



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0487

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [] New [X] Renewal/Update

Manufacturer Information

Manufacturer: Steris

Manufacturer's Technical Representative: James Everette

Mailing Address: 6100 Heisley Road, Mentor, OH 44060

Telephone: (440) 392-7966 Email: james_everett@steris.com

Product Information

Product Name: REPROCESSING SINK

Product Type: Reprocessing Sink

Product Model Number: 50120, 50106, 30120, 30106, 5097, 5096, 5077, 3097, 3096, 3077

General Description: Adjustable and Fix Height Reprocessing Sink

Applicant Information

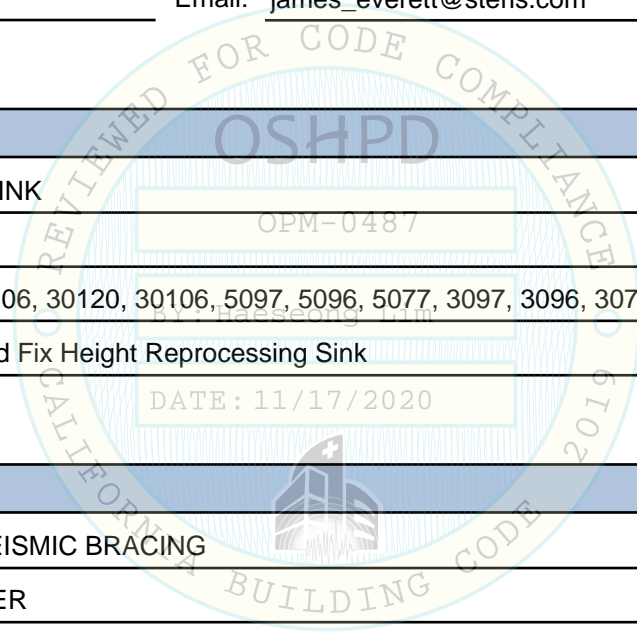
Applicant Company Name: ISAT SEISMIC BRACING

Contact Person: WILLIAM JOERGER

Mailing Address: 14848 Northam Street, La Mirada, CA 90638

Telephone: (714) 920-6066 Email: wvjoerger@isatsb.com

Title:





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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

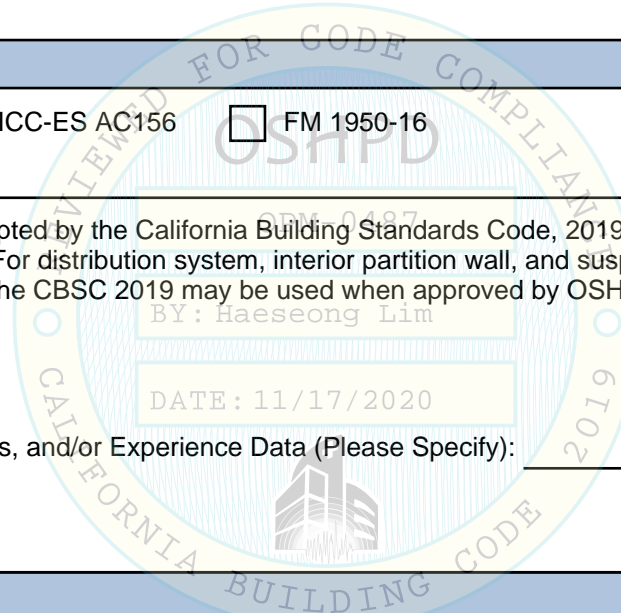
Testing in accordance with: ICC-ES AC156 FM 1950-16
 Other(s) (Please Specify): _____

*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: 11/18/2020
Name: Haeseong Lim Title: Senior Structural Engineer
Condition of Approval (if applicable): _____





TOTAL SUPPORT

Innovation • Engineering • BIM • Fabrication

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Submittal Documents

OPM-0487

OSHPD OPM-0487

INSTALLATION DRAWINGS

REPROCESSING SINKS

STERIS

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



WVJ 230020

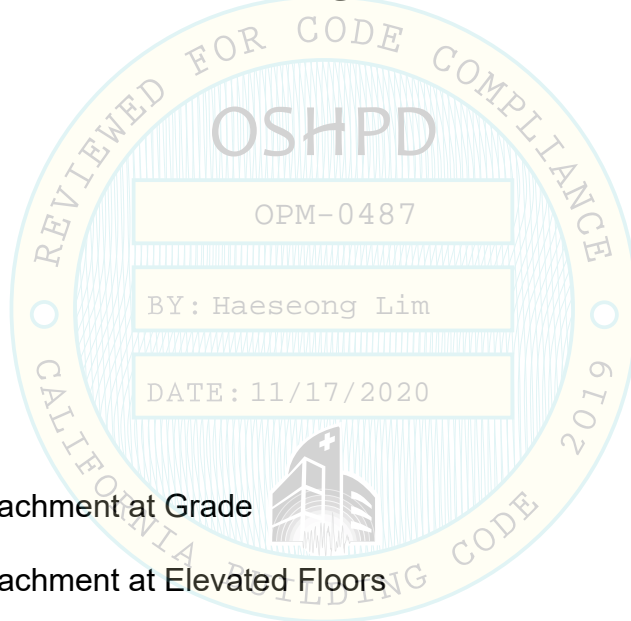


OSHPD OPM-0487

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OSHPD OPM-0487

MANUFACTURE: STERIS


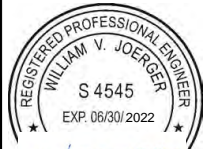
EQUIPMENT TYPE: REPROCESSING SINK

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: $S_{DS} = 2.50$, $I_p = 1.5$, $a_p = 1.0$, $R_p = 2.5$. FOR $z/h = 0$ $F_{pH} = 1.13$ AND FOR $z/h \leq 1.0$ $F_{pH} = 1.80$ AND $F_{pV} = 0.50$. SEE PAGE "DIM & FORCES".
3. SUPPORT AND ATTACHMENT FORCES ARE DETERMINED USING ASCE 7-16 CHAPTER 13 "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". AN OVERSTRENGTH FACTOR $\Omega_0 = 2.0$ IS USED FOR CONCRETE MATERIALS PER ASCE 7-16 TABLE 13.6-1. LOADS SHOWN ARE STRENGTH DESIGN LOADS PER ASCE 7-16 SECTION 12.4.3.2.
4. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
5. STEEL MATERIALS: BRACKET AISI TYPE 304 STAINLESS STEEL ($F_y = 31.2$ KSI) AND THROUGH BOLTS ASTM F593C ($F_u = 100$ KSI AND $F_y = 60$ KSI) OR A193 B8 ($F_u = 75$ KSI AND $F_y = 30$ 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
 - c. FOR SLAB ON GRADE: 6" THICKNESS NORMAL WEIGHT CONCRETE AT 3000 PSI MINIMUM STRENGTH.
7. POST-INSTALLED CONCRETE ANCHORS: HILTI HIT-HY 200 + HAS-R 316 (ESR-3187) STAINLESS STEEL 1/2" DIAMETER x 3" MIN. HOLE DEPTH FOR 2 3/4" EFFECTIVE EMBEDMENT FOR SLAB ON GRADE AND 4" MIN. HOLE DEPTH FOR 3 3/4" EFFECTIVE EMBEDMENT FOR SOLID ELEVATED SLABS SUPPLIED BY INSTALLATION CONTRACTOR. FOR POST INSTALLED ANCHORS IN THE SOFFITT OF METAL DECK SLABS USE HILTI TZ (ESR-1917) 0.50" x 3.25" EFFECTIVE EMBEDMENT WITH 40 FT-LBS INSTALLATION TORQUE.
8. EXERCISE DUE CARE WHEN DRILLING POST-INSTALLED ANCHORS TO AVOID DAMAGING CONCRETE REINFORCEMENT OR TENDONS.



OPM-0487 STERIS REPROCESSING SINKS GENERAL NOTES

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SCALE N.T.S.	PAGE GEN NOTES

OSHPD OPM-0487

MANUFACTURE: STERIS

EQUIPMENT TYPE: REPROCESSING SINKS


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 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 2019 CALIFORNIA BUILDING CODE SECTION 1910A.5.5 FOR ADHESIVE ANCHORS. TENSION TESTING BY HYDRAULIC RAM METHOD SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR; TENSION TEST LOAD = 3150 POUNDS. TEST 50% OF THE ANCHORS FOR EACH PIECE OF EQUIPMENT. IF ANY ANCHOR FAILS TEST ALL ANCHORS. TESTING AND 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 FROM THE SNUG TIGHT CONDITION.
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 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-0487 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-0487 STERIS REPROCESSING SINKS ATTACHMENT NOTES



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BASE SUPPORT BY STERIS PART NO. 1010636
 MAT'L 0.25" 304 SS (Fy = 31.2 KSI) WITH 0.547"
 HOLE AND 0.375" WELD NUT FOR AT BRACKET

3/8" STAINLESS STEEL
 ADJUSTABLE FOOT WITH
 JAMB NUT BY STERIS
 PART NO. 10100729

SEE PAGE "BRACKET"
 3/8" SS BOLT BY STERIS

STAINLESS STEEL JAMB
 NUT AND WASHER

3/4" MAX. AT GRADE
 AND BELOW

EMBEDMENT
 SEE BELOW

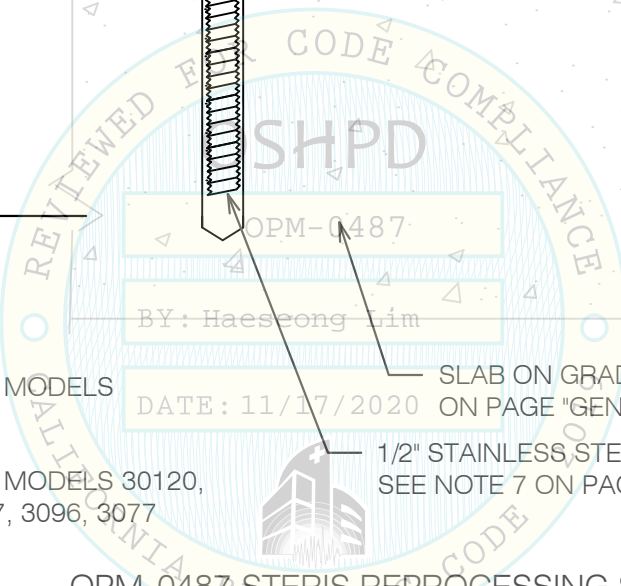
4.75" EMBEDMENT FOR MODELS
 50120, 50106 AND 5097

2.75" EMBEDMENT FOR MODELS 30120,
 30106, 5096, 5077, 3097, 3096, 3077

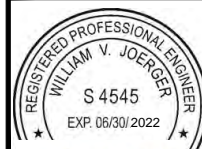
SLAB ON GRADE SEE NOTE 6
 ON PAGE "GEN NOTES"

1/2" STAINLESS STEEL HILTI HIT HY-200
 SEE NOTE 7 ON PAGE "GEN NOTES"

OPM-0487 STERIS REPROCESSING SINK
SEISMIC RESTRAINT ATTACHMENT AT GRADE



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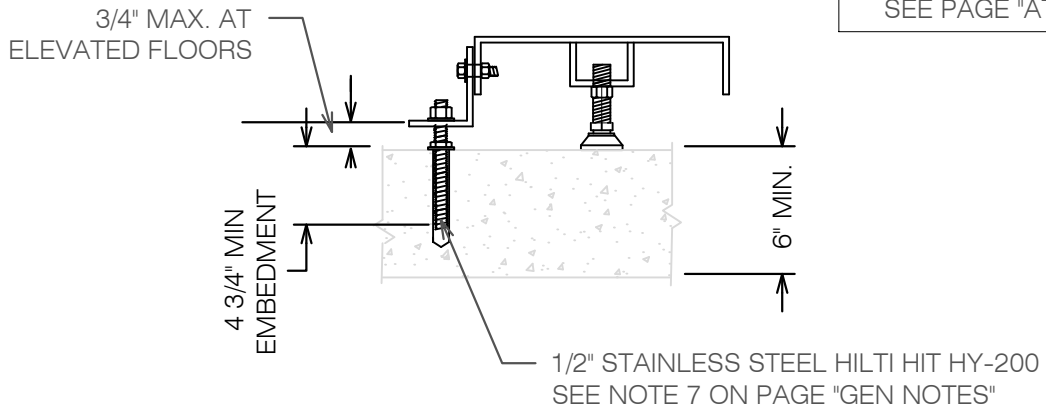
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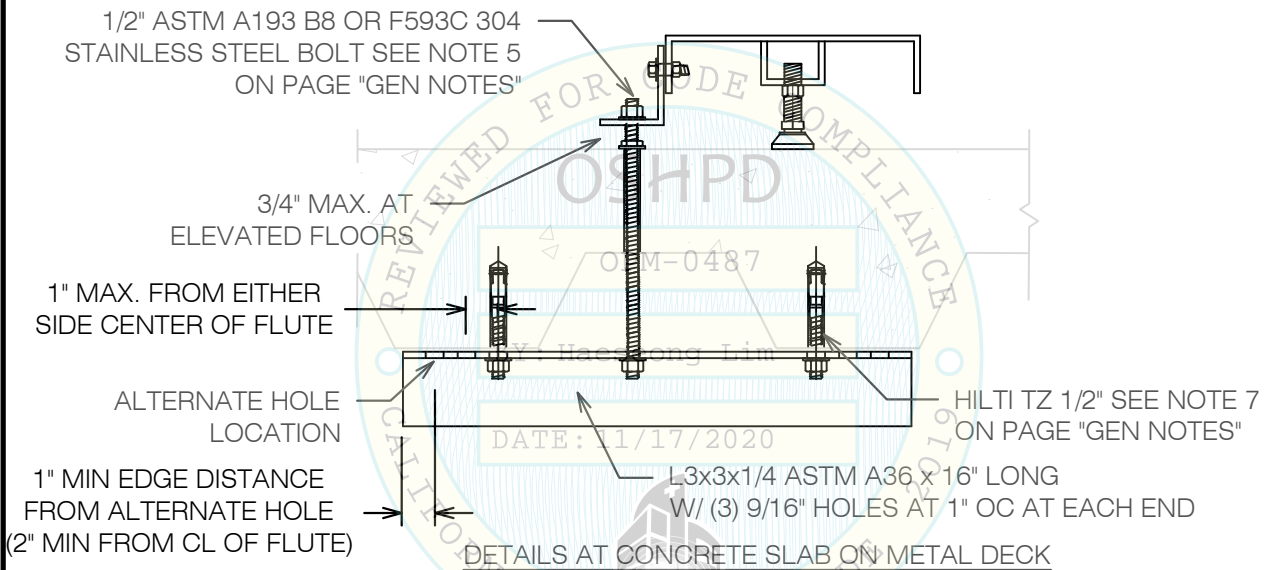
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FOR DETAILS NOT SHOWN
SEE PAGE "ATTACH GD"




DETAILS AT SOLID CONCRETE SLAB

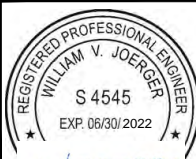


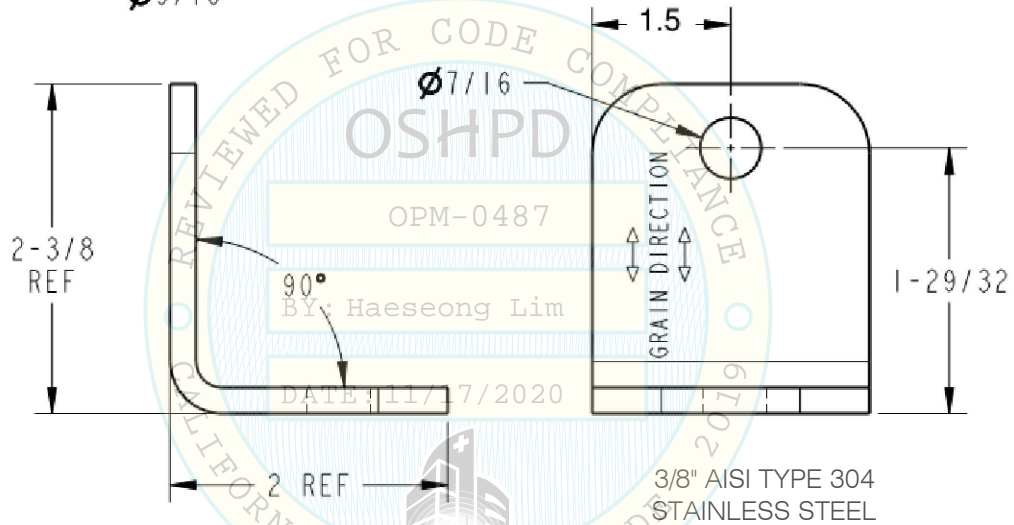
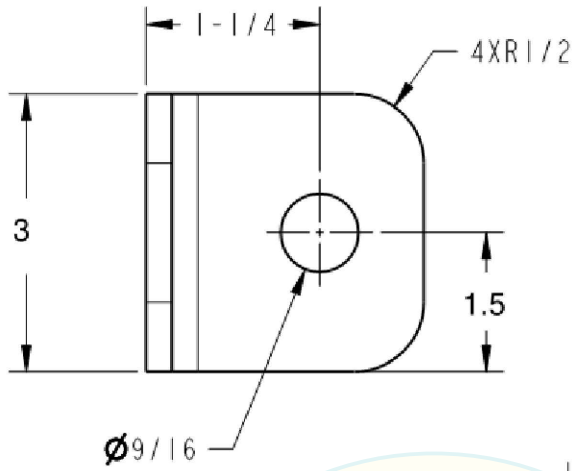
DETAILS AT CONCRETE SLAB ON METAL DECK

OPM-0487-STERIS REPROCESSING SINK
SEISMIC RESTRAINT ATTACHMENT AT ELEVATED SLABS



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OPM-0487 STERIS REPROCESSING SINK BRACKET



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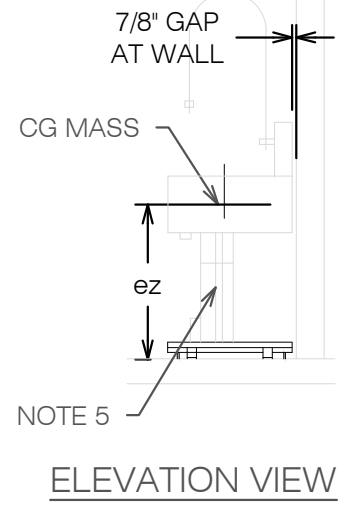
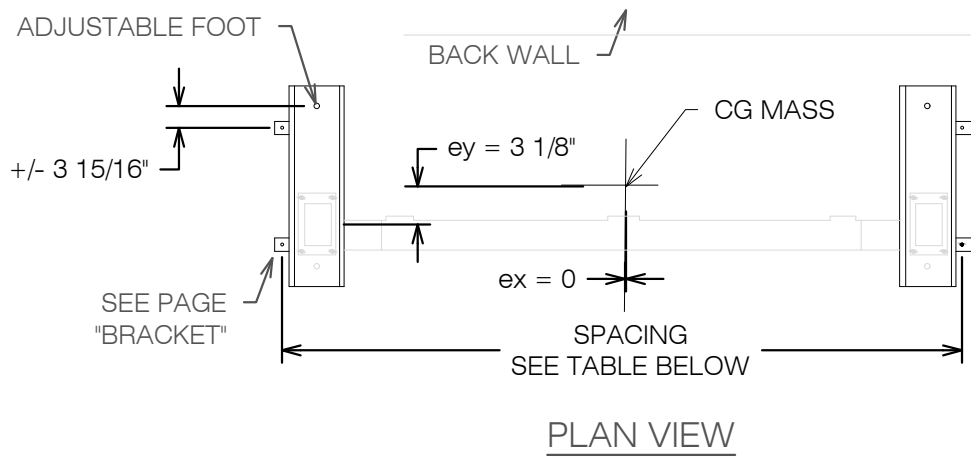
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PAGE
BRACKET




Equipment Data			Anchor	Equipment Eccentricities			Seismic Design Forces at Grade		Seismic Design Forces at Elevated	
Model Series	Weight (lbs.)	Water (lbs.)	Spacing	S _{D5} Grade	S _{D5} Elev	e _z (in)	V _u (lbs.)	T _u (lbs.)	V _u (lbs.)	T _u (lbs.)
50120	490	470	95.063	2.50	2.20	34.9	542	2,107	758	3,051
50106	450	470	95.063	2.50	2.20	34.9	520	2,019	727	2,924
30120	450	470	95.063	2.50	2.50	28.8	520	1,622	828	2,734
30106	420	470	95.063	2.50	2.50	28.8	503	1,569	801	2,644
5097	380	470	95.063	2.50	2.50	34.9	480	1,866	765	3,310
5096	375	313	64.094	2.50	2.50	34.9	389	1,511	619	2,518
5077	335	313	64.094	2.50	2.50	34.9	366	1,423	583	2,372
3097	350	470	95.063	2.50	2.50	28.8	463	1,446	738	2,436
3096	345	313	64.094	2.50	2.50	28.8	372	1,161	592	1,956
3077	305	313	64.094	2.50	2.50	28.8	349	1,090	556	1,837

- WEIGHTS AND MOMENTS ARE FACTORED LOADS USING STRENGTH DESIGN AND INCLUDE THE FOLLOWING FACTORS: DL = 0.9, FpH AT GRADE = 1.13, FpH ELEVATED = 1.80 (FpH ELEVATED = 1.58 FOR TAG NO 50120 AND 50106) AND FpV = 0.50.
- FORCES ARE AT STRENGTH DESIGN LEVEL AND INCLUDE A CONCRETE OVERSTRENGTH FACTOR Q₀ = 2.0.
- WATER WEIGHT FOR BASINS = 470 POUNDS FOR (6) BASINS AND 313 POUNDS FOR (2) BASINS BASED ON 85% FULL.
- MAXIMUM VERTICAL ECCENTRICITY (e_z) IS USED FOR ALL MODELS.
- LINAK DL2 ADJUSTABLE LEGS (SUPPLIED AND MOUNTED TO THE BASE BY STERIS) ARE USED FOR MODELS 50120, 50106, 5097, 5096 AND 5077. TOP OF BASIN IS TO BE 41 INCHES OR LESS FROM THE FLOOR. HEIGHT IS HELD IN POSITION BY THE ADJUSTMENT MOTOR; MECHANICAL LOCKING DEVICES ARE NEEDED. FIXED HEIGHT MODELS 30120, 30106, 3097, 3096 AND 3077 HAVE SHOP ASSEMBLED VERTICAL LEGS FABRICATED FROM 197 mm x 147 mm x 5 mm 6061 ALUMINUM (SUPPLIED AND MOUNTED TO THE BASE BY STERIS).

OPM-0487 STERIS REPROCESSING SINKS DIMENSIONS AND ANCHORAGE FORCES



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		DIM & FORCES