



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0445

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [] New [X] Renewal/Update

Manufacturer Information

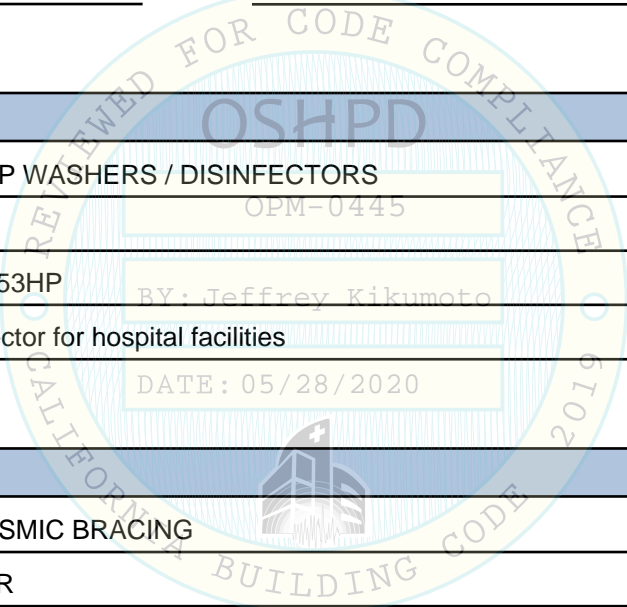
Manufacturer: Steris
Manufacturer's Technical Representative: Lloyd Dupuis
Mailing Address: 490 boul. Armand-Paris, Québec, QC G1C8A3
Telephone: (418) 664-1549 Email: Lloyd_Dupuis@steris.com

Product Information

Product Name: 7052 HP AND 7053HP WASHERS / DISINFECTORS
Product Type: Washer/Disinfector
Product Model Number: 7052HP, 7053HP
General Description: Washer/Disinfector for hospital facilities

Applicant Information

Applicant Company Name: ISAT SEISMIC BRACING
Contact Person: WILLIAM JOERGER
Mailing Address: 14848 Northam Street, La Mirada, CA 90638
Telephone: (714) 920-6066 Email: wvjoerger@isatsb.com
Title:



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

STATE OF CALIFORNIA- HEALTH AND HUMAN SERVICES AGENCY





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

Registered Design Professional Preparing Engineering Recommendations

Company Name: ISAT SEISMIC BRACING
Name: WILLIAM JOERGER California License Number: S4545
Mailing Address: 14848 Northam Street, La Mirada, CA 90638
Telephone: (714) 920-6066 Email: wvjoerger@isatsb.com

OSHPD Special Seismic Certification Preapproval (OSP)

Special Seismic Certification is preapproved under OSP OSP Number: _____

Certification Method

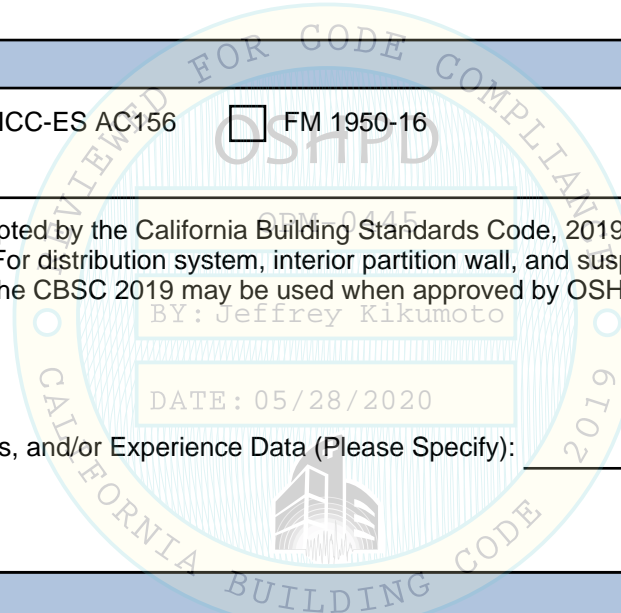
Testing in accordance with: ICC-ES AC156 FM 1950-16
 Other(s) (Please Specify): _____

*Use of criteria other than those adopted by the California Building Standards Code, 2019 (CBSC 2019) 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 2019 may be used when approved by OSHPD prior to testing.

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

OSHPD Approval

Date: 5/28/2020
Name: Jeffrey Kikumoto Title: Senior Structural Engineer
Condition of Approval (if applicable): _____





INTERNATIONAL SEISMIC APPLICATION TECHNOLOGY

A Division of Tomarco Contractor Specialties

Submittal Documents

OPM-0445

OSHPD OPM-0445

**CONSTRUCTION DRAWINGS
7052HP AND 7053HP
WASHERS / DISINFECTORS**

STERIS

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



WV 20 May 20

FILE NO.: CLT-0617-065

“Empowered by Experience”

CBC 2019 REV 1

OSHPD OPM-0445 DWG - i

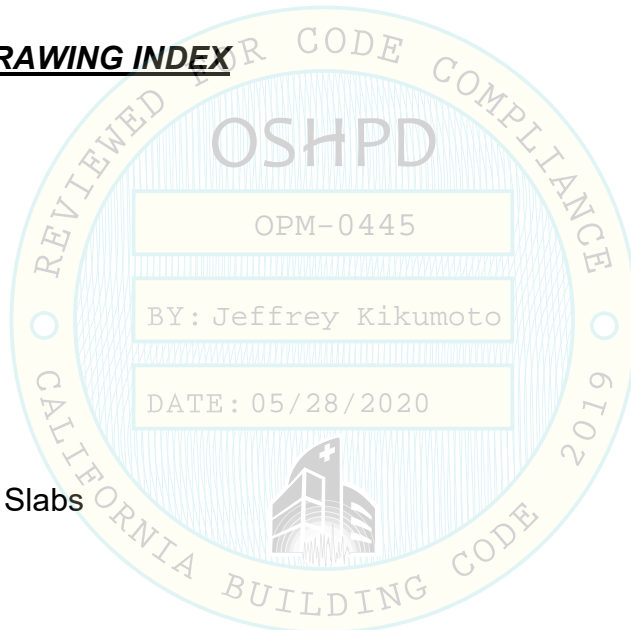


OSHPD OPM-0445

CONSTRUCTION DRAWING INDEX

CONSTRUCTION DRAWING INDEX

Cover Page	p i
Index Page	p ii
General Notes	p 1
Attachment Notes	p 2
Washers at Grade	p 3
Washers at Elevated Slabs	p 4
Miscellaneous Steel	p 5
Bracket	p 6



OSHPD OPM-0445

MANUFACTURE: STERIS

EQUIPMENT TYPE: WASHERS / DISINFECTORS


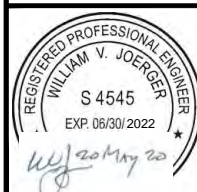
GENERAL NOTES:

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2019.
2. SEISMIC CRITERIA USED: $S_{DS} = 2.5$ $I_p = 1.5$ $a_p = 1.0$ $R_p = 1.5$ (OTHER EQUIPMENT). FOR $z/h = 0$ $F_pH = 1.13$ AND FOR $z/h \leq 1.0$ $F_pH = 3.00$ AND $F_pV = 0.50$.
3. SUPPORT AND ATTACHMENT FORCES ARE DETERMINED USING ASCE 7-16 CHAPTER 13 "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". AN OVERSTRENGTH FACTOR $\Omega_0 = 1.50$ IS USED FOR CONCRETE MATERIALS PER CBC SECTION 1617A.1.23. LOADS SHOWN ARE STRENGTH DESIGN LOADS.
4. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
5. STEEL MATERIALS: ANGLES AND PLATE ASTM A36, ALL THREAD ROD ASTM A193 B8 CLASS 2 (304 STAINLESS STEEL $F_u = 125$ KSI).
6. CONCRETE SLABS:
 - a. FOR ELEVATED SOLID CONCRETE SLABS: 6" THICKNESS OF NORMAL WEIGHT CONCRETE WITH 4000 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 4000 PSI MINIMUM STRENGTH.
 - c. FOR SLAB ON GRADE: 6" THICKNESS NORMAL WEIGHT CONCRETE AT 4000 PSI MINIMUM STRENGTH.
7. POST-INSTALLED CONCRETE ANCHORS: HILTI HIT HY-200 + HAS-R (EST-3187) 316 STAINLESS STEEL 3/4" DIAMETER x 5" HOLE DEPTH AND 4" MIN. EMBEDMENT; CLEAN HOLE PER MANUFACTURER'S INSTRUCTIONS. FOR ANCHORS INTO METAL DECK SOFFIT USE HILTI KWIK BOLT TZ (ESR-1917) 1/2" DIAMETER x 4" 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. THROUGH BOLTS SHALL BE TIGHTENED BY 3/4 TURN AFTER CONNECTED PLIES ARE IN FIRM CONTACT (SNUG TIGHT CONDITION).
9. EXERCISE DUE CARE WHEN DRILLING POST-INSTALLED ANCHORS TO AVOID DAMAGING CONCRETE REINFORCEMENT OR TENDONS.

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 EXISTING 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 2019 AND WITH THE OPM-0445-19 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 (E_h AND E_v) DO NOT EXCEED THE VALUES SHOWN IN THESE DETAILS.

OPM-0445 STERIS 7052HP AND 7053HP WASHERS / DISINFECTORS 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	
 <i>WVJ 20 May 20</i>	DRAWN BY: WVJ DATE: 09/16/17
	REVISED BY: WVJ DATE: 05/20/20 REV NO: 4
SCALE: N.T.S.	PAGE: GEN NOTES

OSHPD OPM-0445 DWG - 1

OSHPD OPM-0445

MANUFACTURE: STERIS

EQUIPMENT TYPE: WASHERS / DISINFECTORS

ATTACHMENT NOTES:

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2019.
2. PERIODIC SPECIAL INSPECTION PER CBC 2019 SECTIONS 1705A.3.8 AND 1905A 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 2019 CALIFORNIA BUILDING CODE SECTION 1910A.5.5 FOR ADHESIVE ANCHORS. TENSION TESTING BY THE HYDRAULIC RAM METHOD SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR; TENSION TEST LOAD = 7000 POUNDS. TEST 50% OF THE ANCHORS FOR EACH PIECE OF EQUIPMENT. IF ANY ANCHORS FAILS TEST ALL ANCHORS. TESTING AND SPECIAL INSPECTION OF EXPANSION ANCHORS SHALL BE PERFORMED BY THE FACILITY OWNER PER CBC 1704A AND 1910A.5 AND CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER AND ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE. 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.

Equipment Data		Anchor Dimensions		Seismic Design Forces at Grade				Seismic Design Forces at Elevated		
Model Series	Weight	Length (in)	Depth (in)	ex (in)	ey (in)	ez (in)	Vu (lbs.)	Tu (lbs.)	Vu (lbs.)	Tu (lbs.)
7052HP	1461	33.43	27.72	4.10	0.7	38.72	710	2,138	1,894	3,878
7053HP	1543	33.43	33.72	4.20	1.1	39.01	756	2,031	2,017	3,695

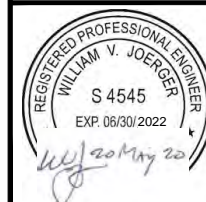
BY: Jeffrey Kikumoto

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 = 3.00 AND FpV = 0.5.
2. TABULATED FORCES ARE PER ANCHOR AT STRENGTH DESIGN LEVEL AND INCLUDE A CONCRETE OVERSTRENGTH FACTOR $\Omega_0 = 1.5$.

OPM-0445 STERIS 7052HP AND 7053HP
WASHERS / DISINFECTORS ATTACHMENT NOTES



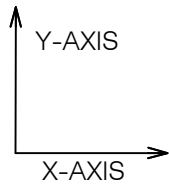
A Division of Tomarco Contractor Specialties
International Seismic Application Technology
1020 Crews Road, Suite Q, Matthews, NC 28105
704-841-4080 www.isatsb.com



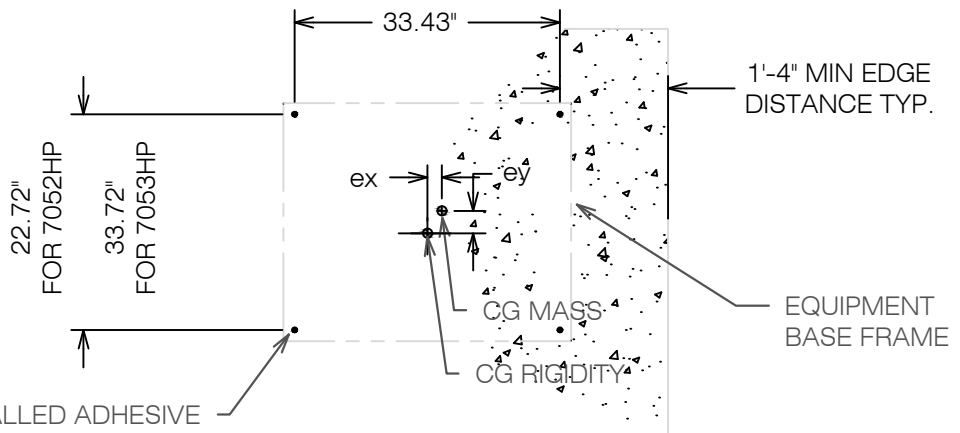
DRAWN BY: WVJ
DATE: 09/12/17
REVISED BY: WVJ
DATE: 05/20/20
REV NO: 4

SCALE N.T.S.	PAGE ATTACH NOTES
------------------------	-----------------------------

OSHPD OPM-0445 DWG - 2

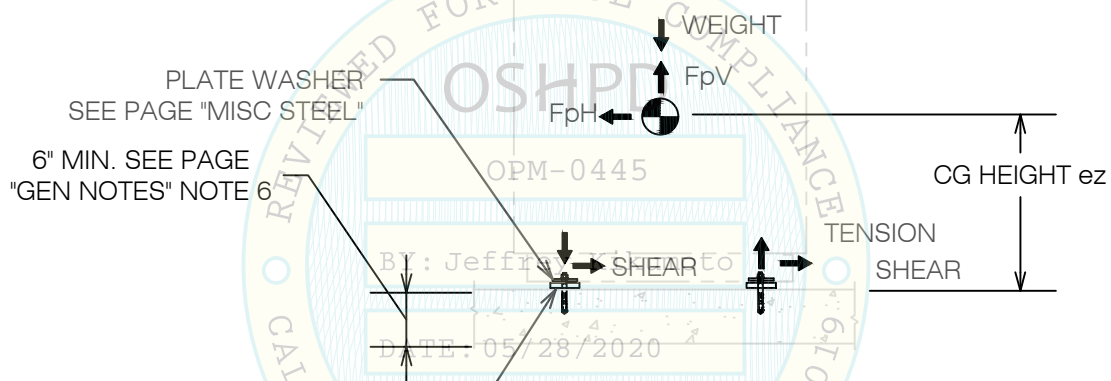


SEE DWG. "ATTACH NOTES" FOR DIMENSIONS, ECCENTRICITIES AND ANCHOR FORCES.



(4) POST-INSTALLED ADHESIVE ANCHORS SEE GEN. NOTE 5 ON PAGE "GEN NOTES". 3/4" HILTI HIT HY-200 + HAS-R 316 STEEL

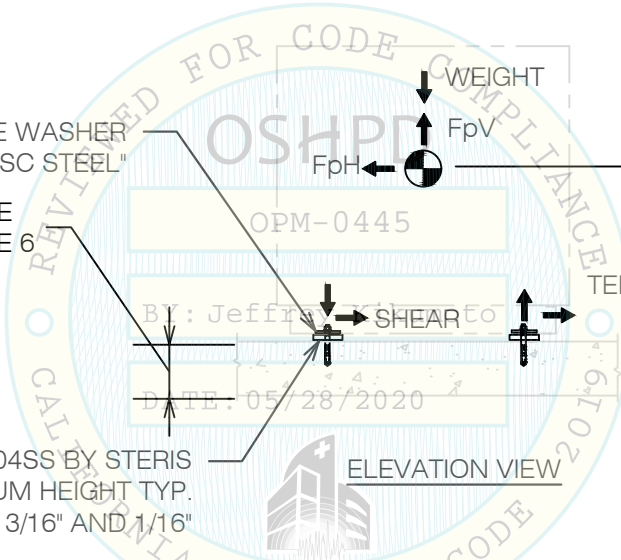
ATTACHMENT PLAN VIEW



SHIMS 2 1/2" OD 304SS BY STERIS 1" MAXIMUM HEIGHT TYP. THICKNESS VARIES 3/8", 3/16" AND 1/16"

ELEVATION VIEW

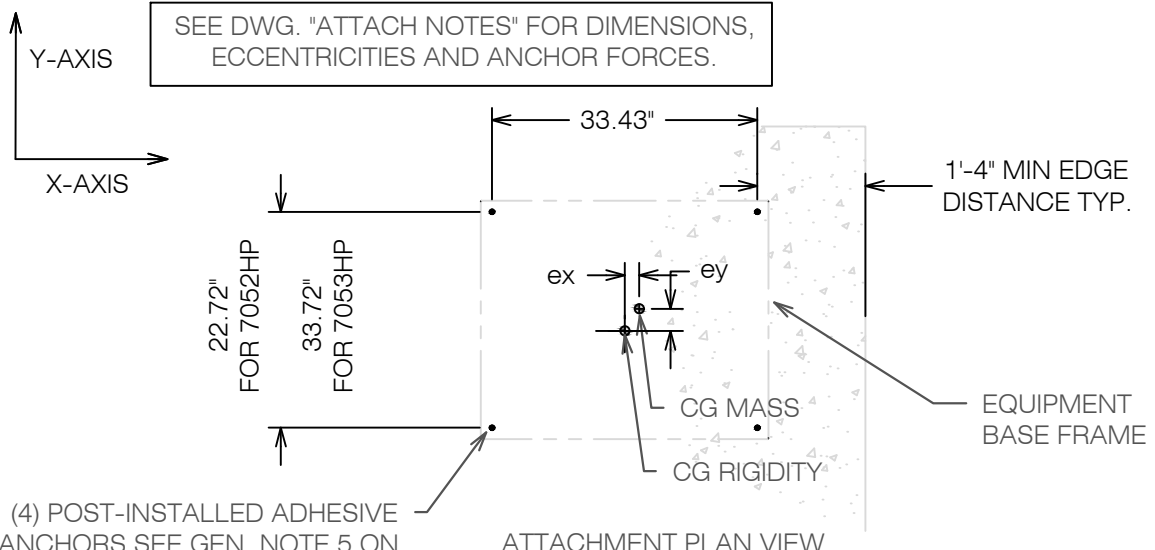
OPM-0445-19 STERIS 7052HP AND 7053HP WASHERS / DISINFECTORS AT GRADE



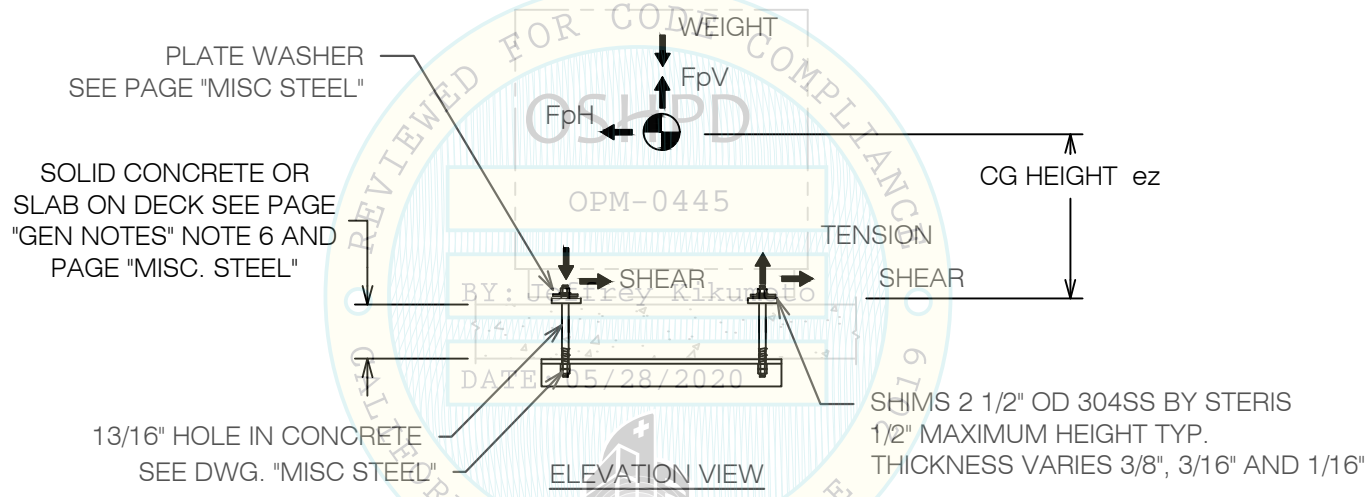


A Division of Tomarco Contractor Specialties International Seismic Application Technology
 1020 Crews Road, Suite Q, Matthews, NC 28105
 704-841-4080 www.isatsb.com

	DRAWN BY: WVJ	
	DATE: 09/12/17	
	REVISED BY: WVJ	
		DATE: 05/20/20
		REV NO: 4
SCALE N.T.S.	PAGE AT GRADE	



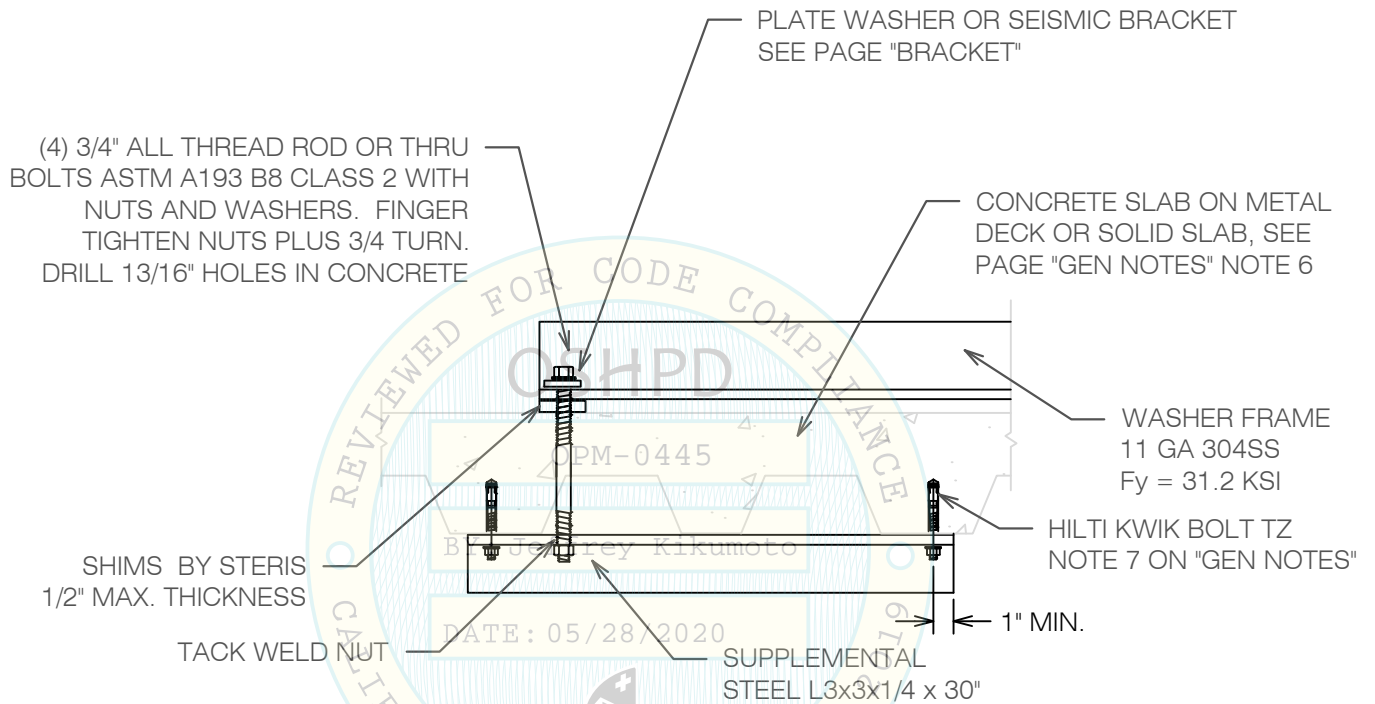
(4) POST-INSTALLED ADHESIVE ANCHORS SEE GEN. NOTE 5 ON PAGE "GEN NOTES". 3/4" HILTI HIT HY-200 + HAS-R 316 STEEL




OPM-0445-19 STERIS 7052HP AND 7053HP WASHERS / DISINFECTORS AT ELEVATED SLABS

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

	DRAWN BY: WVJ
	DATE: 09/12/17
	REvised BY: WVJ
	DATE: 058/20/20
	REV NO: 4
SCALE N.T.S.	PAGE ELEVATED



OPM-0445-19 STERIS 7052HP AND 7053HP
 WASHERS / DISINFECTORS MISCELLANEOUS STEEL



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

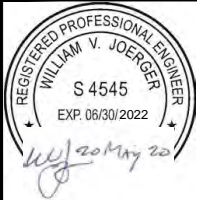
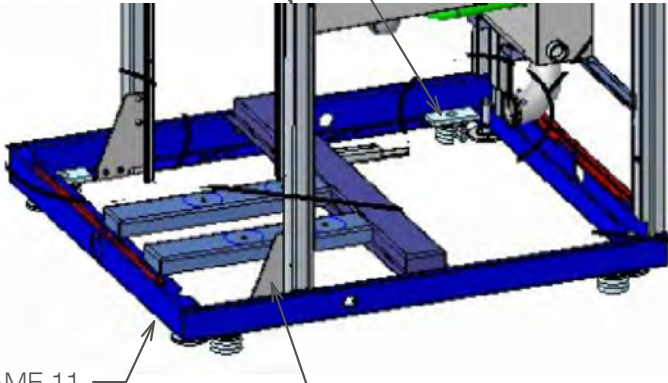
	DRAWN BY: WVJ	
	DATE: 09/12/17	
	REvised BY: WVJ	
		DATE: 05/20/20
		REV NO: 4
SCALE N.T.S.	PAGE MISC. STEEL	

PLATE WASHER BY STERIS (2) PLACES

VERTICAL 14 GA 304 SS

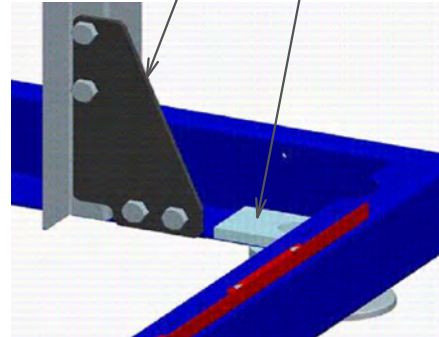


FRAME 11 GA 304 SS

SEISMIC BRACKET BY STERIS (2) PLACES WITH 10 mm 304 SS BOLTS

SEISMIC BRACKET BY STERIS (2) PLACES

PLATE WASHER BY STERIS (2) PLACES



LOCATION DETAIL FOR PLATE WASHERS AND SEISMIC BRACKETS

PLATE WASHER BY STERIS 304 STAINLESS STEEL 2" x 4" x 3/8" THICK WITH 13/16" HOLE

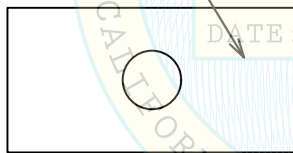
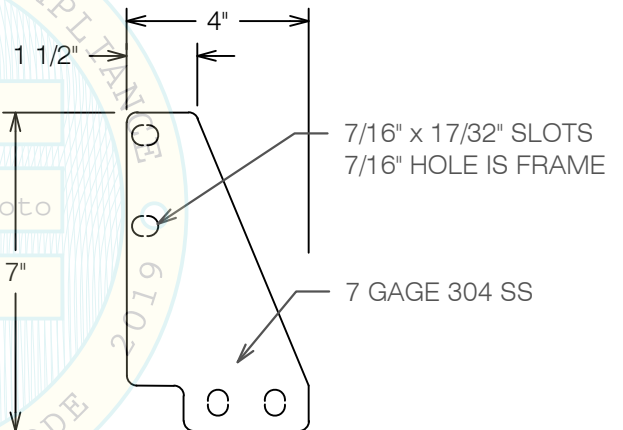
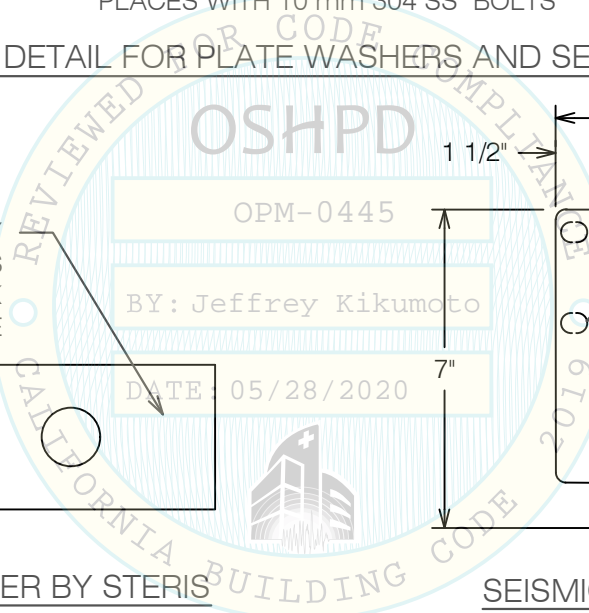


PLATE WASHER BY STERIS (4 TOTAL)



SEISMIC BRACKET BY STERIS



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

	DRAWN BY: WVJ DATE: 09/12/17
	REVISED BY: WVJ DATE: 05/20/20 REV NO: 2
	SCALE: N.T.S. PAGE: BRACKET