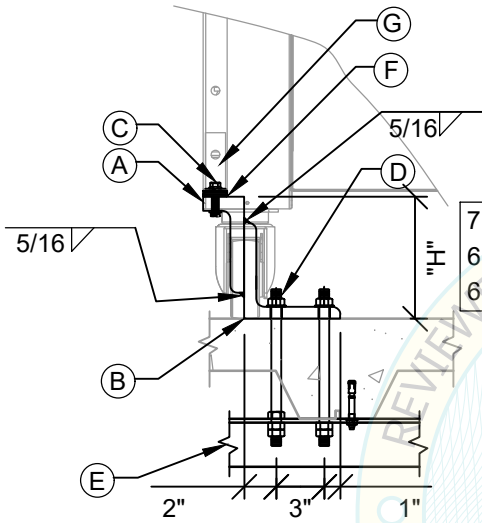
UPPER LEVEL CONDITION

CASE-2A: MODEL 3200, 3300H(S), & 3600H(S) : (z/h <=1); SdS= 2.5g MAX

CASE-2B: MODEL 4100H(S) : (z/h <=1); SdS= 1.6g MAX

LEGEND:

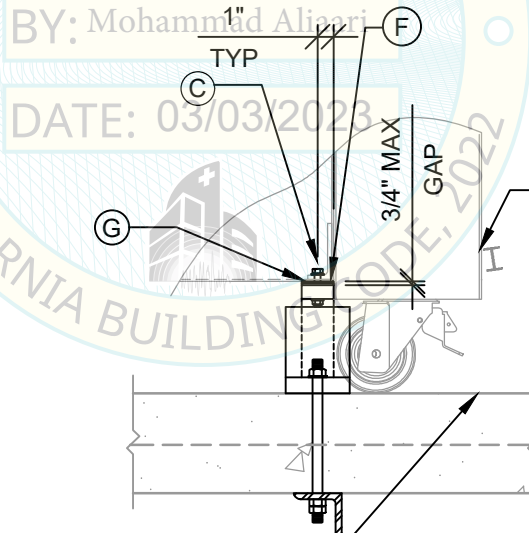
- (A) TOP ANGLE $\angle 6 \times 2 \frac{1}{2} \times 7/8$ (A36, Fy 36 ksi, Fu = 58 ksi)
- (B) BOTTOM ANGLE $\angle 6 \times 6 \times 1$ (A36, Fy 36 ksi, Fu = 58 ksi)
- (C) $3/8 \text{ } \varnothing$ FLANGED HEX BOLT GRADE 8 ZINC PLATED MEDIUM STRENGTH STEEL (Fu = 150,000 PSI)
- (D) (2) $7/8 \text{ } \varnothing$ A36 ALL-THREAD ROD (A36, Fy = 36 ksi, Fu = 58 ksi) SEE SHEET 5.0 & 5.1 FOR BALANCE OF INFORMATION
- (E) ANGLE SUPPORT $\angle 2 \frac{1}{2} \times 2 \frac{1}{2} \times 3/8$ (A36, Fy = 36 ksi, Fu = 58 ksi) TO SPAN 2 LOWER FLUTES MIN.
- (F) $1 \frac{1}{2} \text{ } \times 2 \text{ } \times 1/8$ ASTM A108 ZINC PLATED STEEL SPACER (W/ $7/16 \text{ } \varnothing$ HOLE SIZE), AS NEEDED FOR A LEVEL BRACKET INSTALLATION (SEE FRONT VIEW) (PART OF THE UNIT PER MANUFACTURER)
- (G) ASTM A653 11 GA. GALVANIZED SHEET PANEL (Fy= 38 KSI, Fu= 50 KSI) W/ $\angle 3 \frac{1}{2} \times 1 \frac{1}{2} \times 1/4$ THICK DOUBLER PLATE STIFFENER (A36, Fy = 36 ksi, Fu 58= ksi) SEE FRONT VIEW



BRACKET SIDE VIEW

7 5/8" FOR MODEL 3600H(S)
 6 3/4" FOR MODEL 3300H(S) & 4100H(S)
 6 3/8" FOR MODEL 3200

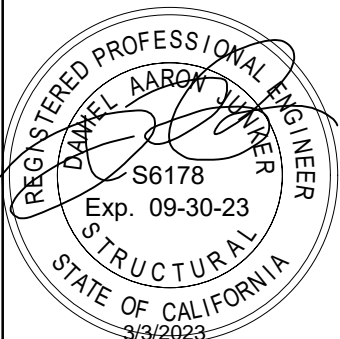
NOTE:
 1. WELDING
 ELECTRODES: E70XX



TYPICAL BRACKET FRONT VIEW

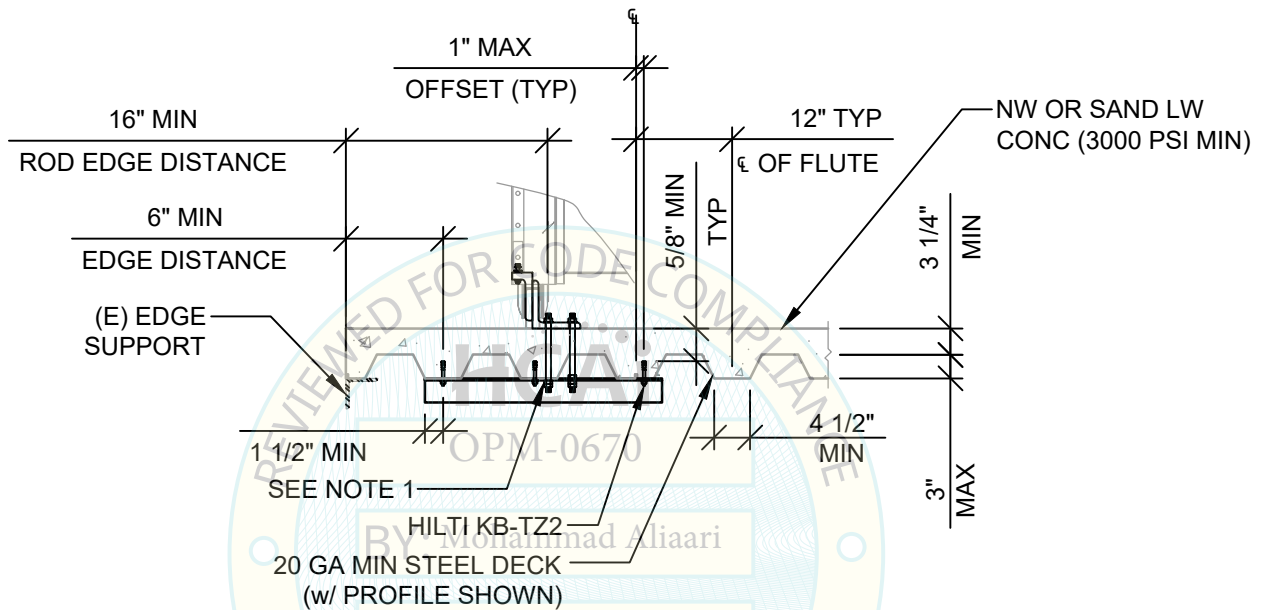
N.W. CONCRETE FLAT SLAB (f'c =3000 psi) OR 3 1/4" MIN NWC OR SAND LWC CONC (f'c=3,000 PSI) OVER 20 GA METAL DECK(SEE SHEET 5.0 & 5.1 FOR MIN DECK REQ'D)

HYPERBARIC CHAMBER



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SHEET TITLE: BRACKET ANCHORAGE DETAIL-UPPER LEVEL			

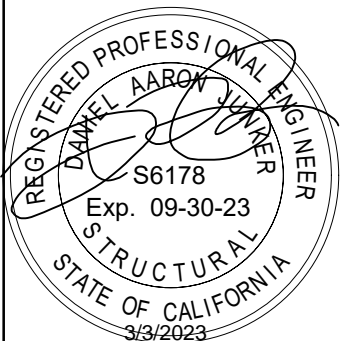
OPM-0670: reviewed for Code Compliance by Mohammad Altaari



HILTI KB-TZ2 (UNDERSIDE OF TYP "W" DECK ANCHORAGE)

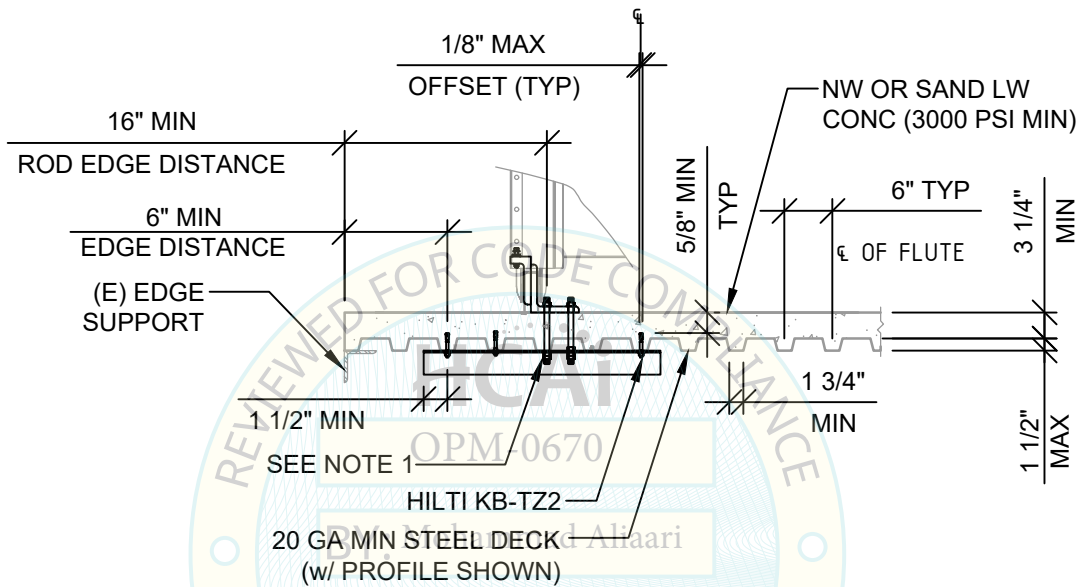
NOTE

1. HEX NUT TOP & BOTTOM OF ANGLE (TYP); WHERE NUT CANNOT BE PROVIDED AT TOP SIDE OF ANGLE, PROVIDE TAPPED HOLE THROUGH ANGLE OR DOUBLE NUTS BELOW ANGLE w/ TOP NUT WELDED TO UNDERSIDE OF ANGLE



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	SHEET TITLE: MIN. CONCRETE OVER METAL DECK REQUIREMENT	DOC NO.: 2022-062-DRAW-01-02 DATE: 02-20-2023
ACTIVITY: INITIAL ISSUE		18 of 19

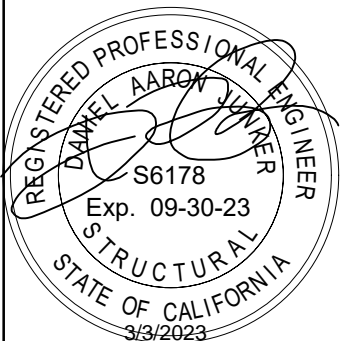
OPM-0670: reviewed for Code Compliance by Mohammad Aliari



HILTI KB-TZ2 (UNDERSIDE OF TYP "B" DECK ANCHORAGE)

NOTE

1. HEX NUT TOP & BOTTOM OF ANGLE (TYP); WHERE NUT CANNOT BE PROVIDED AT TOP SIDE OF ANGLE, PROVIDE TAPPED HOLE THROUGH ANGLE OR DOUBLE NUTS BELOW ANGLE w/ TOP NUT WELDED TO UNDERSIDE OF ANGLE



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	SHEET TITLE: MIN. CONCRETE OVER METAL DECK REQUIREMENTS	DOC NO.: 2022-062-DRAW-01-02 DATE: 02-20-2023
OPM-0670: reviewed for Code Compliance by Mohammad Allaari	ACTIVITY: INITIAL ISSUE	SCALE: NTS SHEET NO.: 5.1