



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

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

OFFICE USE ONLY

APPLICATION #: OPM-0276-13

**OSHPD Preapproval of Manufacturer's Certification (OPM)**

Type:  New  Renewal  Update to Pre-CBC 2013 OPA Number: \_\_\_\_\_

**Manufacturer Information**

Manufacturer: Skytron LLC.

Manufacturer's Technical Representative: Bob Vreeland

Mailing Address: Skytron US, 5085 Corporate Exchange Blvd SE, Grand Rapids, MI 49512

Telephone: (616) 656-1189 Email: bvreeland@skytron.us

**Product Information**

Product Name: Stellar XL (Non-Motorized) Surgical Lights

Product Type: Surgical Light Fixture

STX5-895, STX5-1090, STX5-1285, STX55-895/700, STX55-1090/895, STX55-1285/1090,  
STX555, STX5-EA-1500, STX5-EA-2000, STX55-EA-1500/1300, STX55-EA-2000/1500,  
STX5-EH-895, STX5-EH-1090, STX5-EH-1285, STX5-EH-1500, STX5-EH-2000,  
STX55-EH-895/700, STX55-EH-1090/895, STX55-EH-1285/1090, STX55-EH-1500/1300,  
STX55-EH-2000/1500, STX555-EH, LFSSTX5, LFSSTX55, LFSSTX555, LFSLFSSTX5,

Product Model Number: LFSLFSSTX55, STX5-HY-895, STX5-HY-1090, SYX5-HY-1285, STX5-HY-1500

General Description: Ceiling mounted surgical lights and display interface mount.

**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, 2013.

Signature of Applicant: 

Date: November 25, 2015

Title: Principal Structural Engineer

Company Name: ISAT Seismic Bracing

"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 5/30/13)



osHPD

Page 1 of 2



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
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**Registered Design Professional Preparing Engineering Recommendations**

Company Name: ISAT Seismic Bracing

Name: William V Joerger California License Number: S4545

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 no preapproved

**Certification Method(s)**

- Testing in accordance with:  ICC-ES AC156  FM 1950-10
- 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, 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
- 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 2013 ONLY**

Signature:  Date: 12-11-2015

Print Name: Jeffrey Kikumoto

Title: SSE

Condition of Approval (if applicable): \_\_\_\_\_

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





# INTERNATIONAL SEISMIC APPLICATION TECHNOLOGY

A Division of Tomarco Contractor Specialties

Submittal Documents

OPM-0276-13

**OSHPD OPM-0276-13**

BY: Jeffrey Y. Kikumoto

## SUPPORT AND ATTACHMENT CONSTRUCTION DRAWINGS STELLAR XL SURGICAL LIGHTS

**SKYTRON, LLC**

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



FILE NO.: CLT-0515-069

*"Empowered by Experience"*

REV 1

OSHPD OPM-0276-13 DWG - 1



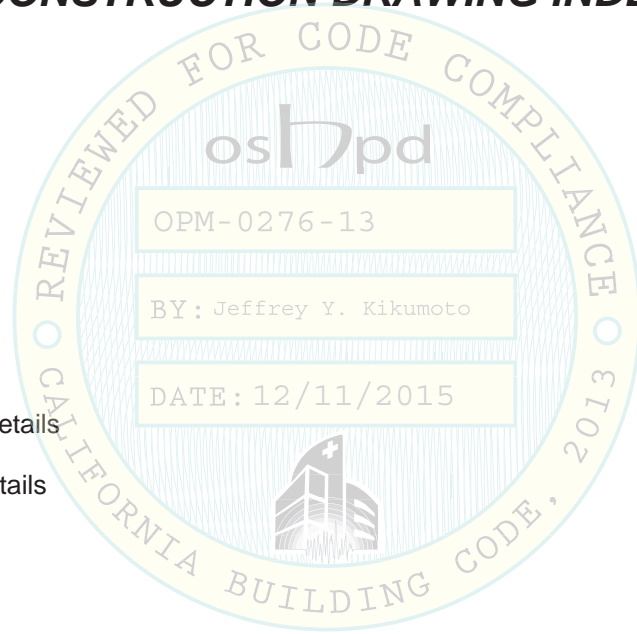
# OSHPD OPM-0276-13

## SKYTRON STELLAR XL SURGICAL LIGHTS

### CONSTRUCTION DRAWING INDEX

#### INDEX

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**OSHPD OPM-0276-13**

MANUFACTURE: SKYTRON

EQUIPMENT TYPE: SURGICAL LIGHTS

**GENERAL NOTES:**

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2013. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2013.
2. SEISMIC CRITERIA USED:  $S_{DS} = 2.5$   $I_p = 1.5$   $a_p = 1.0$   $R_p = 1.5$   $z/h \leq 1.0$   $F_pH = 3.0$  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 2013 SECTION 1909A.
4. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
5. STEEL MATERIALS: ANGLES AND PLATE ASTM A36, HSS ASTM A500 GRADE B ( $F_y = 46$  KSI), PIPE ASTM A53 GRADE B ( $F_y = 35$  KSI), WELDING ELECTRODES E70XX, ALL THREAD ROD AND BOLTS ASTM A193-B7 ( $F_u = 125$  KSI). BOLTS SUPPLIED BY SKYTRON ARE ASTM A193 B7.
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 FLUTE SPACING OF 12", WITH 3 1/4 INCH SAND LIGHT WEIGHT CONCRETE CONCRETE COVER AT 4000 PSI MINIMUM STRENGTH.
7. POST-INSTALLED CONCRETE ANCHORS: HILTI KWIK BOLT TZ (ESR-1917) 5/8" DIAMETER x 3 3/4" MIN. HOLE DEPTH (3 1/8" EFFECTIVE EMBEDMENT) AND 65 FT-LBS INSTALLATION TORQUE.

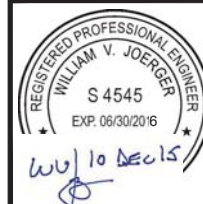
**RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD**

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 2013 AND WITH THE OPM-0276-13 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 ( $E_h$  AND  $E_v$ ) DO NOT EXCEED THE VALUES SHOWN IN THESE DETAILS.

OPM-0276-13 SKYTRON STELLAR XL GENERAL NOTES



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N.T.S.	GEN NOTES

## OSHPD OPM-0276-13

MANUFACTURE: SKYTRON

EQUIPMENT TYPE: SURGICAL LIGHTS

### ATTACHMENT NOTES:

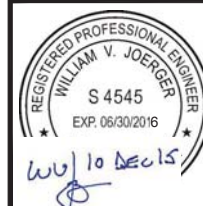
1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2013. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2013.
2. BRACE ARM INCLINATION MAY VARY FROM 30° TO 60° FROM HORIZONTAL.
3. PERIODIC SPECIAL INSPECTION PER CBC 2013 SECTION 1705A AND TABLE 1705A.3 INCLUDING VERIFICATION OF ANCHOR TYPE, ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, ANCHOR SPACING, EDGE DISTANCES, CONCRETE MEMBER THICKNESS, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT AND ADHERENCE TO THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. IN ADDITION, FOLLOW THE PROVISIONS OF THE 2013 CALIFORNIA BUILDING CODE SECTION 1913A.7.2 BY CONFIRMING THE INSTALLATION TORQUE SPECIFIED BY THE MANUFACTURER. TESTING IS NOT TO OCCUR UNTIL A MINIMUM OF 24 HOURS HAS ELAPSED AFTER THE INSTALLATION OF THE SUBJECT ANCHORS. TESTING SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR. TEST 50% OF THE ANCHORS FOR EACH PIECE OF EQUIPMENT. USING A CALIBRATED TORQUE WRENCH VERIFY THE INSTALLATION TORQUE IS OBTAINED WITHIN 1/2 TURN OF THE NUT. 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.
4. WELDS ARE TO BE VISUALLY INSPECTED BY A QUALIFIED WELDING INSPECTOR.
5. STRENGTH DESIGN WAS USED FOR ANCHOR FORCE CALCULATIONS INCLUDING  $\Omega$  PER ACI 318-11 WHERE REQUIRED FOR ATTACHMENT TO CONCRETE.
6. EXERCISE DUE CARE WHEN DRILLING POST-INSTALLED ANCHORS TO AVOID DAMAGING CONCRETE REINFORCEMENT OR TENDONS.
7. PROVIDE FOR FULL THREAD ENGAGEMENT OF NUT AND WASHER.

<u>SERIES</u>	<u>MODELS INCLUDED IN OPM-0276-13</u>
STANDARD	STX5-895, STX5-1090, STX5-1285, STX5-895/700, STX55-1090/895, STX55-1285/1090, STX555-895, STX555-1090
LFS	LFSSTX5, LFSSTX55, LFSSTX555
LFLFS	LFLFSSTX5, LFLFSSTX55
EXTENDED ARM - SINGLE	STX5-EA-1500, STX5-EA-2000
EXTENDED ARM - DUAL	STX5-HY-1285, STX5-HY-1500, STX55-EA-1500/1300, STX55-EA-2000/1500
EXTENDED HUB/EXTENDED ARM	STX55-EH-1500/1300, STX55-EH-2000/1500
EXTENDED HUB	STX5-EH-895, STX5-EH-1090, STX5-EH-1285, STX5-EH-1500, STX5-EH-2000, STX55-895/700, STX55-EH-1090/895, STX55-EH-1285/1090, STX555-EH

OPM-0276-13 SKYTRON STELLAR XL ATTACHMENT NOTES



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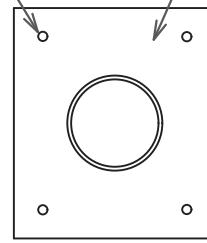
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POST-INSTALLED ANCHORS  
SEE GEN. NOTE 7 ON PAGE "GEN NOTES"

(4) HILTI KWIK BOLT TZ AT TOP PL  $V_u = 820$  LBS.

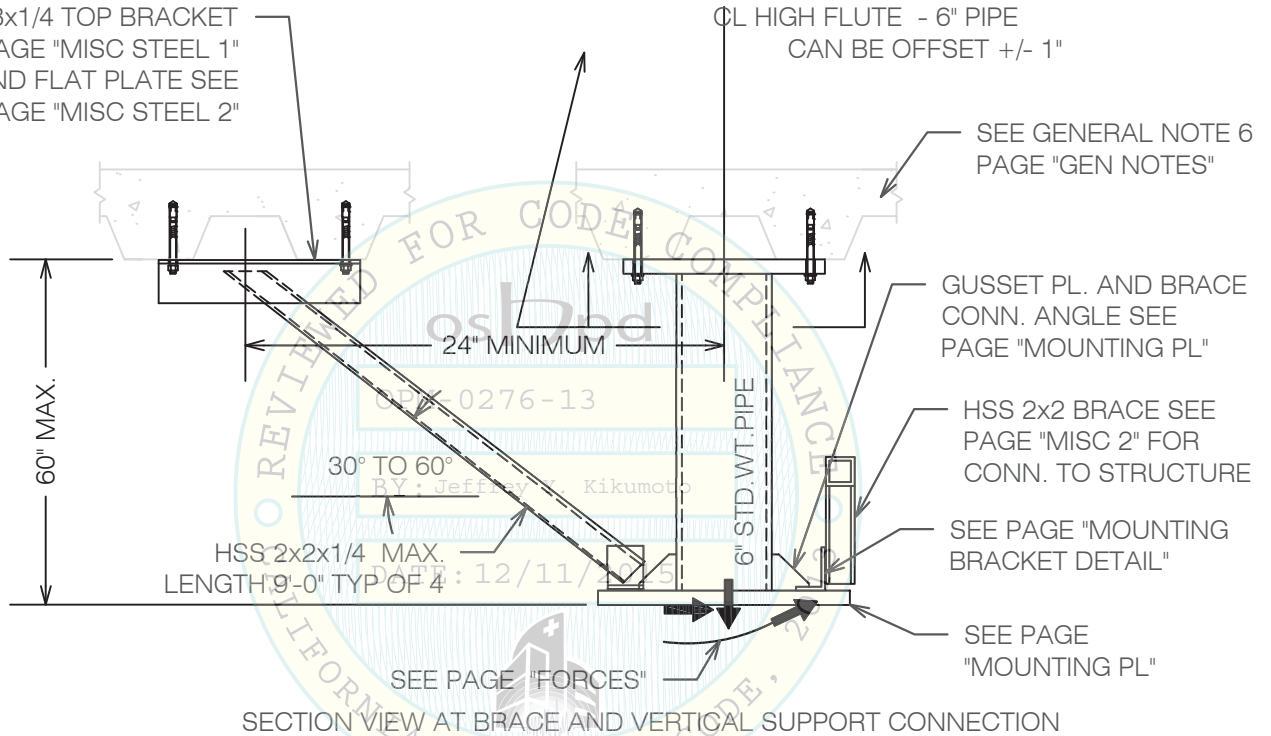
AT EACH OF (4) BRACES USE HILTI KWIK BOLT TZ  
5/8" x 3 1/8" EFFECTIVE EMBEDMENT  
WITH  $T_u = 1210$  LBS.  $V_u = 700$  LBS.  
SEE PAGES "MISC STEEL 1" AND "MISC STEEL 2"

TOP MOUNTING PLATE FOR  
METAL DECK CONCRETE SLABS  
BY INSTALLATION CONTRACTOR  
SEE PAGE "TOP PLATE"



TOP PLATE PLAN VIEW

(2) L3x3x1/4 TOP BRACKET  
SEE PAGE "MISC STEEL 1"  
AND FLAT PLATE SEE  
PAGE "MISC STEEL 2"

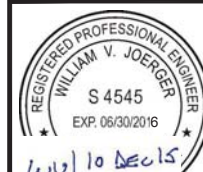


SECTION VIEW AT BRACE AND VERTICAL SUPPORT CONNECTION

OPM-0276-13 SKYTRON STELLAR XL AT METAL DECK SLAB



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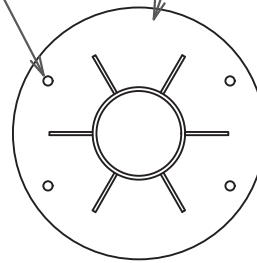
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POST-INSTALLED ANCHORS  
SEE GEN. NOTE 7 ON PAGE "GEN NOTES"

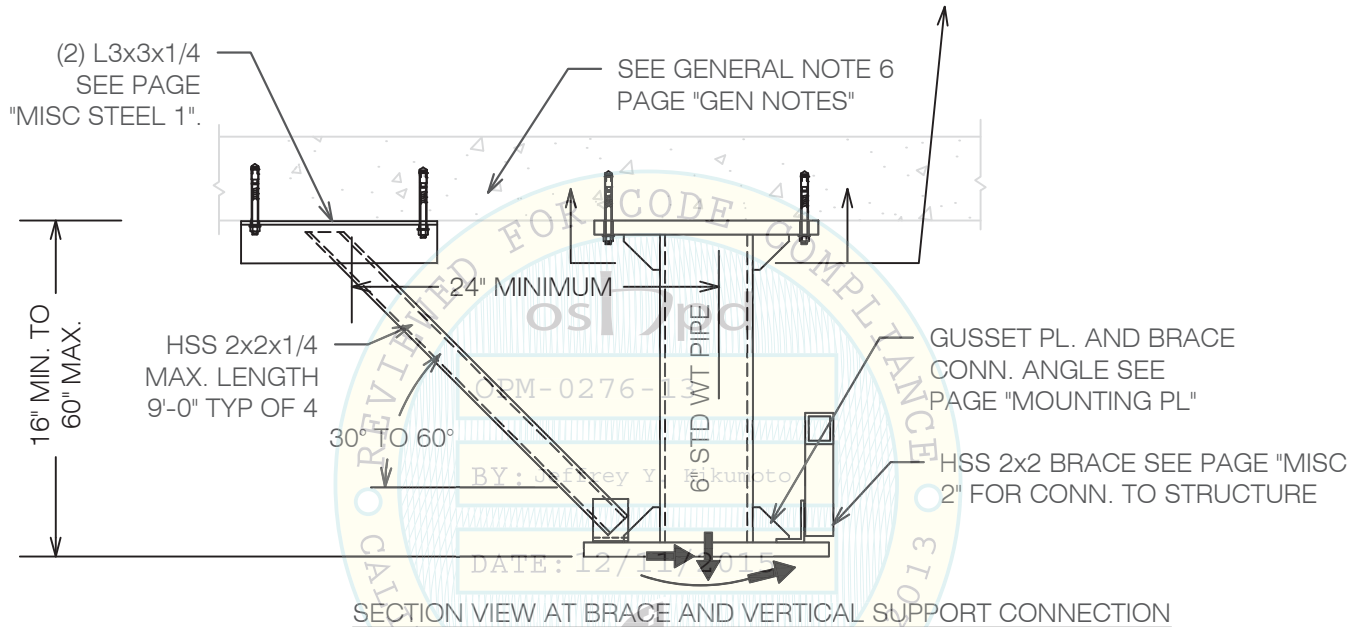
(4) HILTI KWIK BOLT TZ AT TOP PL  $V_u = 820$  LBS.

AT EACH OF (4) BRACES USE HILTI KWIK BOLT TZ  
5/8" x 3 1/8" EFFECTIVE EMBEDMENT  
WITH  $T_u = 1210$  LBS.  $V_u = 700$  LBS.  
SEE PAGES "MISC STEEL 1" AND "MISC STEEL 2"

TOP MOUNTING PLATE FOR  
METAL DECK CONCRETE SLABS  
BY INSTALLATION CONTRACTOR  
SEE PAGE "TOP PLATE"



TOP PLATE PLAN VIEW



SECTION VIEW AT BRACE AND VERTICAL SUPPORT CONNECTION

INSTALLATION DETAILS FOR ALL MODELS. ALL MATERIALS PROVIDED BY THE INSTALLATION CONTRACTOR.

OPM-0276-13 SKYTRON STELLAR XL AT SOLID CONCRETE SLAB



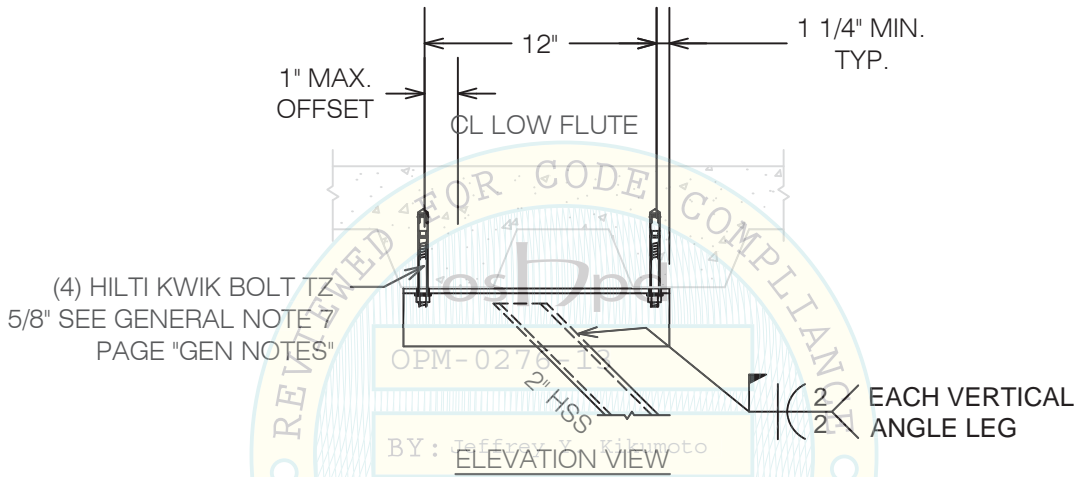
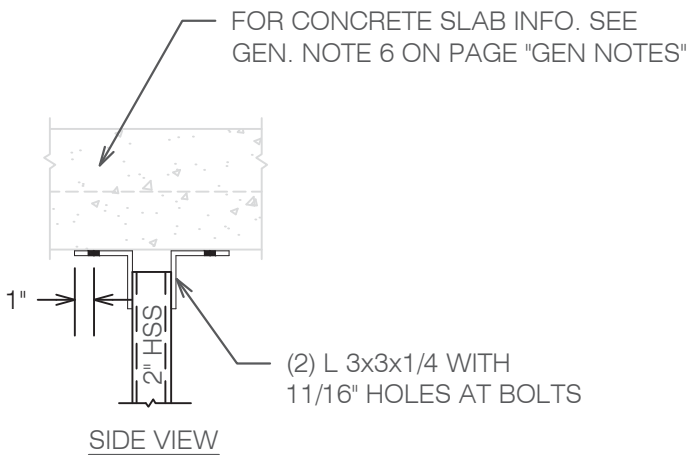
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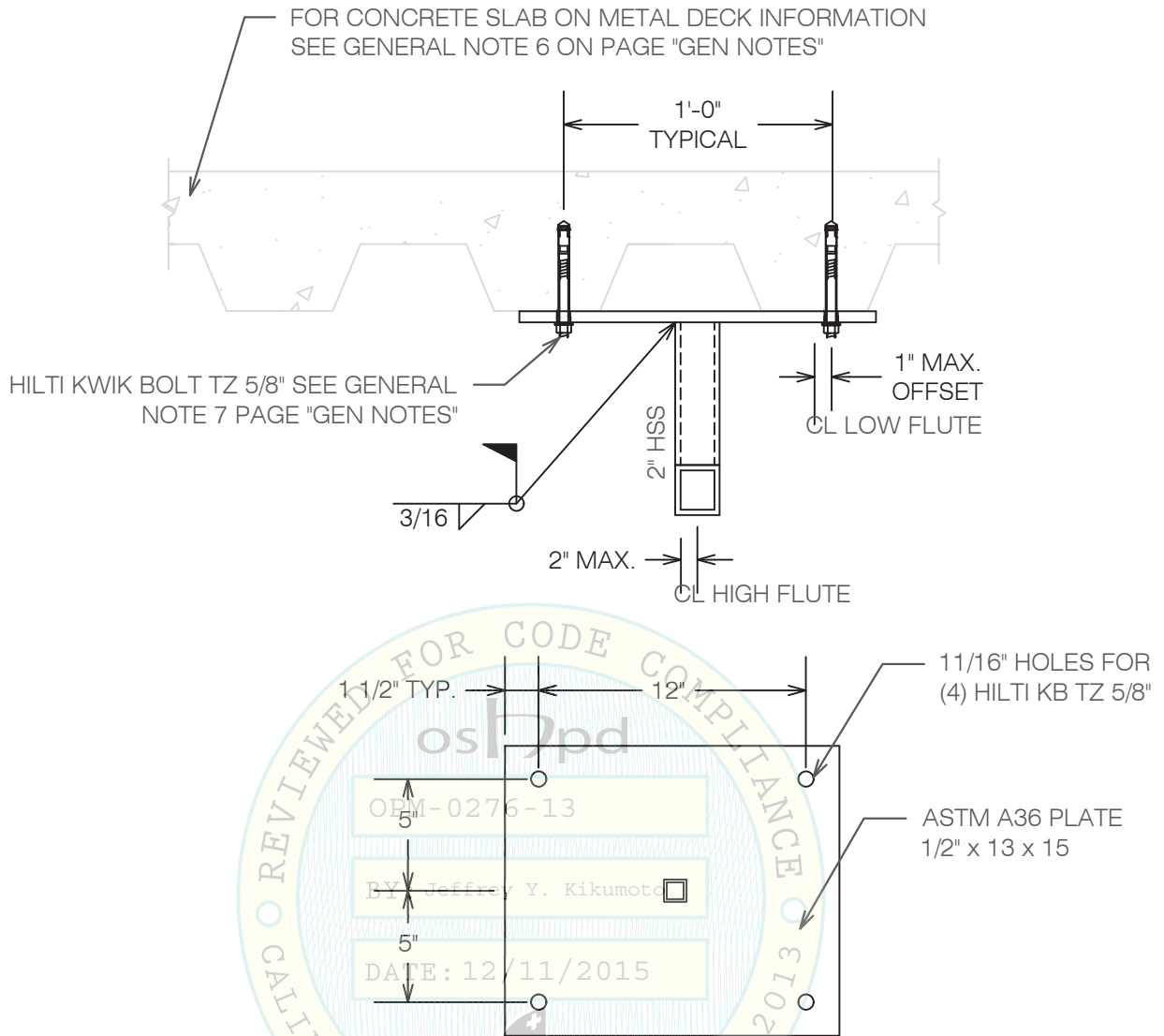
DETAIL A FOR CONNECTION OF ALL MODELS TO METAL DECK SLABS OR A SOLID CONCRETE SLAB

OPM-0276-13 SKYTRON STELLAR XL  
MISCELLANEOUS STEEL FOR SOLID CONCRETE SLABS AND METAL DECK SLABS WITH  
BRACE CONNECTION PERPENDICULAR TO METAL DECK FLUTES




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DETAIL B FOR CONNECTION OF ALL MODELS TO METAL DECK SLABS

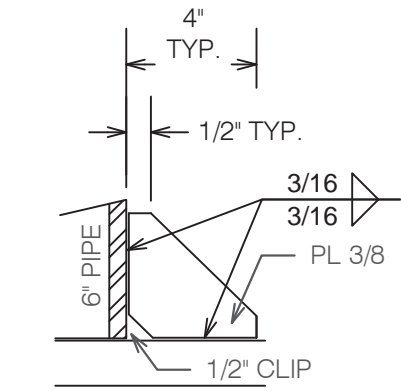
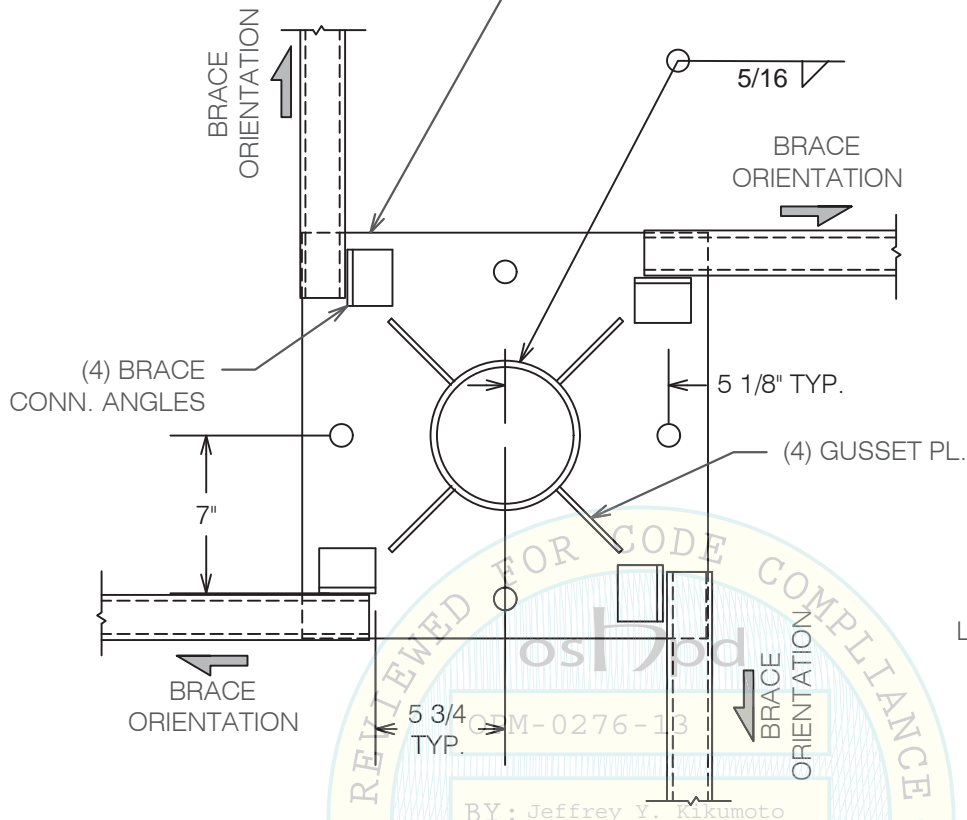
OPM-0276-13 SKYTRON STELLAR XL MISCELLANEOUS STEEL FOR METAL DECK SLABS BRACE CONNECTION PARALLEL TO METAL DECK FLUTES



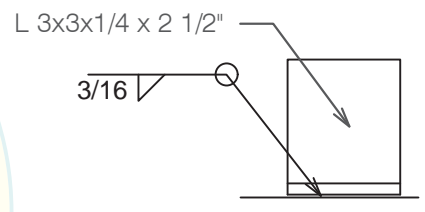
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N.T.S.	MISC. STEEL 2	

MOUNTING PLATE ASTM A36 FY = 36 KSI PLATE 1" x 18" x 1'-6" DRILL 15/16" HOLES ON A 14 1/2" BOLT CIRCLE WITH (4) 7/8" ASTM A193 B7 BOLTS (Fu = 125 KSI), INSTALL WITH 166 FT-LBS TORQUE



GUSSET PLATE DETAIL  
(4 REQUIRED)

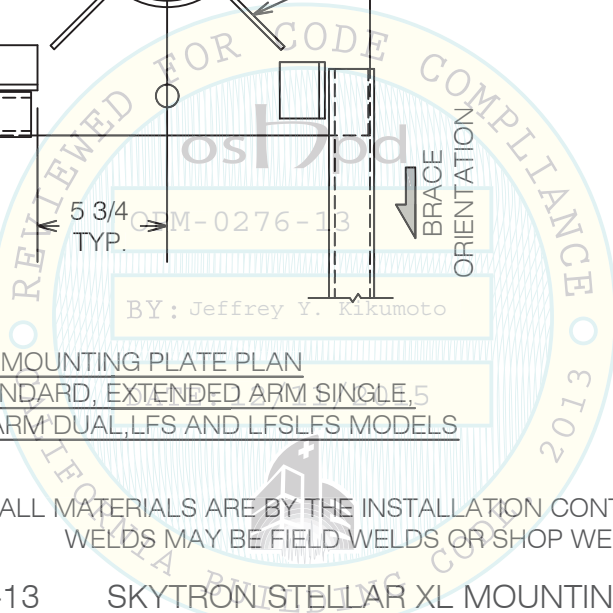


BRACE CONNECTION ANGLE  
(4 REQUIRED)

MOUNTING PLATE PLAN  
FOR STANDARD, EXTENDED ARM SINGLE, 5  
EXTENDED ARM DUAL, LFS AND LFSLFS MODELS

ALL MATERIALS ARE BY THE INSTALLATION CONTRACTOR.  
WELDS MAY BE FIELD WELDS OR SHOP WELDS.

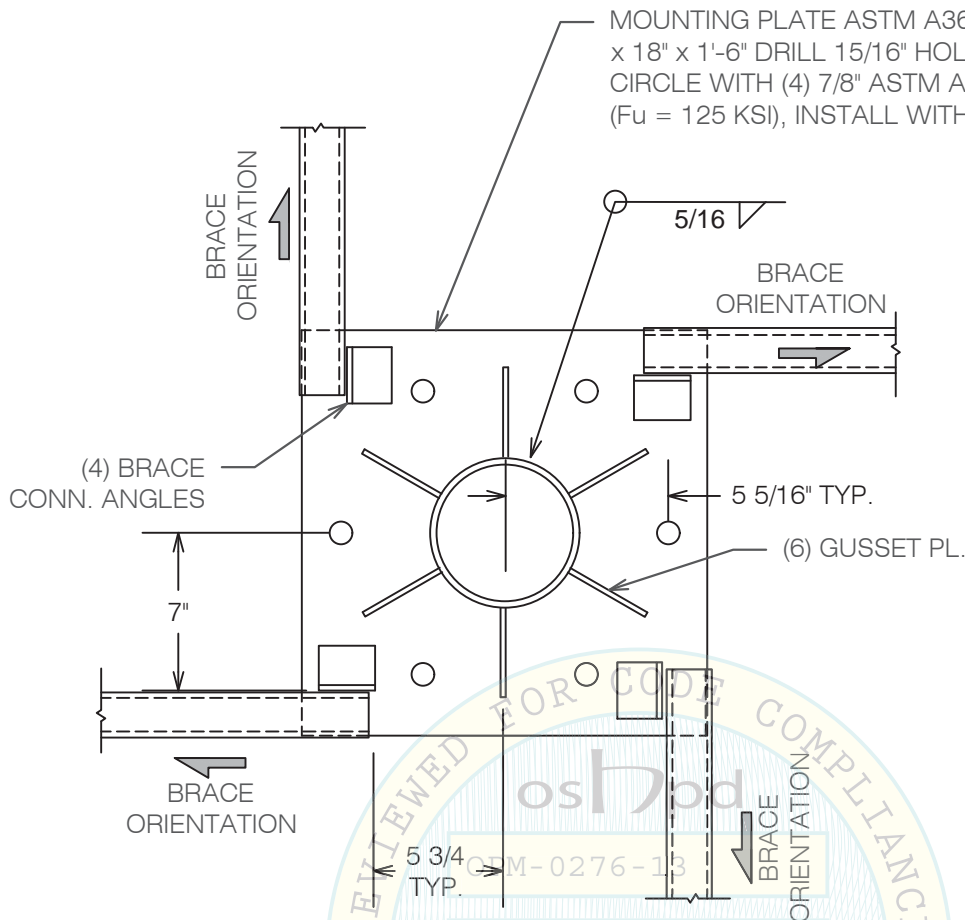
OPM-0276-13 SKYTRON STELLAR XL MOUNTING PLATE DETAILS



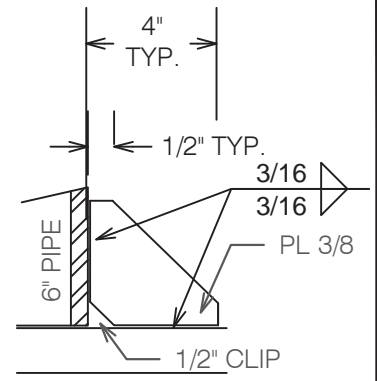


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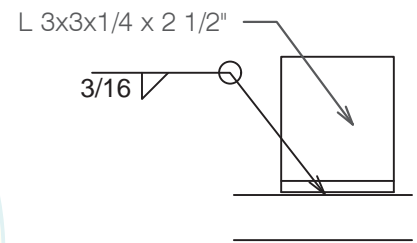
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MOUNTING PLATE ASTM A36 FY = 36 KSI PLATE 1" x 18" x 1'-6" DRILL 15/16" HOLES ON A 14 1/2" BOLT CIRCLE WITH (4) 7/8" ASTM A193 B7 BOLTS (Fu = 125 KSI), INSTALL WITH 166 FT-LBS TORQUE



GUSSET PLATE DETAIL  
(6 REQUIRED)




BRACE CONNECTION ANGLE  
(4 REQUIRED)


REVIEWED FOR CODE COMPLIANCE  
BY: Jeffrey Y. Kikumoto  
MOUNTING PLATE PLAN  
FOR EXTENDED HUB 11/2015

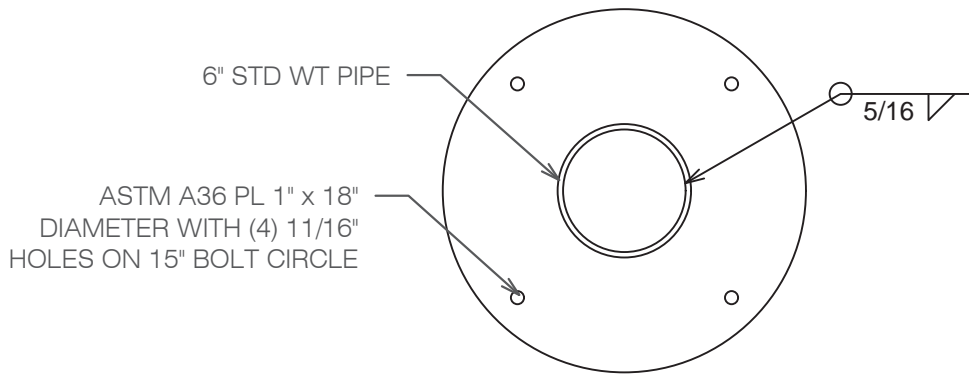
ALL MATERIALS ARE BY THE INSTALLATION CONTRACTOR.  
WELDS MAY BE FIELD WELDS OR SHOP WELDS.

OPM-0276-13 SKYTRON STELLAR XL MOUNTING PLATE DETAILS FOR EXTENDED HUB

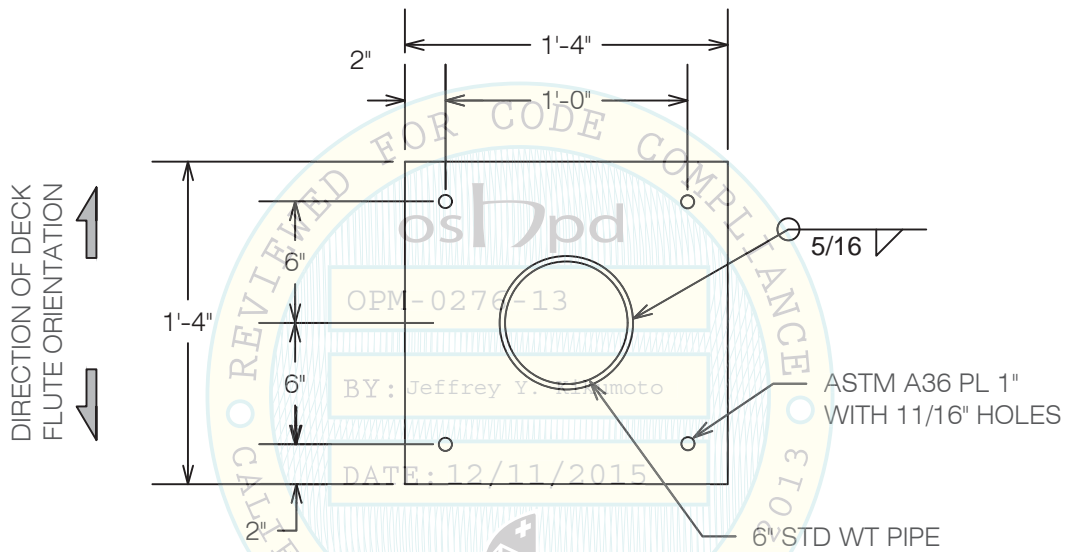


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TOP PLATE AT SOLID CONCRETE SLABS

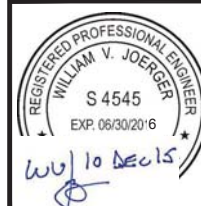


TOP PLATE AT METAL DECK SLABS

OPM-0276-13 SKYTRON STELLAR XL TOP PLATE DETAILS



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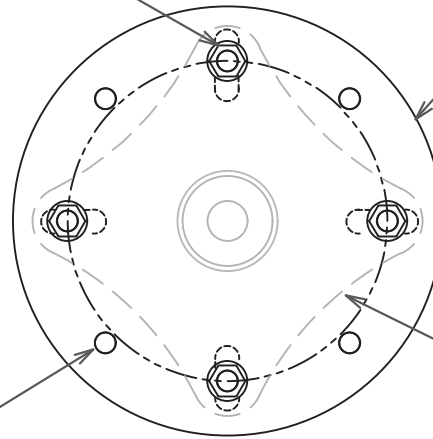


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N.T.S. TOP PLATE

(4) 7/8" SAE GRADE 5 BOLTS BY INSTALLATION CONTRACTOR ON 13.433" BOLT CIRCLE DIAMETER FOR CONNECTION OF HUB PLATE TO THE UNIVERSAL ADAPTER PLATE



UNIVERSAL ADAPTER PLATE 7/8" x 18" DIAMETER ASTM A36 (BY SKYTRON)

(4) 15/16" HOLES SEE PAGE "MOUNTING PLATE"

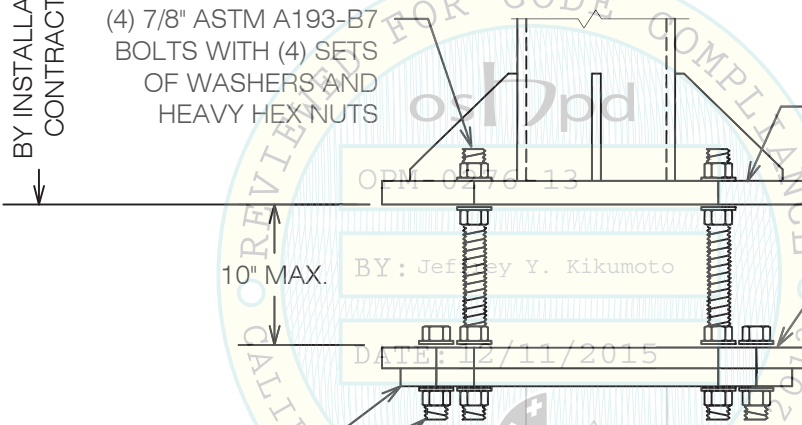
DUCTILE IRON CASTING HUB PL BELOW (BY SKYTRON) ASTM A536 GRADE 65-45-12 STD HUB OR CUSTOM LONG DOUBLE HUB

PLAN AT ADAPTER PLATE

BY INSTALLATION CONTRACTOR

(4) 7/8" ASTM A193-B7 BOLTS WITH (4) SETS OF WASHERS AND HEAVY HEX NUTS

SEE PAGE "MOUNTING PL"



UNIVERSAL ADAPTER PLATE BY SKYTRON

HUB PLATE BY SKYTRON

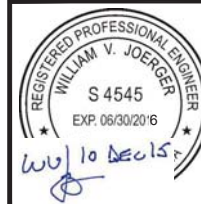
(4) 7/8" SAE GRADE 5 BOLTS

USE THIS DETAIL FOR EXTENDED ARM SINGLE, EXTENDED ARM DUAL, LFS AND LFSLFS MODELS

OPM-0276-13 SKYTRON STELLAR XL CONFIGURATION 1  
HUB PLATE AND UNIVERSAL ADAPTER PLATE DETAILS



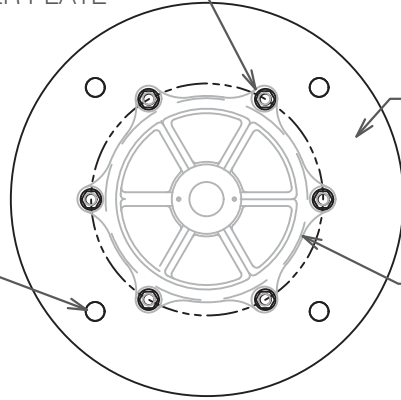
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(6) 1/2" SAE GRADE 5 BOLTS BY INSTALLATION CONTRACTOR ON 10.63" BOLT CIRCLE DIAMETER FOR CONNECTION OF HUB PLATE TO THE UNIVERSAL ADAPTER PLATE

(4) 15/16" HOLES SEE PAGE "MOUNTING PLATE"



UNIVERSAL ADAPTER PLATE  
7/8" x 18" DIAMETER ASTM A36  
(BY SKYTRON)

DUCTILE IRON CASTING HUB PL  
BELOW (BY SKYTRON) ASTM  
A536 GRADE 65-45-12

PLAN AT ADAPTER PLATE

BY INSTALLATION CONTRACTOR

(4) 7/8" ASTM A193-B7 BOLTS WITH (4) SETS OF WASHERS AND HEAVY HEX NUTS

SEE PAGE "MOUNTING PL"

10" MAX.

UNIVERSAL ADAPTER PLATE BY SKYTRON

USE THIS DETAIL FOR STANDARD MODELS

(6) 1/2" SAE GRADE 5 BOLTS  
HUB PLATE BY SKYTRON

ELEVATION

OPM-0276-13 SKYTRON STELLAR XL CONFIGURATION 2  
HUB PLATE AND UNIVERSAL ADAPTER PLATE DETAILS



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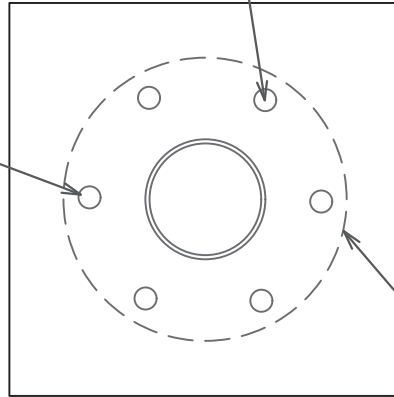


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(6) 7/8" SAE GRADE 5 BOLTS BY INSTALLATION CONTRACTOR ON 10.63" BOLT CIRCLE DIAMETER FOR CONNECTION OF HUB PLATE TO THE MOUNTING PLATE

(6) 15/16" HOLES SEE PAGE "EXT HUB PL"



EXTENDED HUB PLATE BELOW (BY SKYTRON)

PLAN AT MOUNTING PLATE

BY INSTALLATION CONTRACTOR

(6) 7/8" ASTM A193-B7 BOLTS WITH (4) SETS OF WASHERS AND HEAVY HEX NUTS

SEE PAGE "EXT HUB PL"

6" MAX.

EXTENDED HUB PLATE 3/4" X 13"  
JIS G 3101 GRADE SS400  
Fy = 34.1 KSI MIN. (BY SKYTRON)

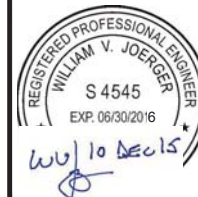
USE THIS DETAIL FOR EXTENDED HUB AND EXTENDED HUB/EXTENDED ARM MODELS

ELEVATION

OPM-0276-13 SKYTRON STELLAR XL CONFIGURATION 3  
HUB PLATE AND UNIVERSAL ADAPTER PLATE DETAILS



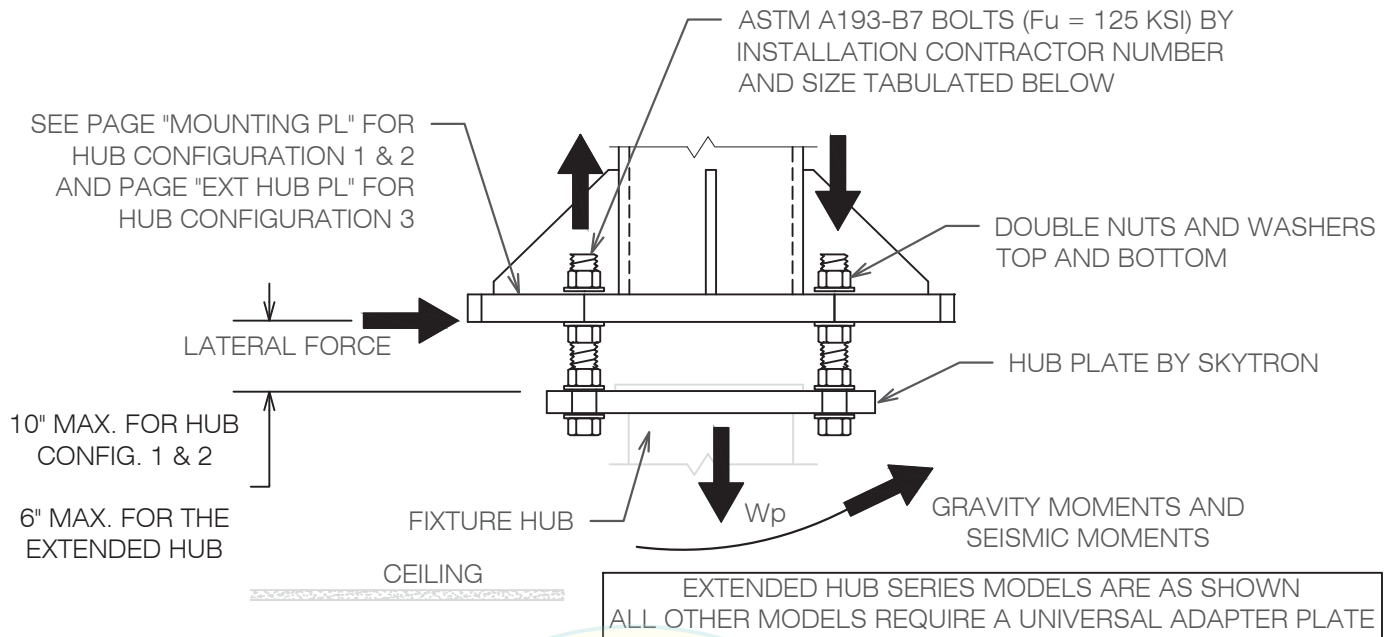
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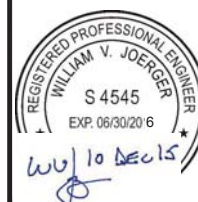
Equipment Data							Seismic Design Forces at Ultimate Loads			
Model Series	Model Number Used for Design	Hub Conf. No.	Bolts at at Hub	Bolts at Mount. Pl.	Torque ft.-lbs.	Weight at 1g lbs.	Vertical Force lbs.	Lateral Force lbs.	Mx ft.-lbs.	My ft.-lbs.
STANDARD	STX555	2	(6) 1/2"	(4) 7/8"	32	353	600	1,059	2,653	3,960
EXTENDED ARM SINGLE	STX5-EA-2000	1	(4) 7/8"	(4) 7/8"	166	159	270	477	1,599	1,432
EXTENDED ARM DUAL	STX55-EA-2000/1500	1	(4) 7/8"	(4) 7/8"	166	315	536	945	1,601	1,389
EXTENDED HUB & ARM	STX55-EH-2000/1500	3	(6) 7/8"	(6) 7/8"	166	421	716	1,263	3,469	1,962
EXTENDED HUB	STX555-EH	3	(6) 7/8"	(6) 7/8"	166	466	792	1,398	3,075	8,352
LFS	LFS STX555	1	(4) 7/8"	(4) 7/8"	166	562	955	1,686	3,656	6,136
LFSLFS	LFSLFS STX55	1	(4) 7/8"	(4) 7/8"	166	579	984	1,737	3,493	5,641

- WEIGHTS AND MOMENTS ARE FACTORED LOADS USING STRENGTH DESIGN AND INCLUDE THE FOLLOWING FACTORS:  $DL = 1.2$ ,  $FpV = 0.5$  AND  $FpH = 3.0$ .
- $M_x$  ARE MOMENTS IN THE HORIZONTAL AXIS DUE TO COMPONENT WEIGHT TIMES THE MAXIMUM HORIZONTAL ECCENTRICITY.
- $M_y$  ARE MOMENTS IN THE HORIZONTAL AXIS DUE TO COMPONENT LATERAL FORCE TIMES THE MAXIMUM VERTICAL ECCENTRICITY.
- MODEL NUMBER TABULATED YIELDS THE WORST CASE LOADING FOR THE MODEL SERIES.
- EXTENDED HUB MODELS DO NOT HAVE A UNIVERSAL MOUNTING PLATE
- SEE PAGE "ATTACH NOTES" FOR A LISTING OF THE MODEL NUMBERS INCLUDED WITHIN A GIVEN MODEL SERIES.

OPM-0276-13 SKYTRON STELLAR XL FORCES AND MOMENTS



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