

APPLICATION FOR OSHPD PREAPPROVAL

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT **FACILITIES DEVELOPMENT DIVISION**

OFFICE USE ONLY

OF MANUFACTURER'S CERTIFICATION (OPM) APPLICATION #: OPM-0439-13							
OSHPD Preapproval of Manufacturer's Certification (OPM)							
Type: ☐ New ☐ Renewal ☐ Update to Pre-CBC 2013 OPA Number:							
Manufacturer Information							
Manufacturer: Medisafe							
Manufacturer's Technical Representative: Neil May							
Mailing Address: Twyford Road, Bishop's Stortford, Hertordshire CM23 3LJ, UK							
Telephone: +44(0)1279 461641 Email: nmay@medisafeinternational.com							
Product Information OS TOP							
Product Name: InnoWave PCF, InnoWave Ultra+ with cabinet, InnoWave PRO							
Product Type: Washer / Sterilizer OPM-0439-13							
Product Model Number:IW PCF, IW ULTRAPLCAB, IW PRO60=hlin							
General Description: The sonic washer and sterilizer series (PRO60, PCF, SISA) named and numbered under							
the Steris InnoWave (IW) brand for the American market. Models are identical to Medisafe counterparts							
except for label color (for instance IW PRO60 = MED11180).							
Applicant Information							
Applicant Company Name: ISAT Seismic Bracing							
Contact Person: William V Joerger							
Mailing Address: 1020 Crews Road, Suite Q, Matthews NC 28105							
Telephone: 510-714-0216 Email: wvjoerger@isatsb.com							
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.							
Signature of Applicant: Date: 27 July, 2017							
Title: Principal Structural Engineer Company Name: ISAT Seismic Bracing							

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







OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT **FACILITIES DEVELOPMENT DIVISION**

Registered Design Professional Preparing Engineering Recommendations								
Company Name: ISAT Seismic Bracing								
Name: William V Joerger California License Number: SE4545								
Mailing Address: 1020 Crews Rd, Matthews NC 28105								
Telephone: 510-714-0216 Email: wvjoerger@isatsb.com								
OSHPD Special Seismic Certification Preapproval (OSP)								
 □ Special Seismic Certification is preapproved under OSP- (Separate application for OSP is required) □ Special Seismic Certification is not preapproved 								
Certification Method(s)								
 ☐ Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950-16 ☐ Other* (Please Specify): Equipment is considered to be rugged. OPM is for anchorage to concrete slabs. 								
OPM-0439-13								
*Use of criteria other than those adopted by the California Building Standards Code, 2016 (CBSC 2016) 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 2016 may be used when approved by OSHPD prior to testing. Analysis DATE: 11/07/2017								
☐ Experience Data								
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 2016 & ALL PRE-2016 CODE BASED PROJECTS								
Signature: Date: 11-07-2017								
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"





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APPLICATION TECHNOLOGY

A Division of Tomarco Contractor Specialties

Submittal Documents

OPM-0439-13

OSHPD OPM-0439-13

By: William Staehlin

SUPPORT AND ATTACHMENT CONSTRUCTION DRAWINGS

WASHERS AND STERILIZERS

STERIS

ISAT 1020 Crews Road Suite Q Matthews, N.C. 28105 704-841-4080

"Empowered by Experience"

REV2

OSHPD OPM-0439-13 DWG - i

FILE NO.: CLT-0617-075



OSHPD OPM-0439-13

STERIS

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OSHPD OPM-0439-13

MANUFACTURE: MEDISAFE

EQUIPMENT TYPE: WASHERS / STERILIZERS

GENERAL NOTES:

- 1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2016. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2016.
- 2. SEISMIC CRITERIA USED: $S_{DS} = 2.5$ $I_P = 1.5$ ap = 1.0 Rp = 1.5 (OTHER EQUIPMENT). FOR z/h = 0 FpH = 1.13 AND FOR $z/h \le 1.0$ FpH = 3.00 AND FpV = 0.50.
- 3. SUPPORT AND ATTACHMENT FORCES ARE DETERMINED USING ASCE 7-10 CHAPTER 13 "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". AN OVERSTRENGTH FACTOR Ω_0 = 1.5 IS USED FOR CONCRETE MATERIALS PER ASCE 7-10 SUPPLEMENT 1 TABLE 13.6-1. LOADS SHOWN ARE STRENGTH DESIGN LOADS PER CBC 2016 SECTION 1605A.2.
- 4. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
- 5. STEEL MATERIALS: PLATE 10600 (304-2B-6) STAINLESS STEEL BY MANUFACTURER (Fy = 31.2 KSI), ALL THREAD ROD ASTM F593 CW1 304 STAINLESS STEEL FOR BOLTS AT ELEVATED FLOORS, ANGLE ASTM A36 (Fu = 58 KSI) HOT DIPPED GALVANIZED.
- 6. CONCRETE SLABS:
 - a. FOR ELEVATED SOLID CONCRETE SLABS: 6" THICKNESS OF NORMAL WEIGHT CONCRETE WITH 3000 PSI MINIMUM STRENGTH.
 b. METAL DECK: 3" DEEP COMPOSITE STEEL DECK, 20 GAGE MINIMUM, 4 1/2 INCH MINIMUM BOTTOM FLUTE WIDTH AND
 MINIMUM FLUTE SPACING OF 12", WITH 3 1/4 INCH SAND LIGHT WEIGHT CONCRETE CONCRETE COVER AT 3000 PSI MINIMUM
 c. FOR SLAB ON GRADE: 6" THICKNESS NORMAL WEIGHT CONCRETE AT 3000 PSI MINIMUM STRENGTH.
- 7. POST-INSTALLED CONCRETE ANCHORS FOR SLAB ON GRADE: HILTI HIT-HY 200 HAS-R (ESR-3187) STAINLESS STEEL 1/2" DIAMETER WITH 3" EMBEDMENT. DRILL 9/16" DIAMETER x 4 INCH DEEP HOLE; CLEAN HOLE PER MANUFACTURER'S INSTRUCTIONS. FOR ANCHORS INTO THE SOFFITT OF THE METAL DECK USE KWIK BOLT TZ (ESR-1917) 1/2" DIAMETER x 4" MIN. HOLE DEPTH FOR 3 1/4" EFFECTIVE EMBEDMENT WITH 1" MAXIMUM OFFSET FROM THE CENTER OF THE METAL DECK FLUTE. BOTH ARE SUPPLIED BY INSTALLATION CONTRACTOR.

8. EXCERCISE DUE CARE WHEN DRILLING POST-INSTALLED ANCHORS TO AVOID DAMAGING CONCRETE REINFORCEMENT OR TENDONS.

11/05/0015

DATE: 11/07/2017

OPM-0439-13 STERIS WASHERS / STERILIZERS GENERAL NOTES

A Division of Tomarco Contractor Specialties International Seismic Application Technology 1020 Crews Road, Suite Q, Matthews, NC 28105 704-841-4080 www.isatsb.com

S4545 EXP. 06/30/2018 **DRAWN BY:** WVJ **DATE:** 07/24/17

REVISED BY: WVJ DATE: 10/26/17 REV NO: 2

SCALE SCALE

SCALE PAGE N.T.S. GEN NOTES

OSHPD OPM-0439-13

MANUFACTURE: MEDISAFE

EQUIPMENT TYPE: WASHERS / STERILIZERS

ATTACHMENT NOTES:

- 1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2016. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2016.
- 2. PERIODIC SPECIAL INSPECTION PER CBC 2016 SECTION 1705A AND TABLE 1705A.3 INCLUDING VERIFICATION OF ANCHOR TYPE, ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, ANCHOR SPACING, EDGE DISTANCES, CONCRETE MEMBER THICKNESS, HOLE DIMENSIONS, ANCHOR EMBEDMENT AND ADHERENCE TO THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. IN ADDITION, FOLLOW THE PROVISIONS OF THE 2016 CALIFONIA BUILDING CODE SECTION 1910A.5.5. FOR ADHESIVE ANCHORS TENSION TESTING BY THE HYDRAULIC RAM METHOD SHALL USE A TENSION FORCE OF 2500 POUNDS. TENSION TESTING SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR. TORQUE CONTROLLED POSTINSTALLED ANCHORS TEST USING A CALIBRATED TORQUE WRENCH; 40 FOOT-POUNDS TORQUE SHALL BE ACHIEVED WITHIN ONEHALF TURN OF THE NUT. TEST 50% OF THE ANCHORS FOR EACH PIECE OF EQUIPMENT. IF ANY ANCHOR FAILS TEST ALL ANCHORS. REPORT OF TEST RESULTS ARE TO BE SUBMITTED TO THE ENFORCEMENT AGENGY. THE SEOR SHALL PROVIDE REMEDIAL ANCHORAGE DETAILS IN THE EVENT THAT AN ANCHOR FAILS TO MEET THE TEST REQUIREMENTS. FOR THROUGH BOLTS MARK THE NUT LOCATION AT SNUG TIGHT CONDITION. INSPECTOR IS TO VERIFY 3/4 TURN.
- 3. STRENGTH DESIGN WAS USED FOR ANCHOR FORCE CALCULATIONS INCLUDING Ω_0 PER ACI 318-14 WHERE REQUIRED FOR ATTACHMENT TO CONCRETE.
- 4. PROVIDE FOR FULL THREAD ENGAGEMENT OF THE NUT AND WASHER.

RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD

- 1. CONFIRM THE MATERIAL PROPERTIES AND THICKNESS OF THE CONCRETE SLAB TO WHICH THE EQUIPMENT IS ATTACHED MEETS THE REQUIREMENTS OF THIS OPM.
- 2. PROVIDE A PLAN FOR INSPECTION OF SUPPORTS AND ATTACHMENTS AND VERIFY ITS IMPLEMENTATION.
- 3. CONFIRM THE SPECIFIED MINIMUM CONCRETE EDGE DISTANCES ARE MAINTAINED BASED ON THE ACTUAL EQUIPMENT LOCATION. VERIFY THAT EXISTING OR NEW ANCHORS ARE AN ADEQUATE DISTANCE FROM THIS UNIT'S ATTACHMENT.
- 4. VERIFY THAT THE EXISITING STRUCTURE IS ADEQUATE FOR THE IMPOSED DEAD, LATERAL AND TENSION FORCES SHOWN IN ADDITION TO ALL OTHER LOADS.
- 5. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH CBC 2016 AND WITH THE OPM-0439-13 DETAILS INCLUDING MATERIALS AND DIMENSIONS OF THE SUPPORT WHERE THE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN.
- 6. VERIFY THAT THE PROJECT SPECIFIC S_{DS} AND z/h VALUES RESULT IN SEISMIC FORCES (ED AND EV) DO NOT EXCEED THE VALUES SHOWN IN THESE DETAILS.

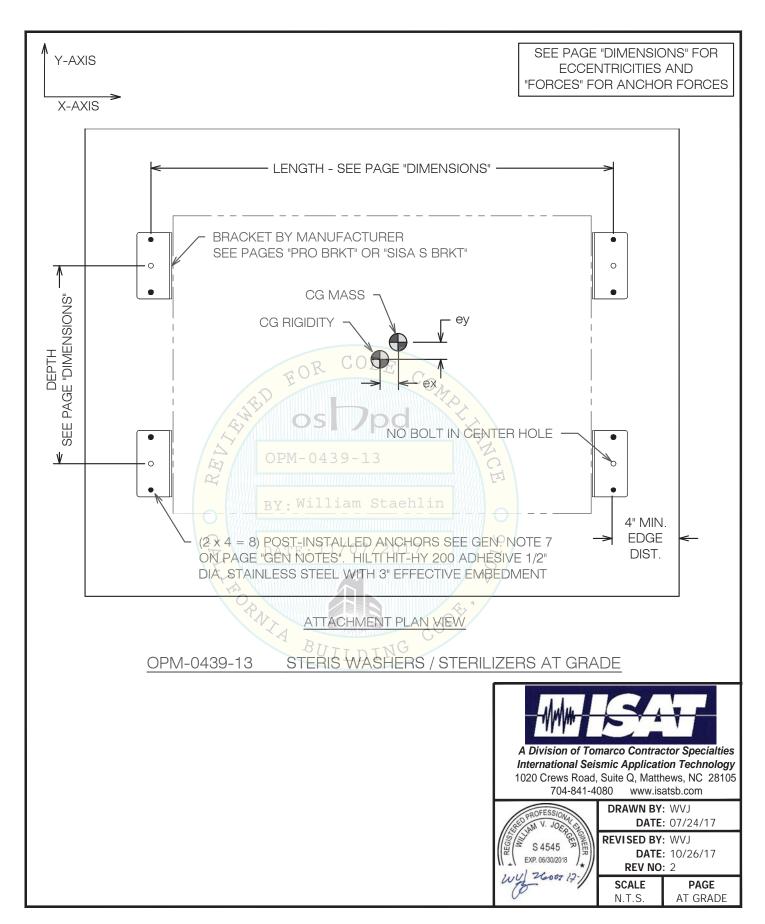
OPM-0439-13 STERIS WASHERS / STERILIZERS ATTACHMENT NOTES

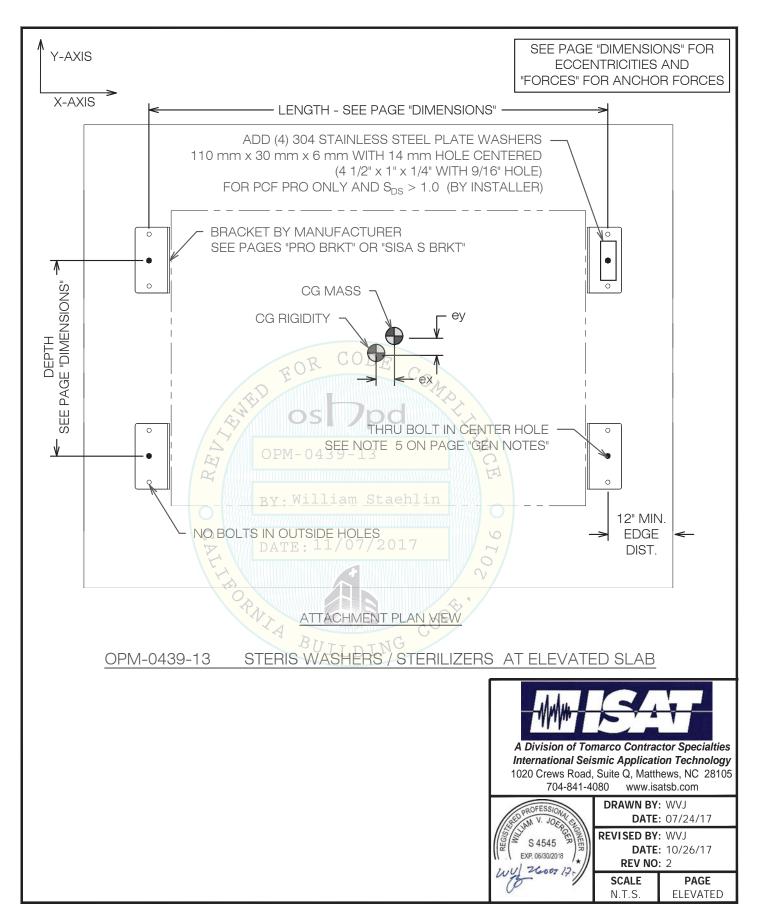


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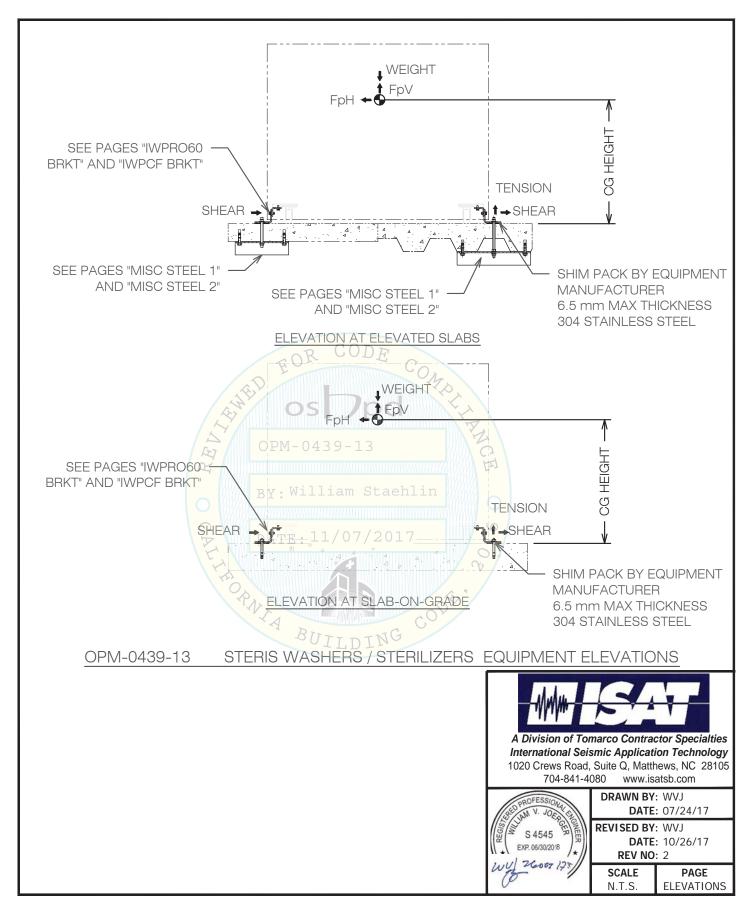
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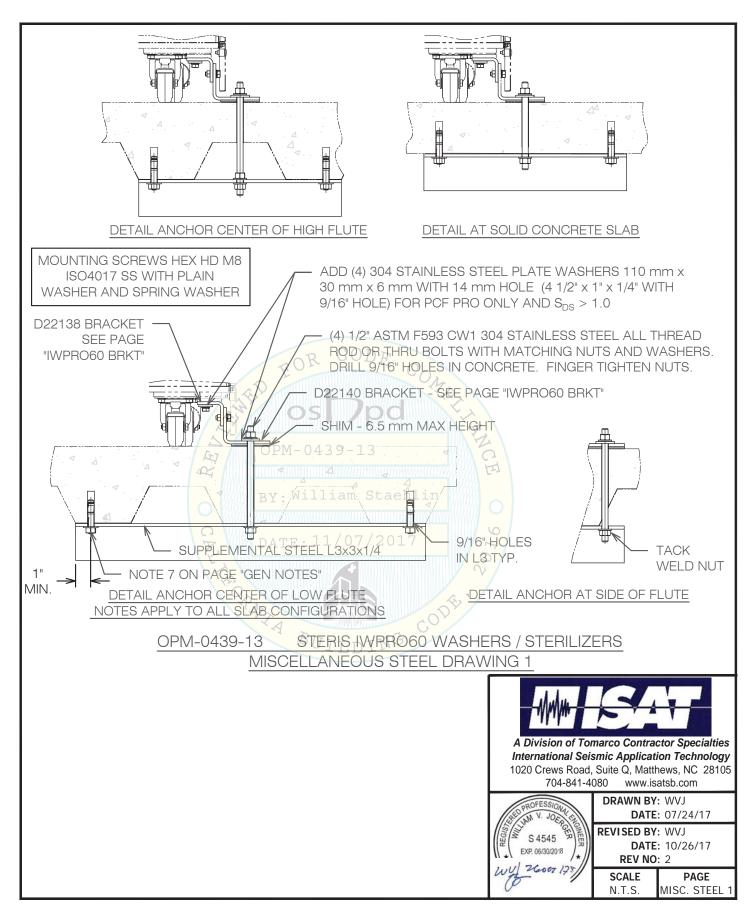


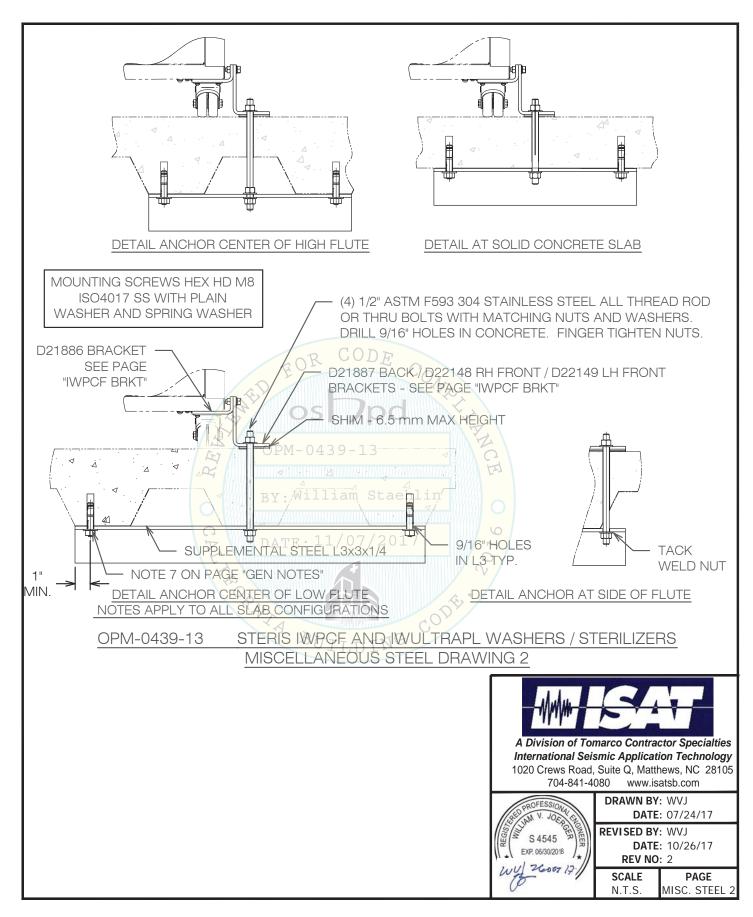


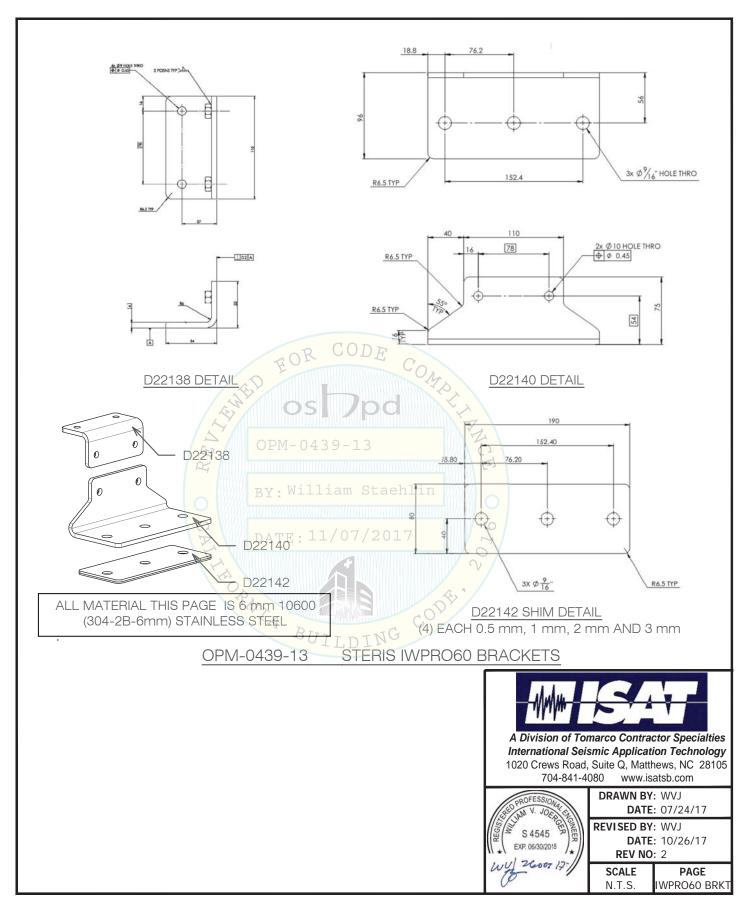
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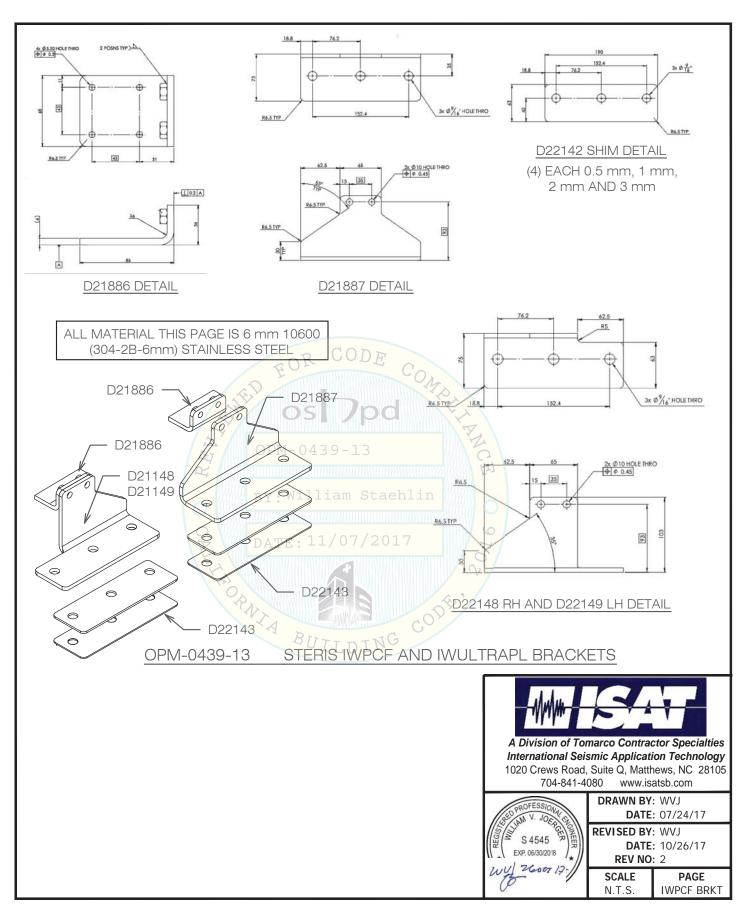
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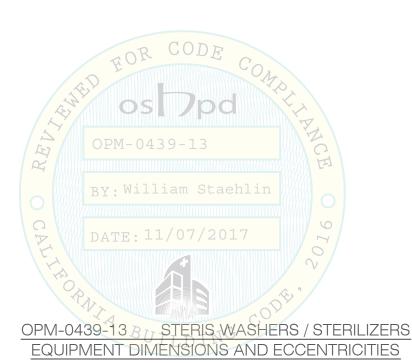




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STERIS WASHERS / STERILERS									
Equipment Data				Anchor Dimensions		Equipment Eccentricies			
Model Series	Max. Water Fill	Lid	Weight	Length (in)	Depth (in)	ex (in)	ey (in)	ez (in)	
IWPCF	NO		314.12	37.4	19.45	0.00	0.00	22.55	
IWPCF	YES		417.56	37.4	19.45	0.12	0.11	24.61	
IWULTAPL	NO		149.12	32.32	13.94	0.00	0.00	25.34	
IWULTAPL	YES		200.9	32.32	13.94	0.35	0.21	27.07	
IWPRO60	NO	UP	973.87	51.97	25.59	0.00	0.00	27.46	
IWPRO60	NO	DOWN	973.87	51.97	25.59	0.00	0.00	23.16	
IWPRO60	YES	DOWN	1353.6	51.97	25.59	0.38	0.25	24.33	





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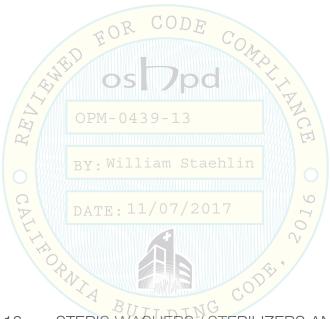
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SCALE PAGE N.T.S. DIMENSIONS

STERIS WASHERS / STERILIZERS							
Equipment Data			Seismic Design	Forces at Grade	Seismic Design Forces at Elevated		
Model Series	Max. Water Fill	Lid	Weight	Vu (lbs.)	Tu (lbs.)	Vu (lbs.)	Tu (lbs.)
IWPCF	NO		314.12	66	150	353	584
IWPCF	YES		417.56	89	220	473	852
IWULTAPL	NO		149.12	31	113	168	428
IWULTAPL	YES		200.9	44	164	230	616
IWPRO60	NO	UP	973.87	205	418	1,096	1,650
IWPRO60	NO	DOWN	973.87	205	341	1,096	1,376
IWPRO60	YES	DOWN	1353.6	294	508	1,544	2,022

- 1. WEIGHTS AND MOMENTS ARE FACTORED LOADS USING STRENGTH DESIGN AND INCLUDE THE FOLLOWING FACTORS: DL = 0.9, FpH AT GRADE = 1.13, FpH ELEVATED = 3.0 AND FpV = 0.5.
- 2. TABULATED FORCES ARE PER ANCHOR AT STRENGTH DESIGN LEVEL AND INCLUDE A CONCRETE OVERSTRENGTH FACTOR Ω_0 = 1.5.



OPM-0439-13 STERIS WASHERS / STERILIZERS ANCHORAGE FORCES



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