

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

OFFICE USE ONLY

APPLICATION #: OPM-0505-13

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

Product Name: SI Contour

Product Type: Washer / Sterilizer

Product Model Number: MED 523046, MED 523036, MED 523035

General Description: Medisafe Sonic washer and sterilizer series in various electronic configurations to account for different mains input ranges.

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: 10/15/18

Title: Principal Structural Engineer

Company Name: ISAT Seismic Bracing

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.

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

List of Attachments Supporting the Manufacturer's Certification

- Test Report Drawings Calculations Manufacturer's Catalog
 Other(s) (Please Specify): _____

OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2016 & ALL PRE-2016 CODE BASED PROJECTS

Signature: Sonia Eliseo Date: 9/23/2019
Print Name: Sonia Eliseo
Title: SE
Condition of Approval (if applicable): _____



INTERNATIONAL SEISMIC APPLICATION TECHNOLOGY

A Division of Tomarco Contractor Specialties

Submittal Documents

OSHPD OPM-0505-13

BY: Sonia Eliseo

**MEDISAFE SI CONTOUR
WASHERS AND STERILIZERS**

**SUPPORT AND ATTACHMENT
CONSTRUCTION DRAWINGS**

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



WVJ 30 Aug 19

FILE NO.: CLT-1018-122

"Empowered by Experience"

REV 3



OSHPD OPM-0505-13

MEDISAFE

DRAWING INDEX

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OSHPD OPM-0505-13

MANUFACTURE: MEDISAFE

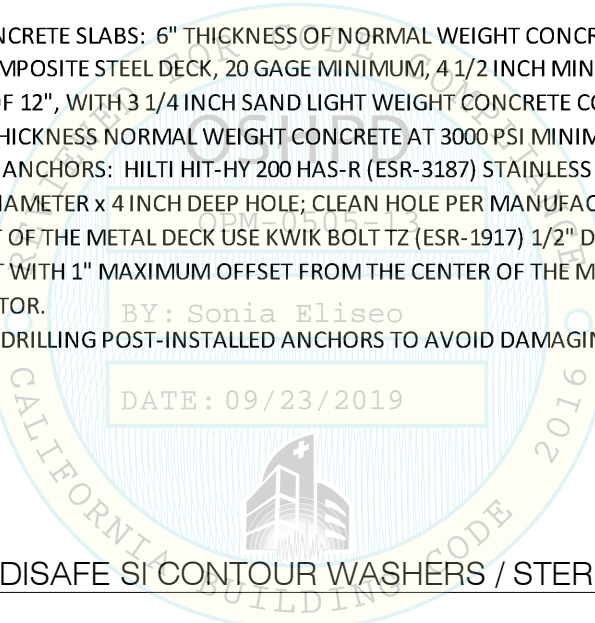
EQUIPMENT TYPE: WASHERS / STERILIZERS

GENERAL NOTES:


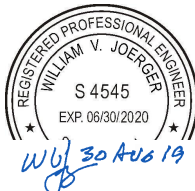
1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2016. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2016.
2. SEISMIC CRITERIA USED: $S_{DS} = 2.5$ $I_p = 1.5$ $a_p = 1.0$ $R_p = 1.5$ (OTHER EQUIPMENT). FOR $z/h = 0$ $F_pH = 1.13$ AND FOR $z/h \leq 1.0$ $F_pH = 3.00$ AND $F_pV = 0.50$.
3. SUPPORT AND ATTACHMENT FORCES ARE DETERMINED USING ASCE 7-10 CHAPTER 13 "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". AN OVERSTRENGTH FACTOR $\Omega_0 = 1.5$ 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 ($F_y = 31.2$ KSI), ALL THREAD ROD ASTM F593 CW1 304 STAINLESS STEEL FOR BOLTS ($F_y=30$ ksi) AT ELEVATED FLOORS, ANGLE ASTM A36 ($F_y = 36$ KSI) HOT DIPPED GALVANIZED.
6. CONCRETE SLABS:
 - a. FOR ELEVATED SOLID CONCRETE SLABS: 6" THICKNESS OF NORMAL WEIGHT CONCRETE WITH 3000 PSI MINIMUM
 - 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
 - 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 (ESR-3187) STAINLESS STEEL 1/2" DIAMETER x 3" EMBEDMENT. DRILL 9/16" DIAMETER x 4 INCH DEEP HOLE: CLEAN HOLE PER MANUFACTURER'S INSTRUCTIONS. FOR ANCHORS INTO THE SOFFIT 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. EXERCISE DUE CARE WHEN DRILLING POST-INSTALLED ANCHORS TO AVOID DAMAGING CONCRETE REINFORCEMENT OR TENDONS.

BY: Sonia Eliseo

DATE: 09/23/2019



OPM-0505-13 MEDISAFE SI CONTOUR 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		
 <i>WVJ 30 Aug 19</i>	DRAWN BY: WVJ DATE: 10/10/18	
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	<table border="1"> <tr> <td>SCALE N.T.S.</td> <td>PAGE GEN NOTES</td> </tr> </table>	SCALE N.T.S.
SCALE N.T.S.	PAGE GEN NOTES	

OSHPD OPM-0505-13

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 CALIFORNIA BUILDING CODE SECTION 1910A.5.5. FOR ADHESIVE ANCHORS - TENSION TESTING BY THE HYDRAULIC RAM METHOD SHALL USE A TENSION FORCE OF 2250 POUNDS (1.25*ANCHOR STRENGTH). TENSION TESTING SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR. TORQUE CONTROLLED POST-INSTALLED ANCHORS - TEST USING A CALIBRATED TORQUE WRENCH; 40 FOOT-POUNDS TORQUE SHALL BE ACHIEVED WITHIN ONE-HALF 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 AGENCY. 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.

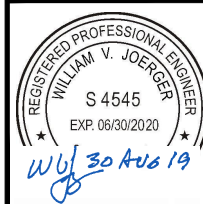
RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD

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 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 2016 AND WITH THE OPM-0505-13 DETAILS INCLUDING MATERIALS AND DIMENSIONS OF THE SUPPORT WHERE THE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION
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-0505-13 MEDISAFE SI CONTOUR WASHERS / STERILIZERS ATTACHMENT NOTES

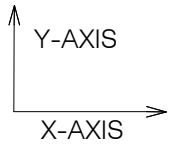


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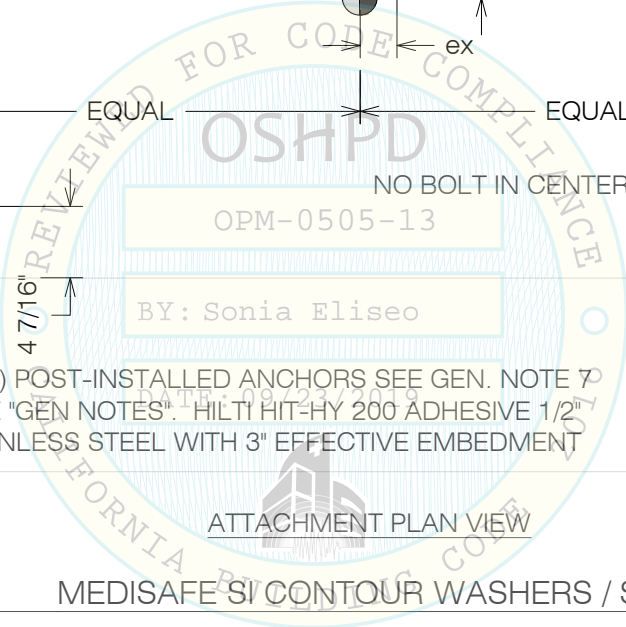
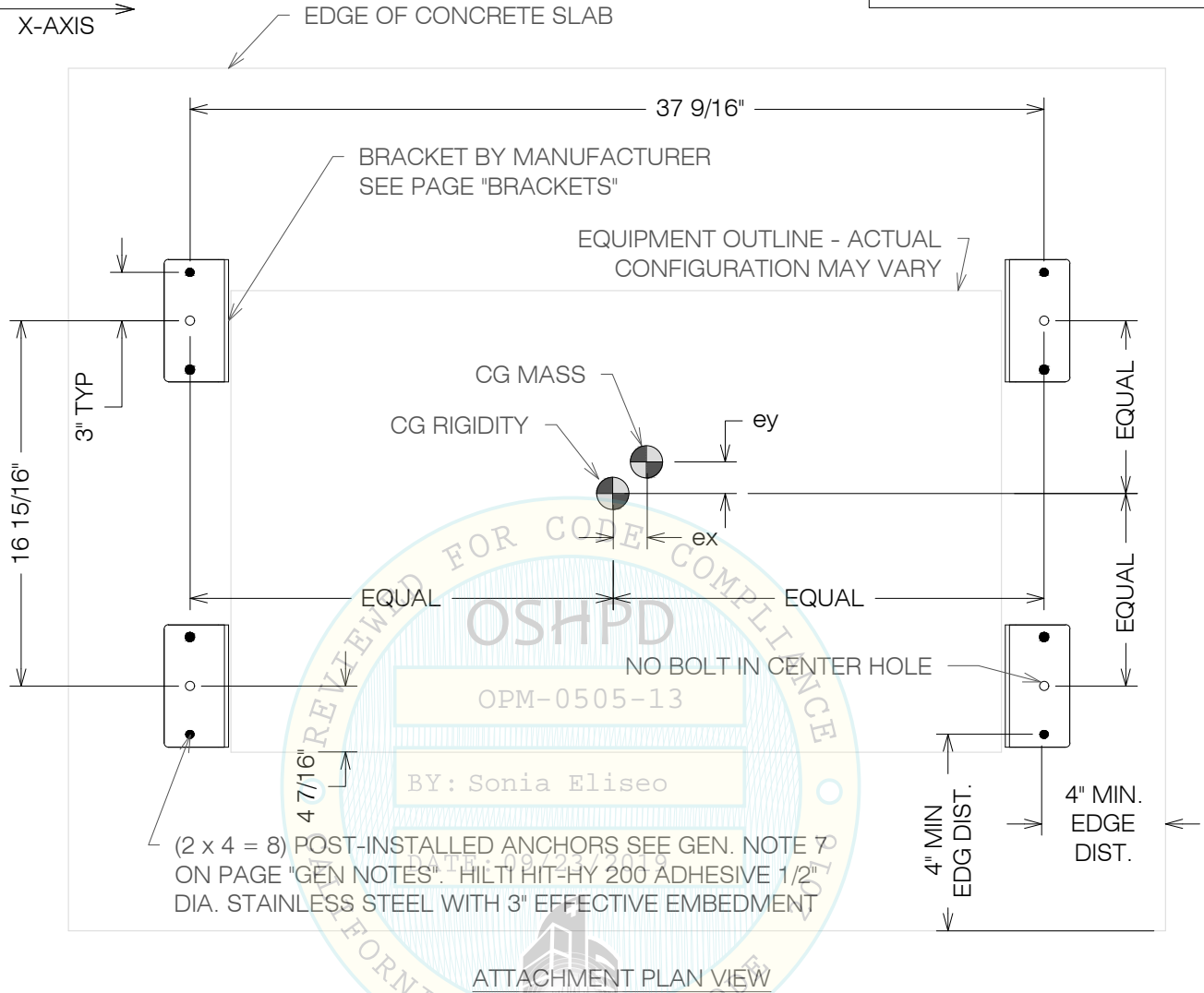


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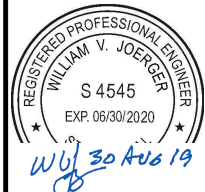
SEE PAGE "DIM & FORCES" FOR DIMENSIONS, ECCENTRICITIES AND ANCHOR FORCES

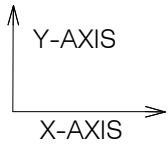


OPM-0505-13 MEDISAFE SI CONTOUR WASHERS / STERILIZERS AT GRADE

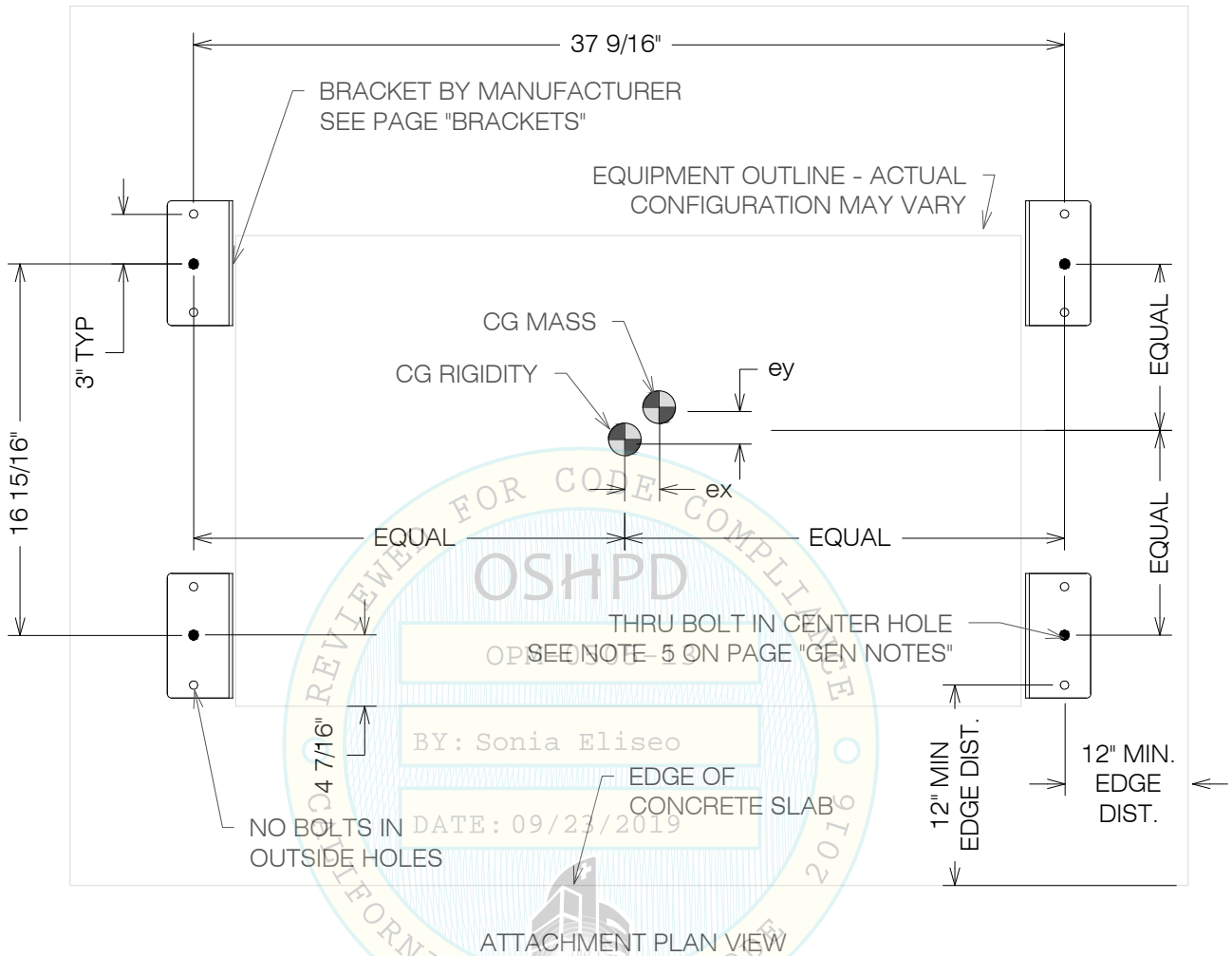


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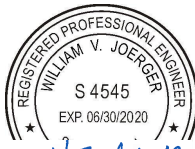
SEE PAGE "DIM & FORCES" FOR DIMENSIONS, ECCENTRICITIES AND ANCHOR FORCES



OPM-0505-13 MEDISAFE SI CONTOUR WASHERS / STERILIZERS AT ELEVATED SLAB



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EQUIPMENT OUTLINE - ACTUAL CONFIGURATION MAY VARY

SEE PAGES "BRACKETS"

SEE PAGE "MISC STEEL"

SEE PAGE "MISC STEEL"

ELEVATION AT ELEVATED SLABS

EQUIPMENT OUTLINE - ACTUAL CONFIGURATION MAY VARY

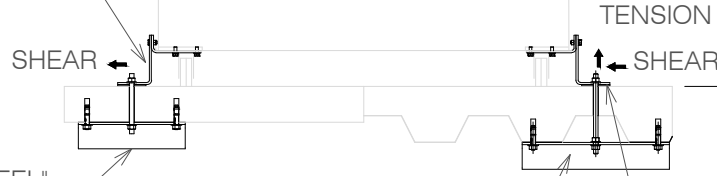
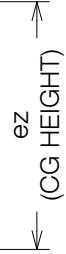
SEE PAGE "BRACKETS"

ELEVATION AT SLAB-ON-GRADE

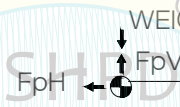
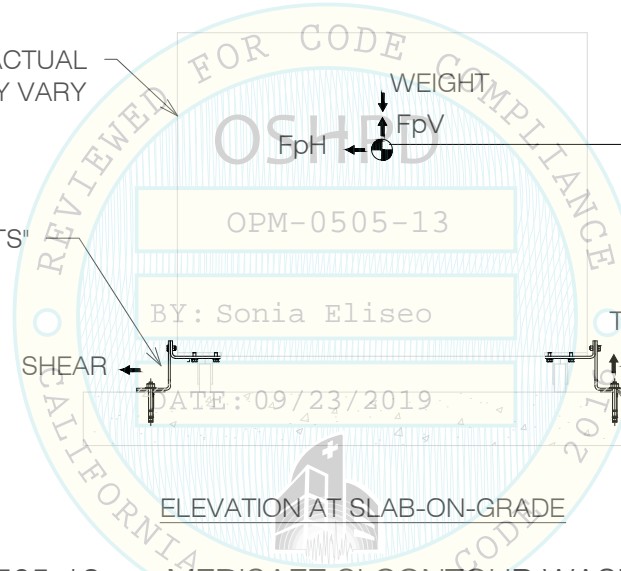
OPM-0505-13

MEDISAFE SI CONTOUR WASHERS / STERILIZERS



EQUIPMENT ELEVATIONS

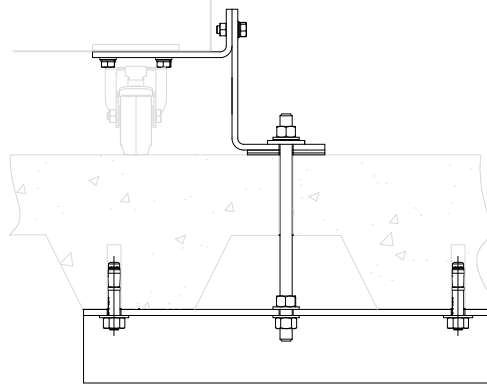


SHIM PACK BY EQUIPMENT MANUFACTURER
1/4" (6.5 mm) MAX THICKNESS
304 STAINLESS STEEL
SEE PAGE "BRACKETS"

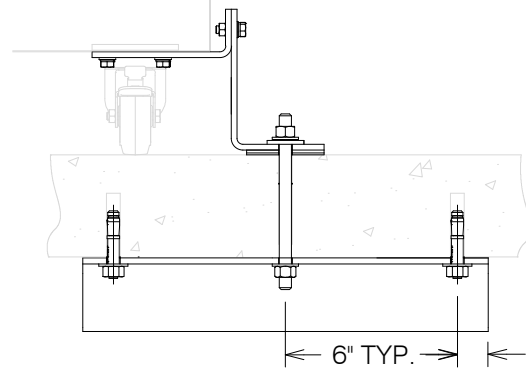


SHIM PACK BY EQUIPMENT MANUFACTURER
1/4" (6.5 mm) MAX THICKNESS
304 STAINLESS STEEL
SEE PAGE "BRACKETS"

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DETAIL ANCHOR CENTER OF HIGH FLUTE



DETAIL AT SOLID CONCRETE SLAB

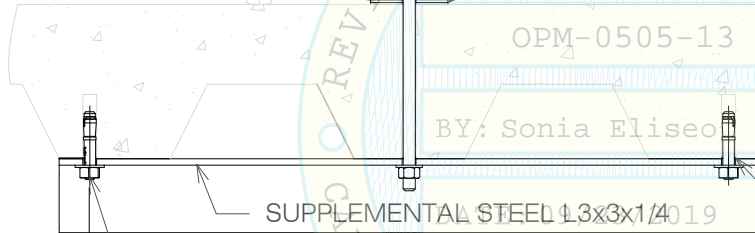
(2) MOUNTING SCREWS PER BRACKET
 HEX HD M8 (5/16" Ø) ISO4017 SS A2 (FY=65 KSI)
 WITH PLAIN WASHER AND SPRING WASHER

MP21886 SEE
 PAGE "BRACKETS"
 0.25" (6 mm) 304 SS
 PLATE (Fy = 31.2 KSI)
 WELDED TO UNIT

(4) 1/2" ASTM F593 CW1 304 STAINLESS STEEL ALL THREAD
 ROD OR THRU BOLTS WITH MATCHING NUTS AND WASHERS.
 DRILL 9/16" HOLES IN CONCRETE. FINGER TIGHTEN NUTS.

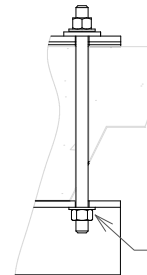
MP21887 - SEE PAGE "BRACKETS"

SHIM - 1/4" (6.5 mm) MAX HEIGHT



SUPPLEMENTAL STEEL L3x3x1/4

9/16" HOLES
 IN L3 TYP.



TACK
 WELD NUT

1"
 MIN.

NOTE 7 ON PAGE "GEN NOTES"

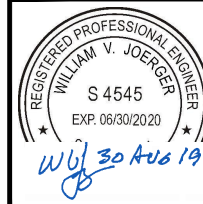
DETAIL ANCHOR CENTER OF LOW FLUTE
 NOTES APPLY TO ALL SLAB CONFIGURATIONS

DETAIL ANCHOR AT SIDE OF FLUTE

OPM-0505-13 MEDISAFE SI CONTOUR WASHERS / STERILIZERS
 MISCELLANEOUS STEEL

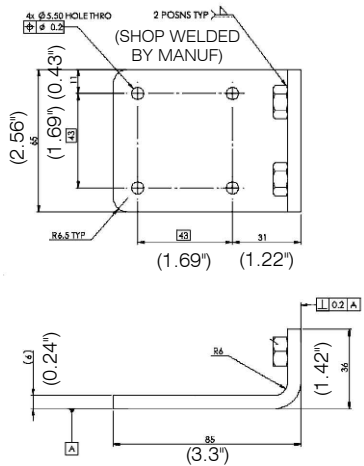


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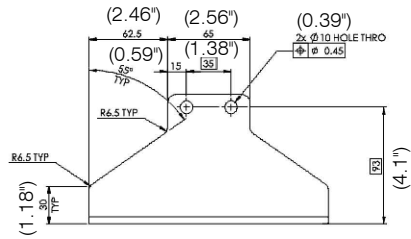
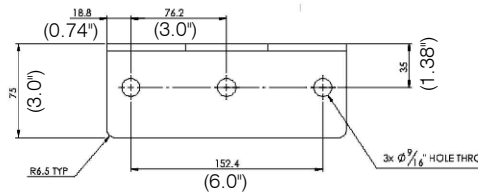


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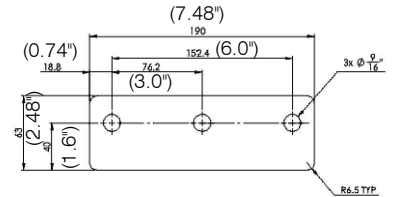
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MP21886 DETAIL

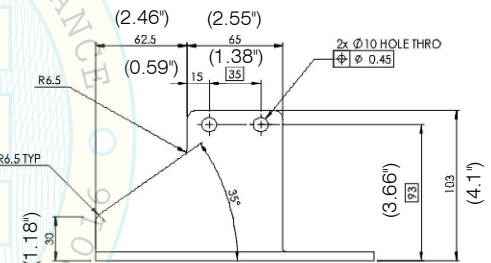
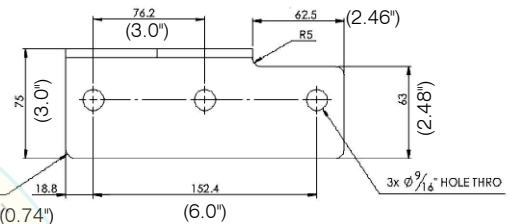
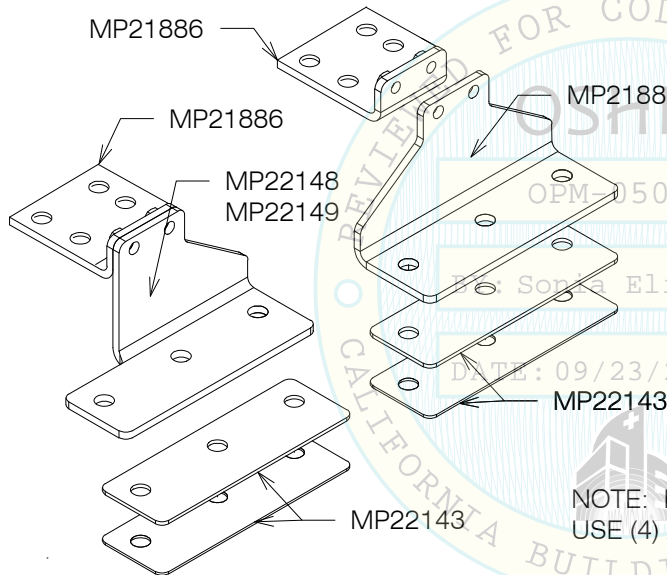


MP21887 DETAIL



MP22143 SHIM DETAIL
 PROVIDE 16 SHIMS PER BRACKET: (4) EACH OF 1/64" (0.5 mm), 1/32" (1 mm), 5/64" (2 mm), AND 1/8" (3 mm)


ALL MATERIAL THIS PAGE IS 1/4" (6 mm) 10600 (304-2B-6mm) STAINLESS STEEL UNLESS NOTED OTHERWISE



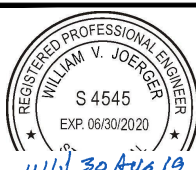
MP22148 RH AND MP22149 LH DETAIL

NOTE: BOLT MATERIAL ISO4017 SS 8 mm (5/16") Fy = 30 KSI
 USE (4) AT WHEELS AND (2) IN BRACKET VERTICAL LEG

OPM-0505-13 MEDISAFE SI CONTOUR BRACKETS



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MEDISAFE SI CONTOUR WASHERS / STERILIZERS								
Equipment Data				Anchor Dimensions		Equipment Eccentricities		
Model Series	Model	Max. Water Fill	Weight (lb)	Length (in)	Depth (in)	ex (in)	ey (in)	ez (in)
SI CONTOUR	MED 523046	NO	289.0	37.56	16.93	0.91	0.56	20.46
SI CONTOUR	MED 523046	YES	372.8	37.56	16.93	1.05	0.57	23.00
SI CONTOUR	MED 523036	NO	289.0	37.56	16.93	0.91	0.56	20.46
SI CONTOUR	MED 523036	YES	372.8	37.56	16.93	1.05	0.57	23.00
SI CONTOUR	MED 523035	NO	289.0	37.56	16.93	0.91	0.56	20.46
SI CONTOUR	MED 523035	YES	372.8	37.56	16.93	1.05	0.57	23.00

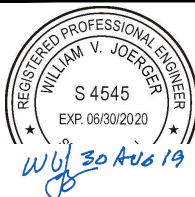
MEDISAFE SI CONTOUR WASHERS / STERILIZERS						
Equipment Data			Seismic Design Forces at Grade ²		Seismic Design Forces at Elevated ²	
Model Series	Model	Max. Water Fill ³	Vu (lbs.)	Tu (lbs.)	Vu (lbs.)	Tu (lbs.)
SI CONTOUR	MED 523046	NO	62	146	329	550
SI CONTOUR	MED 523046	YES	83	219	431	802
SI CONTOUR	MED 523036	NO	62	146	329	550
SI CONTOUR	MED 523036	YES	83	219	431	802
SI CONTOUR	MED 523035	NO	62	146	329	550
SI CONTOUR	MED 523035	YES	83	219	431	802

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 $\Omega_0 = 1.5$ AS REQUIRED. FOR THROUGH BOLTS ON ELEVATED SLABS A TENSION OVERSTRENGTH FACTOR OF 1.0 IS USED.
3. MAX. WATER FILL INDICATES THE ANALYSIS INCLUDES WATER WEIGHT.

OPM-0505-13 MEDISAFE SI CONTOUR WASHERS / STERILIZERS
EQUIPMENT DIMENSIONS AND FORCES



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