

APPLICATION FOR OSHPD PREAPPROVAL
OF MANUFACTURER'S CERTIFICATION (OPM) APPLICATION #: OPM-0152-13
OSHPD Preapproval of Manufacturer's Certification (OPM)
Type: New Renewal Update to Pre-CBC 2013 OPA Number:
Manufacturer Information
Manufacturer: SECHRIST INDUSTRIES, INC.
Manufacturer's Technical Representative: Deepak Talati
Mailing Address:4225 E. La Palma Avenue, Anaheim, CA 92807
Telephone: 714-579-8362 Email: DTalati@SechristUSA.com
Product Information
Product Name: Sechrist Monoplace Hyperbaric Chambers
Product Type: Other Mechanical or Electrical Component 2-13
Product Model Number: 3200, 3300H(S), 3600H(S), & 4100H(S)
General Description: Floor mounted Hyperbaric chamber with Brackets
E. C.
Applicant Information
Applicant Company Name: Sechrist Industries, Inc.
Contact Person: Deepak Talati
Mailing Address: _ 4225 E. La Palma Avenue, Anaheim, CA 92807
Telephone: 714-579-8362 Email: DTalati@SechristUSA.com
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.
Signature of Applicant: Deepak Talati Date: 10/29/2014
Title: VP Operations And R&D Company Name: Sechrist Industries, Inc
"Access to Safe. Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"
STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY OSH-FD-700 (REV 10/22/14) Page 1 of 2



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

Registered Design Professional Preparing Engineering Recommendations
Company Makeitright Inc. Name:
Name: Joseph La Brie California License Number: S3566
Mailing Address: _55 E. Huntington Drive Ste 277, Arcadia, CA 91006
Telephone: (626) 445-0366 Email: labrie@makeitright.net
OSHPD Special Seismic Certification Preapproval (OSP)
 Special Seismic Certification is preapproved under OSP- (Separate application for OSP is required) Special Sciencia Certification is not preapproved
Special Seismic Certification is not preapproved
Certification Method(s)
Testing in accordance with: ICC-ES AC156 FM 1950-10
Other* (Please Specify): <u>Hyperbaric Chamber does not require Special Seismic Certification. Anchorage is for</u>
anchorage to concrete slabs and decks.
*Use of criteria other than those adopted by the California Building Standards Code, 2013 (CBSC 2013) 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 2013 may be used when approved by OSHPD prior to testing.
Analysis
Experience Data DATE: 02/19/2015
Combination of Testing, Analysis, and/or Experience Data (Please Specify):
List of Attachments Supporting the Manufacturer's Certification
Test Report
Other(s) (Please Specify):
OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2013 ONLY
Signature: Neth Jack Date: 02/19/2015
Print Name: William Staehlin
Title: SSE
Condition of Approval (if applicable):
"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY OSH-FD-700 (REV 10/22/14)

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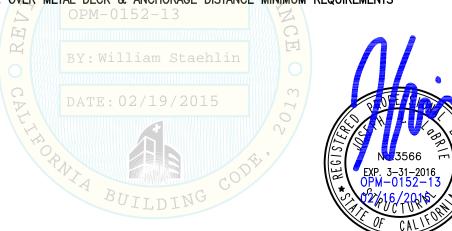




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SECHRIST - HYPERBARIC CHAMBERS Model nos.: 3200, 3300H(S), 3600H(S), 4100H(S)	hospital build	bitright"
Title: TABLE OF CONTENTS	DATE 02/16/15 PAGE TC-1 BB E Hunting Areadia, CA PAGE TC-1	91006 445-0366
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GENERAL NOTES

- 1.) THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2013 CALIFORNIA BUILDING CODE (CBC). THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2013 CALIFORNIA BUILDING CODE (CBC).
- 2.) SITE VERIFICATION IS REQUIRED. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE AREA(S) OF WORK PRIOR TO THE BEGINNING OF THE PROJECT. DO NOT SCALE THE DRAWINGS; ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED, IMMEDIATELY, IF ANY DISCREPANCIES ARE FOUND.
- 3.) DESIGN CRITERIA:
 - a.) <u>SLAB ON GRADE (SUPPORTS & ATTACHMENTS FOR MODEL NOS. 3200, 3300H(S), 3600H(S) & 4100H(S))</u> Sds = 2.2 MAX.; I = 1.5 ; z/h = 0 (GROUND OR SLAB ON GRADE) <u>UPPER FLOOR (SUPPORTS & ATTACHMENTS FOR MODEL NOS. 3200, 3300H(S), & 3600H(S))</u> Sds = 2.5 MAX. ; I = 1.5 ; z/h <= 1 (UPPER FLOOR) <u>UPPER FLOOR (SUPPORT & ATTACHMENTS FOR MODEL NO. 4100H(S))</u> Sds = 1.8 MAX. ; I = 1.5 ; z/h <= 1 (UPPER FLOOR)
 - b.) PER ASCE 7-10 INCLUDING SUPPLEMENT NO. 1 & TABLE 13.6-1 : $a_p = 1$; $R_p = 1.5$; $\Omega_0 = 1.5$ (APPLY Ω_0 FACTOR FOR ANCHORAGE TO CONCRETE)
- 4.) CENTER OF GRAVITY (C.G.) WEIGHT IS A MAXIMUM.152-13
- 5.) STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL :
 - a.) CHECK THAT THE EXISTING/NEW STRUCTURE WILL BE ABLE TO SUPPORT THE MAXIMUM WEIGHTS/FORCES SHOWN IN ADDITION TO ANY OTHER LOADS TO THE STRUCTURE. PROVIDE STRENGTENING OF STRUCTURE AS REQUIRED.
 - b.) CHECK THAT THE FLOOR OR DECK ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR 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 THIS 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 2013 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 EQUIPMENT 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 VALUES SHOWN ON THIS OPM.
- 6.) EXPANSION ANCHORS SHALL BE HILTI KB-TZ ANCHORS (PER ICC-ESR- 1917 DATED AUGUST 2014) AND INSTALLED IN NORMAL WEIGHT CONCRETE & 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:

SECHRIST - HYPERBARIC Model nos.: 3200, 3300H(S), 3600			JOSEPH L. LA BRIE Structural Engineer No. SE 3566	makeitright Makeitright
Title: GENERAL NOT	ËS	DATE 02/16/15	PAGE GN-1	55 E. Huntington Dr., Suite 277 Arcadla, CA 91006 PHIN: (526) 445-0366 FAX: (626) 445-2947
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	TEST	LOAD FOR HIL	<u>ti kb-tz e</u>	XPANSION ANCHOR	5		NL.
<u>(f'c = 3</u>	<u> 3000 PSI MIN.) — INS</u>	TALLED TO N.W.	CONCRETE	SLAB & SAND L.W	. CONCRETE	AS OCCURING	
BOLT SIZE	APPLICATION	MINIMUM EFFECTIVE EMBEDMENT (INS.)	MINIMUM ANCHOR SPACING (INS.)	MINIMUM EDGE DISTANCE (INS.)	DIRECT TENSION (LBS.)	INSTALLATION TORQUE (LBS.—IN)	N-3566
5/8 " 1/2"	TOP OF SLAB/DECK UNDERSIDE OF DECK	4" 2"	3" 6"	14" 6"	2,837 1,190	720 480	OPM-0152-13 • 02%16/2016 • 05 CAL 108

- a.) WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE 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 SHEAR) 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:

<u>HYDRAULIC RAM METHOD:</u> THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. FOR WEDGE AND SLEEVE TYPE ANCHORS, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE. FOR ADHESIVE ANCHORS, WHERE OTHER THAN BOND IS BEING TESTED, THE DEVICE SHALL NOT RESTRICT THE CONCRETE SHEAR CONE TYPE FAILURE MECHANISM FROM OCCURING <u>TORQUE WRENCH METHOD</u>: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE OR SLEEVE TYPE: ONE-HALF (1/2) TURN OF THE NUT FOR 3/8" SLEEVE ANCHOR ONLY.

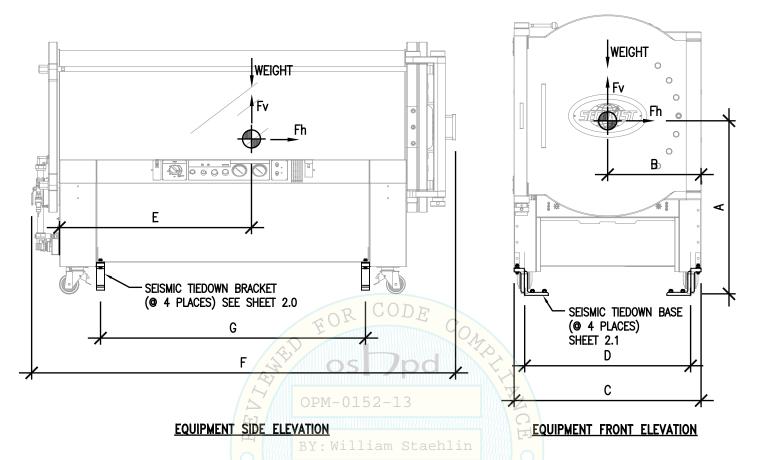
- d.) OWNER'S REPRESENTATIVE IS RESPONSIBLE FOR ALL ANCHOR TESTING.
- e.) ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE INSPECTOR OF RECORD AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY.

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 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 FOF POST INSTALLED ANCHORS.

SECHRIST - HYPERBARIC CHAMBERS Model nos.: 3200, 3300H(S), 3600H(S), 4100H(S)		JOSEPH L. LA BRIE Structural Engineer No. SE 3566	makeitright [™]
Title: GENERAL NOTES	DATE 02/16/15	PAGE GN-2	55 E. Huntington Dr., Suite 277 Arcadla, CA 91006 PHIN: (526) 445-0366 FAX: (526) 445-2947
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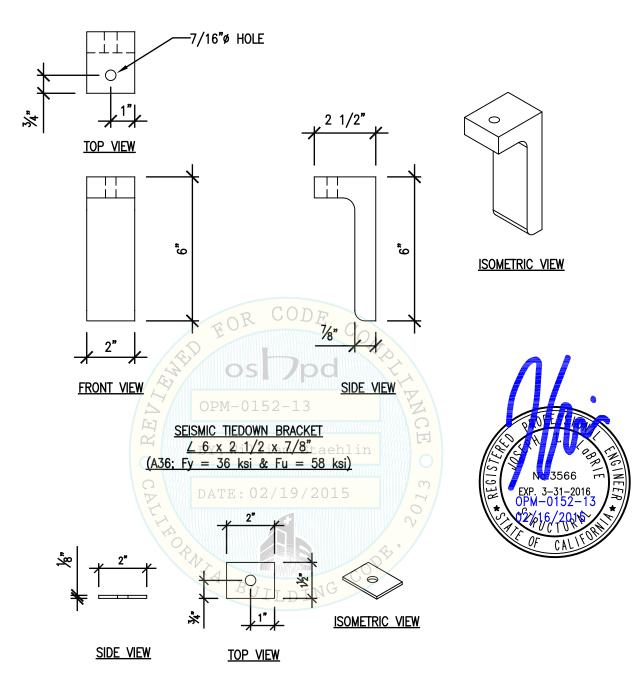


MODEL NO.	Equip. Weight (LBS.)	MAX. PATIENT WEIGHT (LBS.)	A (INCHES.)	B (INCHES.)	C (INCHES.)	D (INCHES.)	E (INCHES.)	F (INCHES.)	G (INCHES.)
3200	1,982	500	35*	21.5*	43*	38"	47*	105.5"	68.75"
3300H(S)	2,030	500	36.6*	22.25*	44.5 *	39.5"	48"	106"	66.25"
3600H(S)	2,220	700	38.8"	22.25*	44.5*	39.5"	48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



SECHRIST - HYPERBARIC CHAMBERS			
Model nos.: 3200, 3300H(S), 3600H(S), 4100H(S)	Scale: N.T.S.	JOSEPH L. LA BRIE Structural Engineer No. SE 3566	makeitright
Title: HYPERBARIC CHAMBER DIMENSIONS	DATE 02/16/15	PAGE 1.0	55 E. Huntington Dr., Suite 277 Arcadla, CA 91006 PHN: (526) 445-0366 FAX: (526) 445-2947

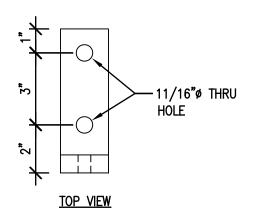


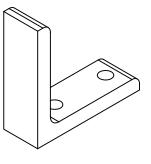


<u>SPACER</u> <u>1 1/2" x 2 x 1/8" (ASTM A108)</u>

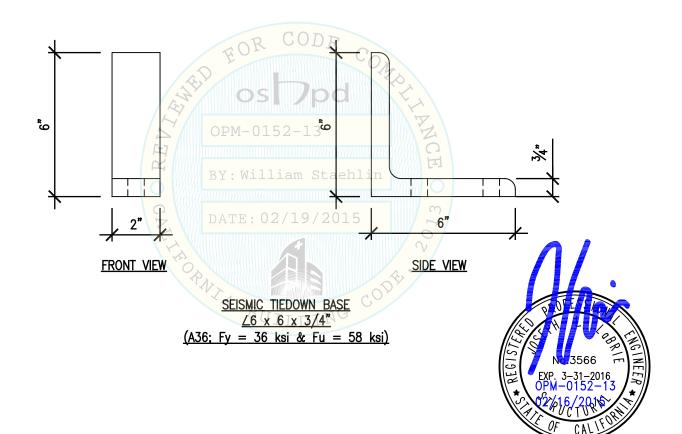
	PERBARIC CHAMBERS 3300H(S), 3600H(S), 4100H(S)		JOSEPH L. LA BRIE	
Title: SEISMIC TIEDOV	VN BRACKET & SPACER DETAIL	Scale: 3"=1'-0" DATE 02/16/15	No. SE 3566	hasheitnight bestel hulding design professionals 55 E.F.Hungton Dr., Suite 277 Arcadis, CA 91005 PHN: (626) 443-0365 FAX: (626) 445-2947
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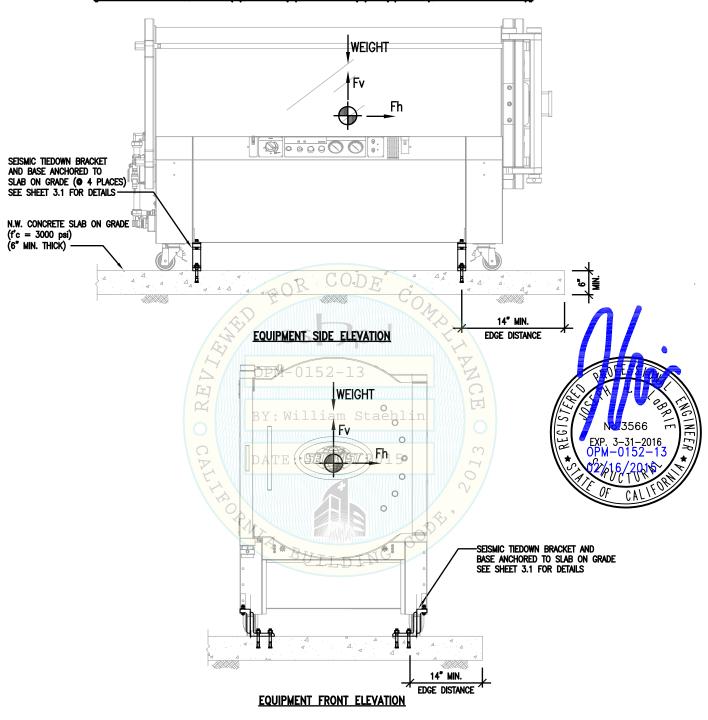


ISOMETRIC VIEW



SECHRIST - HYPERBARIC CHAMBERS Model nos.: 3200, 3300H(S), 3600H(S), 4100H(S)	Scale: 3"=1'-0"	JOSEPH L. LA BRIE Structural Engineer No. SE 3566	makeitright TM
Title: SEISMIC TIEDOWN BASE DETAIL	DATE 02/16/15	PAGE 2.1	55 E. Huntington Dr., Suite 277 Arcadle, CA 91006 PHN: (526) 445-0366 FAX: (526) 445-2947
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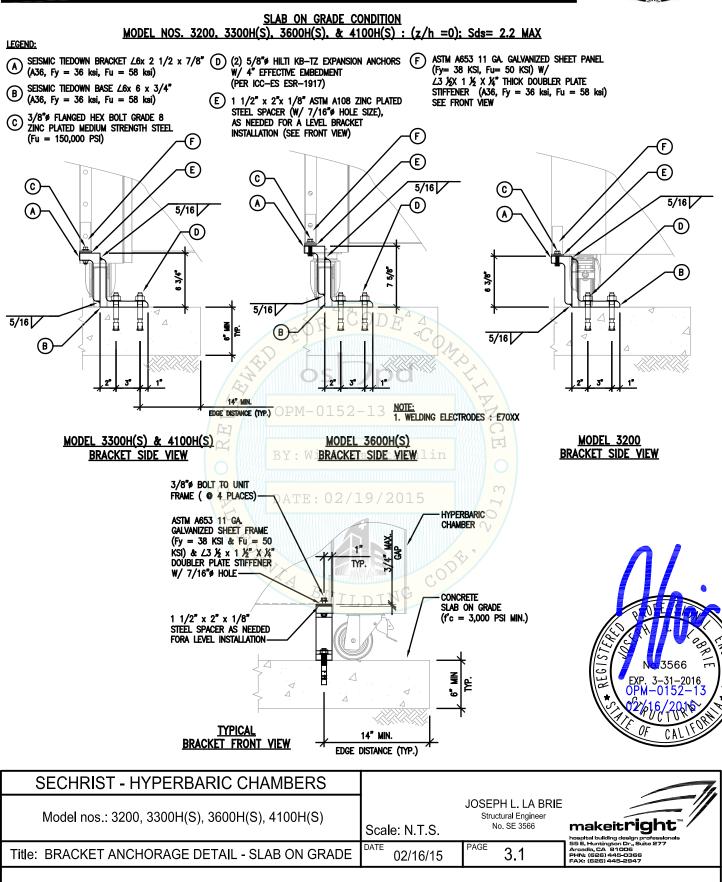




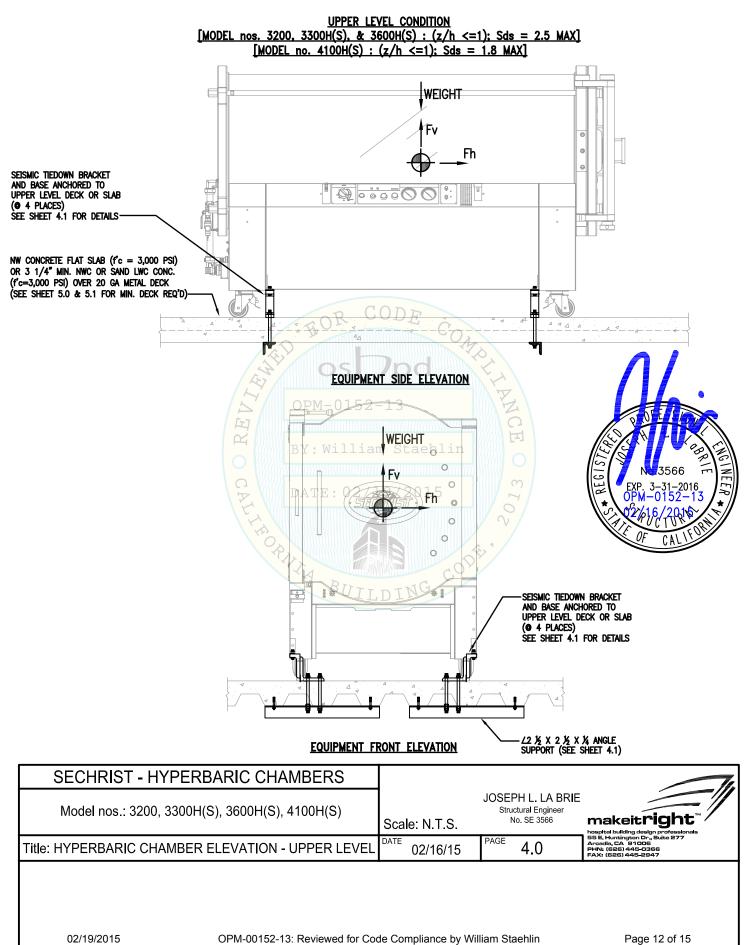
<u>SLAB ON GRADE CONDITION</u> [MODEL Nos. 3200, 3300H(S), 3600H(S), & 4100H(S) : (z/h =0); Sds = 2.2 MAX.)]

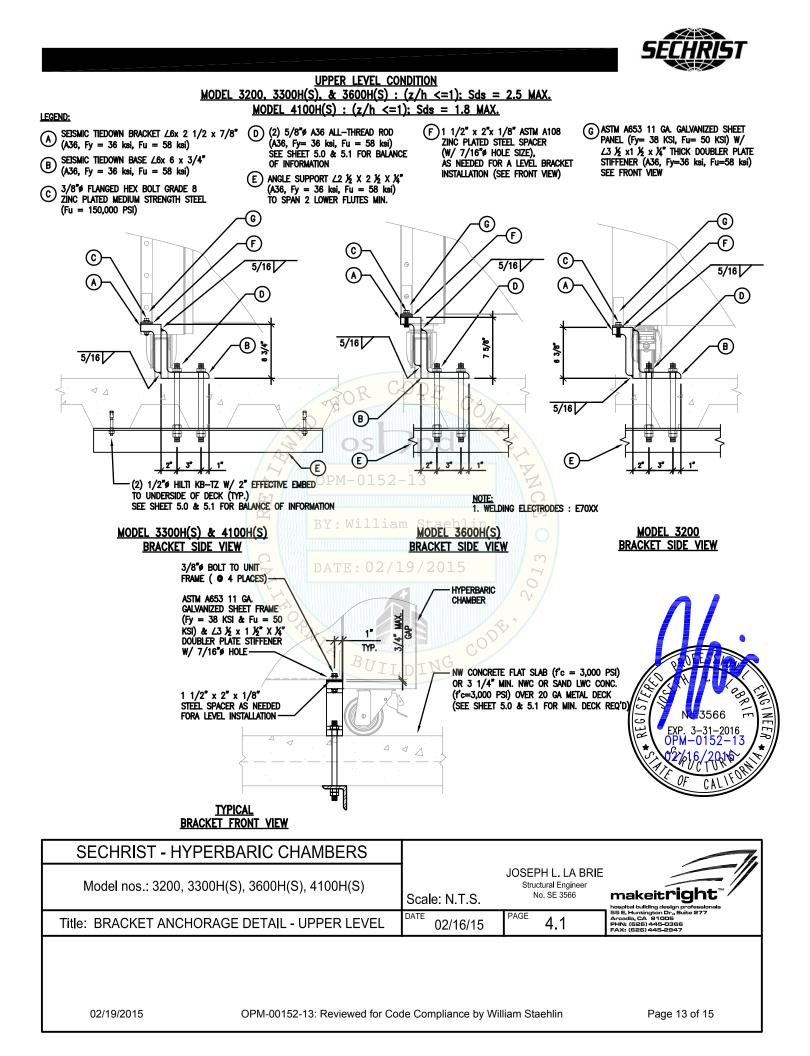
SECHRIST - HYPERBARIC CHAMBERS JOSEPH L. LA BRIE Model nos.: 3200, 3300H(S), 3600H(S), 4100H(S) Structural Engineer No. SE 3566 makeit**right** Scale: N.T.S. hospital building design p 55 E. Huntington Dr., Su Arcadia, CA 91006 PHN: (626) 445-0366 FAX: (626) 445-2947 PAGE DATE Title: HYPERBARIC CHAMBER ELEVATION-SLAB on GRADE 3.0 02/16/15 02/19/2015 OPM-00152-13: Reviewed for Code Compliance by William Staehlin Page 10 of 15

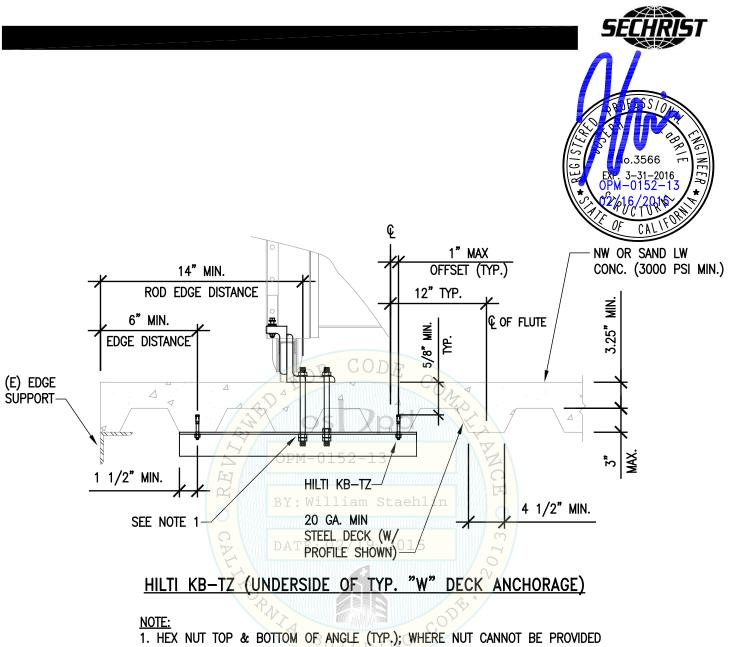






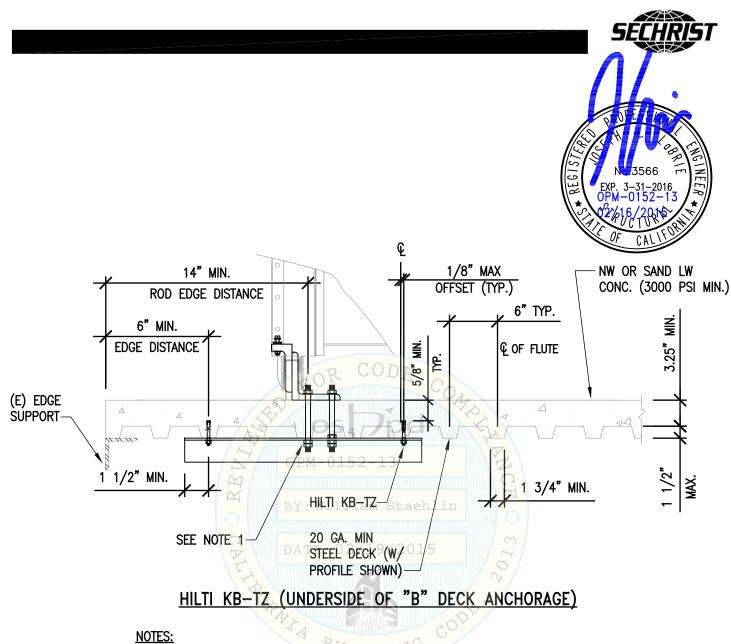






AT TOP SIDE OF ANGLE, PROVIDE TAPPED HOLE THROUGH ANGLE OR DOUBLE NUTS BELOW ANGLE W/ TOP NUT WELDED TO UNDERSIDE OF ANGLE.

SECHRIST - HYPERBARIC CHAMBERS Model nos.: 3200, 3300H(S), 3600H(S), 4100H(S)	Scale: N.T.S.	JOSEPH L. LA BRIE Structural Engineer No. SE 3566	makeitright [™]
Title: CONCRETE OVER METAL DECK REQUIREMENTS	DATE 02/16/15	PAGE 5.0	55 E. Huntington Dr., Suite 277 Arcadla, CA 91006 PHN: (526) 445-0366 FAX: (526) 445-2947
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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.

SECHRIST - HYPERBARIC CHAMBERS Model nos.: 3200, 3300H(S), 3600H(S), 4100H(S)	Scale: N.T.S.	JOSEPH L. LA BRIE Structural Engineer No. SE 3566	makeitright [™]
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