



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0543-19

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [X] New [] Renewal/Update

Manufacturer Information

Manufacturer: Siemens Healthcare Diagnostics Inc.

Manufacturer's Technical Representative: Robert Wiedenmann

Mailing Address: 600 GBC Drive, Newark, DE 19702

Telephone: (302) 631-7539

Email: robert.k.wiedenmann@siemens-healthineers.com

Product Information

Product Name: External Uninterruptible Power Supplies (UPS)

Product Type: UPS

Product Model Number: Alpha Technologies Pinnacle Plus 6000T & Falcon Electric SG2K-1T

General Description: UPS are specified to complement many Siemens Healthcare Diagnostic Systems to assure data Integrity in the event of power loss

Applicant Information

Applicant Company Name: Siemens Healthcare Diagnostics Inc.

Contact Person: Robert Wiedenmann

Mailing Address: 600 GBC Drive, Newark, DE 19702

Telephone: (302) 631-7539

Email: robert.k.wiedenmann@siemens-healthineers.com

Title:





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

Registered Design Professional Preparing Engineering Recommendations

Company Name: CYS STRUCTURAL ENGINEERS, INC.
Name: Dieter Siebald California License Number: S4346
Mailing Address: 2495 Natomas Park Drive, Suite 650, Sacramento, CA 95833
Telephone: 916-920-2020 Email: dieters@cyseng.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: 8/28/2020
Name: Haeseong Lim Title: Senior Structural Engineer
Condition of Approval (if applicable): _____

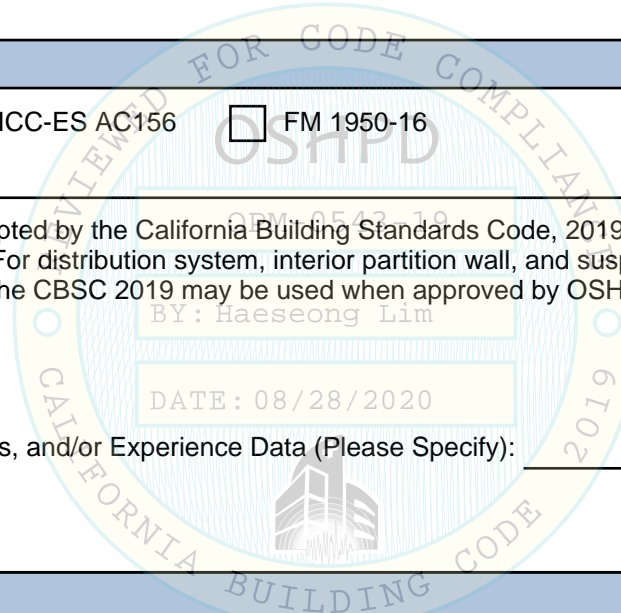
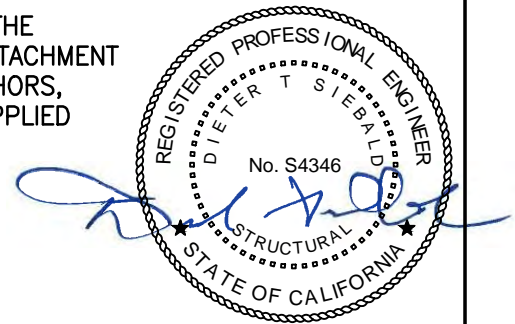
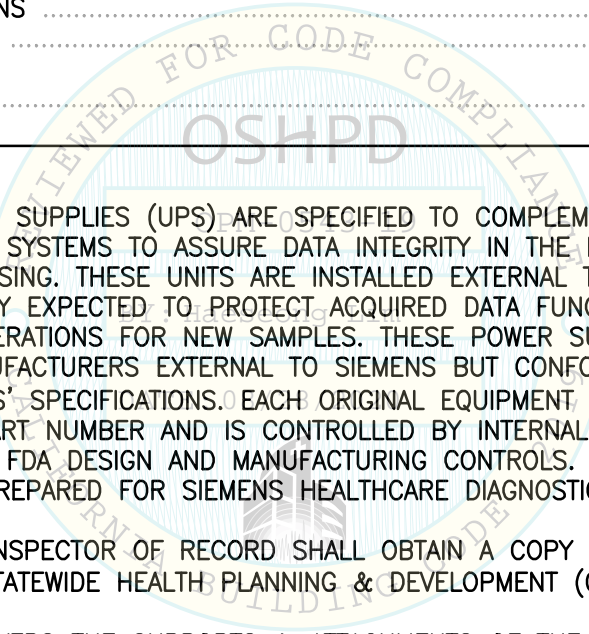


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NOTES:

- UNINTERRUPTIBLE POWER SUPPLIES (UPS) ARE SPECIFIED TO COMPLEMENT MANY SIEMENS HEALTHCARE DIAGNOSTIC SYSTEMS TO ASSURE DATA INTEGRITY IN THE EVENT OF POWER LOSS DURING SAMPLE PROCESSING. THESE UNITS ARE INSTALLED EXTERNAL TO THE PRIMARY ANALYZER AND ARE ONLY EXPECTED TO PROTECT ACQUIRED DATA FUNCTIONS AND NOT TO CONTINUE ANALYZER OPERATIONS FOR NEW SAMPLES. THESE POWER SUPPLIES ARE PURCHASED FROM COMMERCIAL MANUFACTURERS EXTERNAL TO SIEMENS BUT CONFORM TO SIEMENS HEALTHCARE DIAGNOSTICS' SPECIFICATIONS. EACH ORIGINAL EQUIPMENT MANUFACTURER UNIT IS ASSIGNED A SIEMENS PART NUMBER AND IS CONTROLLED BY INTERNAL QUALITY MANAGEMENT REQUIREMENTS TO MEET FDA DESIGN AND MANUFACTURING CONTROLS.
- THESE DRAWINGS ARE PREPARED FOR SIEMENS HEALTHCARE DIAGNOSTICS, INC., NEWARK, DELAWARE.
- THE CONTRACTOR AND INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT (OSHPD) PRE-APPROVAL PROGRAMS WEBSITE.
- THIS PRE-APPROVAL COVERS THE SUPPORTS & ATTACHMENTS OF THE EQUIPMENT TO THE SUPPORTING STRUCTURE. THE EQUIPMENT & ATTACHMENT HARDWARE ARE SUPPLIED BY THE MANUFACTURER. EXPANSION ANCHORS, THRU-BOLTS & STRUT PLATES SHOWN IN THIS OPM SHALL BE SUPPLIED & INSTALLED BY THE CONTRACTOR.



SHEET TITLE: TABLE OF CONTENTS



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

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GENERAL NOTES:

1. THIS OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE W/ THIS OPM SHALL BE BASED ON THE CBC 2019.
2. EQUIP ANCHORAGES SUCH AS EXPANSION ANCHORS, BOLTS, SCREWS, & FITTINGS SHALL BE DESIGNED IN COMPLIANCE W/ THE FORCE LEVEL REQUIREMENTS OF THE 2019 CBC, TITLE 24, PART 2, VOLUME 2. LOAD COMBINATIONS FOR LOAD & RESISTANCE FACTOR DESIGN (LRFD) SHALL BE USED.
3. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD FOR A SITE SPECIFIC PROJECT TO VERIFY:
 - A. THE ADEQUACY OF THE NEW OR (E) STRUCTURE TO RESIST THE FORCES & WEIGHT SPECIFIED FOR EACH EQUIP IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS AS REQ.
 - B. THE NEW ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPENINGS, SEE TABLE 1 ON PAGE 3.
 - C. THE NEW ANCHORS ARE LOCATED AT LEAST 18" AWAY FROM ADJACENT (E) ANCHORS OR THE SEOR SHALL EVALUATE THE ANCHORAGES FOR THE EQUIP IN THIS OPM FOR ADVERSE AFFECTS OF ADJACENT ANCHORAGES. THE SPACING SHOWN IN TABLE 1 ON PAGE 3, IS THE REQ MIN SPACING OF THE 1/2"Ø AB'S. THE REQ SPACING FROM ANCHORS OF OTHER DIAMETERS & EMBED MAY VARY & SHALL BE EVALUATED BY THE SEOR.
 - D. THAT THE INSTALLATION IS IN CONFORMANCE W/ THE 2019 CBC & W/ THE DTLs SHOWN IN THIS PRE-APPROVAL.
 - E. THAT THE ACTUAL EQUIP'S WEIGHT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS, ANCHOR DTLs, & THE MATERIAL & GA OF THE EQUIP WHERE ATTACHMENTS ARE MADE, AGREE W/ THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.
 - F. THAT THE CONC SLAB TO WHICH THE EQUIP IS ANCHORED SHALL MEET THE REQUIREMENTS OF APPLICABLE ICC REPORT & THIS OPM
- 4A. EXPANSION ANCHORS INSTALLED IN NORMAL WEIGHT OR SAND LIGHTWEIGHT CONCRETE SHALL BE CARBON STEEL HILTI KB-TZ EXPANSION ANCHORS COMPLYING W/ ESR-1917 REISSUED MAY 2019.
 - B. INSTALLATION: INSTALL THE EXPANSION ANCHORS IN ACCORDANCE W/ THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR.
 - C. JOB SITE TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOB SITE TESTING IN ACCORDANCE W/ THE TEST TORQUE LOAD PROVIDED IN TABLE 1 OF THIS DOCUMENT. TEST 50% OF THE INSTALLED ANCHORS. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE INSPECTOR OF RECORD. TESTING & SPECIAL INSPECTION OF EXPANSION ANCHORS SHALL BE PERFORMED BY THE FACILITY OWNER PER CBC 1704A & 1910A.5 & CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER & ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE. IF ANY ANCHOR FAILS THE TEST, TEST ALL ANCHORS. THE TEST SHALL BE PERFORMED 24 HOURS OR MORE AFTER INSTALLATION. TESTING MAY BE DONE PRIOR TO EQUIP INSTALLATION, HOWEVER, THE NUT SHALL BE RETORQUED TO INSTALLATION TORQUE AFTER EQUIP INSTALL. ALSO, REFER TO 2019 CBC 1910A.5 "TESTS FOR POST-INSTALLED ANCHORS IN CONCRETE".
 - D. FAILURE/ACCEPTANCE CRITERIA: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN ONE-HALF (1/2) TURN OF THE NUT.
 - E. AVOID DAMAGING (E) STL REINF IN CONC SLAB WHEN INSTALLING CONC EXPANSION ANCHORS. PROVIDE FOR FULL THRD ENGAGEMENT OF NUT & WASHER.



SHEET TITLE: GENERAL NOTES



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GENERAL NOTES CONTINUED:

4F. ANCHOR REQUIREMENTS:

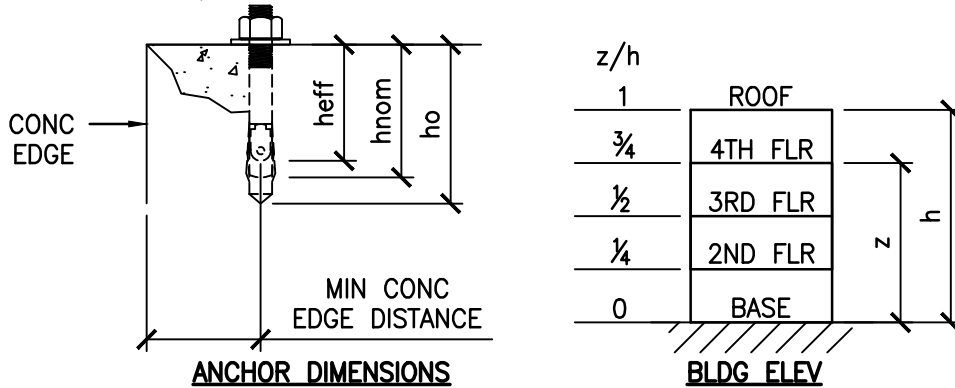


TABLE 1 – HILTI KB-TZ CARBON STEEL ANCHOR INSTALLATION

CONDITION OF ANCHORAGE	ANCHOR DIA (INCH)	INSTALLATION EMBED (INCH) hnom	EFFECTIVE EMBED (INCH) heff	HOLE DEPTH (INCH) ho	MIN CONC THICKNESS (INCH)	MIN CONC EDGE DISTANCE (INCH)	MIN AB SPACING (INCH)	TEST TORQUE (FT-LBS)
CASE 1	3/8	2 5/16	2	2 5/8	3/4	3	4	25
CASE 2	1/2	2 3/8	2	2 5/8	2 7/8	6	40	

5. BOLTS THRU CONC ON MTL DECK:

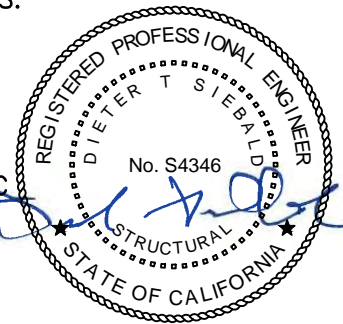
- A. BOLTS SHALL BE TORQUED BY 3/4 TURN OF THE NUT AFTER SNUG TIGHT CONDITION IS ACHIEVED, UNO. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQ TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
- B. THRU-BOLT HOLES SHALL BE 1/16" LARGER THAN BOLT SIZE (HOLE SIZE = BOLT SIZE + 1/16").
- C. THRU-BOLTS IN CONC SHALL RECEIVE SPECIAL INSPECTION & TESTING IN ACCORDANCE W/ REQUIREMENTS FOR POST-INSTALLED ANCHORS. THRU-BOLTS W/ STL TO STL CONN IN TENSION DO NOT REQUIRE TESTING.

6. TWO (2) CONDITIONS OF ANCHORAGE ARE SPECIFIED & PRESENTED IN THIS PRE-APPROVAL:

- A. **CASE 1:** ANCHORAGE DETAILS LOCATED AT UPPER FLRS ABOVE THE BASE OF A BLDG ($0 < z/h < OR = 1.0$), SEOR SHALL DESIGN THE STRUTS & ANCHORS AT THE SOFFIT OF THE CONC FILLED MTL DECK FOR SITE SPECIFIC CONDITIONS.
- CASE 2:** ANCHORAGE DTLs LOCATED AT SOG AT OR BELOW THE BASE OF A BLDG ($z/h=0$). THE FLRS ARE ASSUMED TO BE BUILT OF MIN OF 4" NWC ($f'c = 3000$ PSI, MIN).

7. THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA. WHERE $S_{ps} = OR < 2.6$.

8. THE UPS COMPONENTS & THEIR SUPPORTS HAVE BEEN SUBJECTED TO DYNAMIC TESTING TO CERTIFY THAT THE UPS & ITS SUPPORTS WILL REMAIN OPERABLE FOLLOWING THE DESIGN BASIS EARTHQUAKE PRESCRIBED BY THE 2019 CBC. REFER TO OSHPD'S PRE-APPROVAL PROGRAM WEBSITE FOR SPECIAL SEISMIC CERTIFICATIONS.



SHEET TITLE: GENERAL NOTES (CONTINUED)

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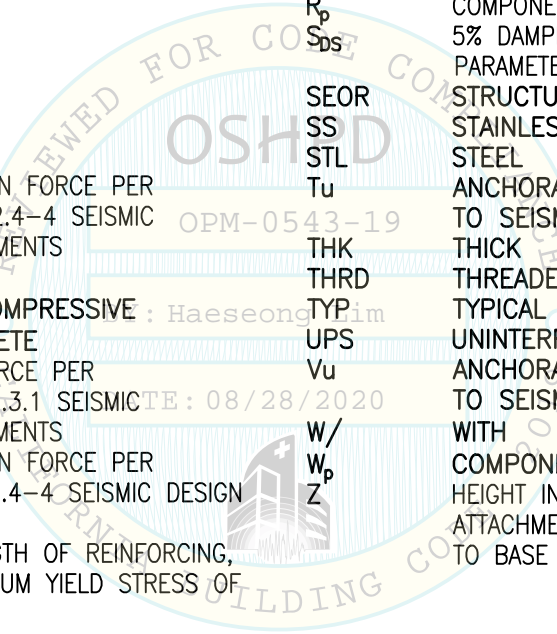
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SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



ABBREVIATIONS:

⊙	AT	LBS	POUNDS
AB	ANCHOR BOLT	LRFD	LOAD & RESISTANCE FACTOR DESIGN
AISI	AMERICAN IRON & STEEL INSTITUTE	LWC	LIGHT WEIGHT CONCRETE
a_p	COMPONENT AMPLIFICATION FACTOR	MAX	MAXIMUM
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	MFR	MANUFACTURER
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	MIN	MINIMUM
BLDG	BUILDING	NO. (#)	NUMBER
C	ANCHORAGE COMPRESSION REACTION DUE TO SEISMIC DESIGN FORCE	NWC	NORMAL WEIGHT CONCRETE
CBC	CALIFORNIA BUILDING CODE	OPM	OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION
CG	CENTER OF GRAVITY	OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
⊕	CENTERLINE	OSP	OSHPD SEISMIC CERTIFICATION PRE-APPROVAL
CONC	CONCRETE	Ⓡ	PLATE
CRS	COLD-ROLLED STEEL	PSI	POUNDS PER SQUARE INCH
DTL	DETAIL	REQ	REQUIRED
DIA (∅)	DIAMETER	R_p	COMPONENT RESPONSE MODIFICATION FACTOR
(E)	EXISTING CONDITION	S_{ds}	5% DAMPED SPECTRAL RESPONSE ACCELERATION PARAMETER AT SHORT PERIODS
ELEV	ELEVATION	SEOR	STRUCTURAL ENGINEER OF RECORD
EMBED	EMBEDMENT	SS	STAINLESS STEEL
EQ	EQUAL	STL	STEEL
EQUIP	EQUIPMENT	Tu	ANCHORAGE TENSION REACTION DUE TO SEISMIC DESIGN FORCE
ES	EACH SIDE	THK	THICK
E_v	VERTICAL SEISMIC DESIGN FORCE PER ASCE 7-16 SECTION 12.4-4 SEISMIC DESIGN FORCE REQUIREMENTS	THRD	THREADED
FLR	FLOOR	TYP	TYPICAL
f'_c	MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE	UPS	UNINTERRUPTIBLE POWER SUPPLY
F_p	HORIZONTAL SEISMIC FORCE PER ASCE 7-16 SECTION 13.3.1 SEISMIC DESIGN FORCE REQUIREMENTS	Vu	ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE
F_v	VERTICAL SEISMIC DESIGN FORCE PER ASCE 7-16 SECTION 12.4-4 SEISMIC DESIGN FORCE REQUIREMENTS	W/	WITH
F_y	SPECIFIED YIELD STRENGTH OF REINFORCING, PSI OR SPECIFIED MINIMUM YIELD STRESS OF STEEL, KSI	W_p	COMPONENT OPERATING WEIGHT
GA	GAUGE	Z	HEIGHT IN THE STRUCTURE OF POINT OF ATTACHMENT OF COMPONENT WITH RESPECT TO BASE
GC	GENERAL CONTRACTOR		
GR	GRADE		
h	AVERAGE ROOF HEIGHT OF STRUCTURE WITH RESPECT TO THE BASE		
ID	IDENTIFICATION		
IN (")	INCH		
I_p	COMPONENT IMPORTANCE FACTOR		
KSI	KIP PER SQUARE INCH		



SHEET TITLE: ABBREVIATIONS

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EQUIP IDENTIFICATION ONLY:

TABLE 2 – EQUIP IDENTIFICATION

UPS ID	COMMERCIAL SUPPLIER	MODEL	SIEMENS PART NO.	SIZE	SIEMENS ANALYZER ¹
1	ALPHA TECHNOLOGIES	PINNACLE PLUS 6000T	1000037971	6 kVA	VISTA 500-1500 OR DIMENSION EXL 200
2	FALCON ELECTRIC	SG2K-1T	10471339	2 kVA	RXL MAX (XPAND, EXL)

1. THE VARIOUS SIEMENS HEALTHCARE DIAGNOSTIC EQUIPMENT ELECTRICALLY CONNECTED BY THESE UPS UNITS ARE NOT PART OF THIS OSHPD PRE-APPROVAL.

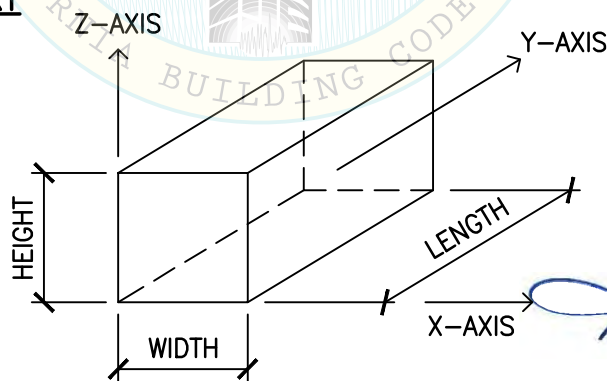
EQUIP GEOMETRY

TABLE 3 – EQUIP GEOMETRY

UPS ID	UPS DIMENSIONS			CENTER OF GRAVITY – CG ¹			UPS WEIGHT W _p (LBS)
	WIDTH (IN)	LENGTH (IN)	HEIGHT (IN)	X-AXIS (IN)	Y-AXIS (IN)	Z-AXIS (IN)	
1	10.15	27.55	39.44	5.1	9.3	15.7	336.6
2	7.6	18.9	13.8	3.8	9.5	6	68.4

1. MEASURED FROM UNIT BASE, INCLUSIVE OF CASTERS WHERE OCCURS.

FIGURE 1 – EQUIP GEOMETRY



SHEET TITLE: EQUIPMENT IDENTIFICATION & GEOMETRY

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SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



SEISMIC DESIGN FORCES (LRFD)

$$F_p = \frac{0.4 Q_p S_{DS} W_p}{(R_p/I_p)} (1+2 z/h) \quad \text{ASCE 7-16 (13.3-1)}$$

$$F_p \text{ (MAX)} = 1.6 S_{DS} I_p W_p \quad \text{ASCE 7-16 (13.3-2)}$$

$$F_p \text{ (MIN)} = 0.3 S_{DS} I_p W_p \quad \text{ASCE 7-16 (13.3-3)}$$

$$E_v = F_v = \pm 0.2 S_{DS} W_p \quad \text{ASCE 7-16 (12.4-4)}$$

SUPPORT & ATTACHMENT DESIGN IS PER 2019 CBC AT LRFD LEVEL FORCES PER TABLE 13.6-1 OF ASCE 7-16 INCL SUPPLEMENT #1 & ERRATA. GENERATORS, BATTERIES, INVERTERS, MOTORS, TRANSFORMERS & OTHER COMPONENTS CONSTRUCTED OF HIGH-DEFORMABILITY MATERIALS.

$$Q_p = 1.0$$

$$S_{DS} = 2.6$$

$$R_p = 2.5$$

$$I_p = 1.5$$

$$\Omega_o = 2.0$$

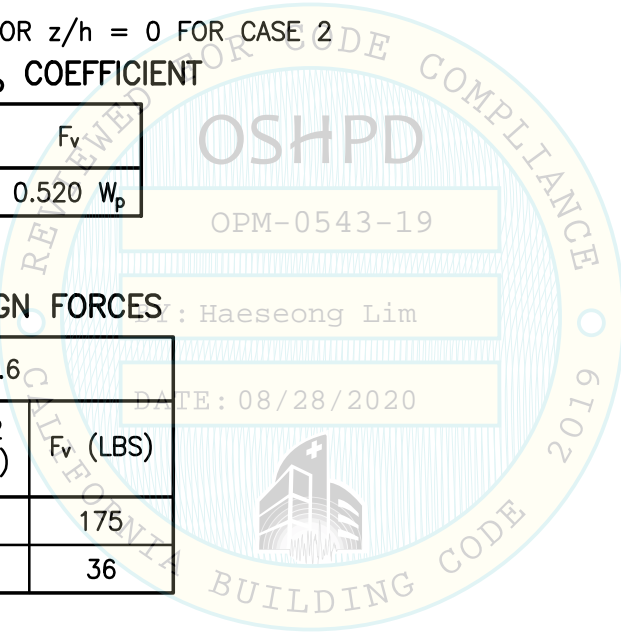
$z/h \leq 1$ FOR CASE 1 OR $z/h = 0$ FOR CASE 2

TABLE 4 – GOVERNING F_p COEFFICIENT

S_{DS}	CASE 1	CASE 2	F_v
2.6	1.87 W_p	1.17 W_p	0.520 W_p

TABLE 5 – SEISMIC DESIGN FORCES

UPS ID	$S_{DS} = 2.6$		
	CASE 1 F_p (LBS)	CASE 2 F_p (LBS)	F_v (LBS)
1	630	394	175
2	128	80	36



SHEET TITLE: SEISMIC DESIGN FORCES



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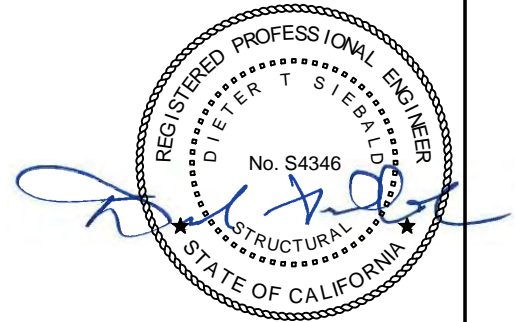
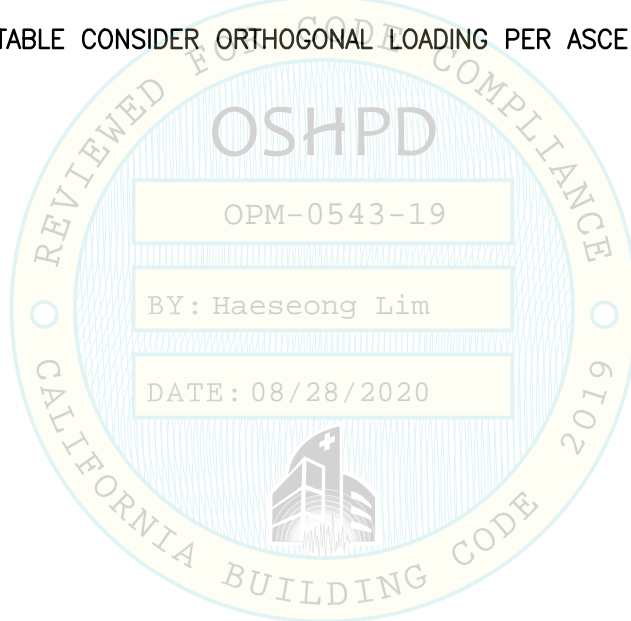
MAX ANCHORAGE REACTIONS: 1, 2

TABLE 6 – MAX ANCHORAGE REACTIONS

UPS ID	$S_{ps} = 2.6$					
	CASE 1 ($z/h \leq 1.0$)			CASE 2 ($z/h = 0$)		
	T_{Umax} (LBS)	C_{Umax} (LBS)	V_{Umax} (LBS)	T_{Umax} (LBS)	C_{Umax} (LBS)	V_{Umax} (LBS)
1	379	525	126	232	377	79
2	58	130	64	32	103	40

NOTE:
FORCES SHOWN DO NOT
INCLUDE THE OVERSTRENGTH
FACTOR, Ω_o

1. THIS TABLE REPORTS THE MAX FORCE WITHOUT Ω_o ON THE MOST HIGHLY LOADED BOLT IN A CONNECTION TO THE BLDG STRUCTURE AS SHOWN ON THE ANCHORAGE DTL FOR EACH UPS.
2. FORCES LISTED IN THIS TABLE CONSIDER ORTHOGONAL LOADING PER ASCE 7-16 SECTION 12.5.3.1.a.



SHEET TITLE: MAX ANCHORAGE REACTIONS



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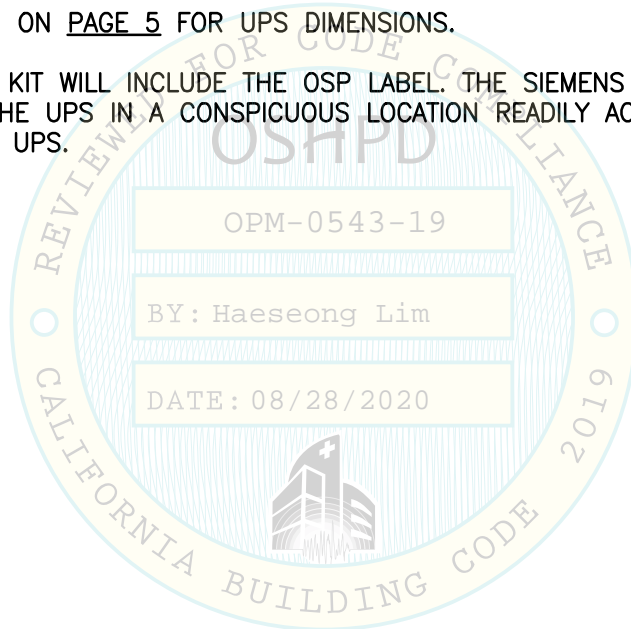
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UPS INSTALLATION NOTES:

1. FOR EQUIP IDENTIFICATION, SEE PAGE 5.
2. FOR EQUIP GEOMETRY, SEE PAGE 5.
3. FOR EQUIP ANCHORAGE DESIGN LOADS, SEE PAGES 6 & 7. FOR EQUIP ATTACHMENT DTLS, SEE PAGES 15 THRU 17.
4. REFER TO PAGE 2 THRU 4 FOR GENERAL NOTES & ABBREVIATIONS.
5. INSTALLATION OF UPS UNIT TO SUPPORT BRACKET IS THE RESPONSIBILITY OF SIEMENS. REFER TO PAGES 9 THRU 14 FOR SIEMENS ANCHOR ASSEMBLY DRAWINGS.
6. AB INSTALLATION TO STRUCTURE SHALL BE PERFORMED BY A GC.
7. THE GC & SIEMENS MUST WORK CONCURRENTLY TO COMPLETE THE UPS INSTALLATION.
8. SEE TABLE 3 & FIGURE 1 ON PAGE 5 FOR UPS DIMENSIONS.
9. THE SIEMENS ANCHORAGE KIT WILL INCLUDE THE OSP LABEL. THE SIEMENS REPRESENTATIVE SHALL AFFIX THIS LABEL ONTO THE UPS IN A CONSPICUOUS LOCATION READILY ACCESSIBLE TO VIEW DURING THE INSTALLATION OF THE UPS.



SHEET TITLE: UPS INSTALLATION NOTES



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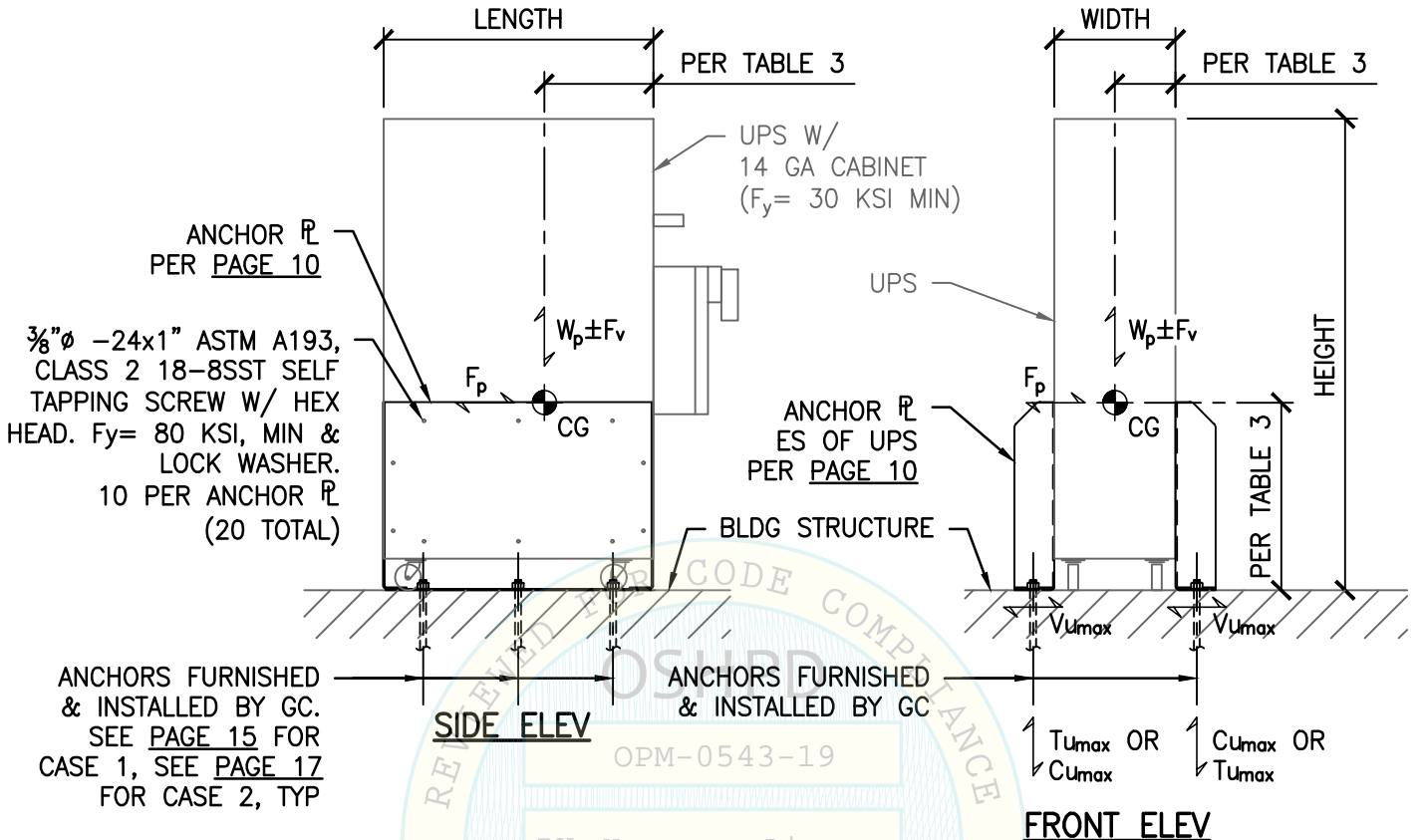
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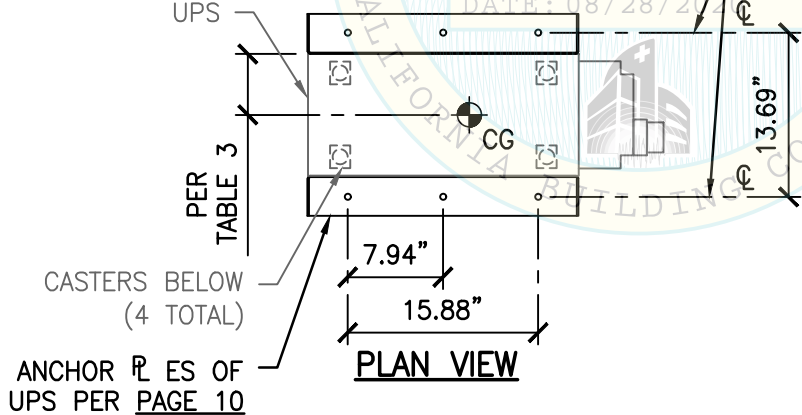
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SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



1 ROW OF 3 ANCHORS PER ANCHOR \bar{P} , TYP. FURNISHED & INSTALLED BY GC



- NOTES:**
- SEE PAGE 8 FOR INSTALLATION NOTES.
 - ALL ITEMS SHALL BE FURNISHED & INSTALLED BY SIEMENS EXCEPT AS NOTED.



SHEET TITLE: ALPHA TECHNOLOGIES PINNACLE PLUS 6000T
PLAN & ELEVATIONS



CYS STRUCTURAL ENGINEERS, INC.

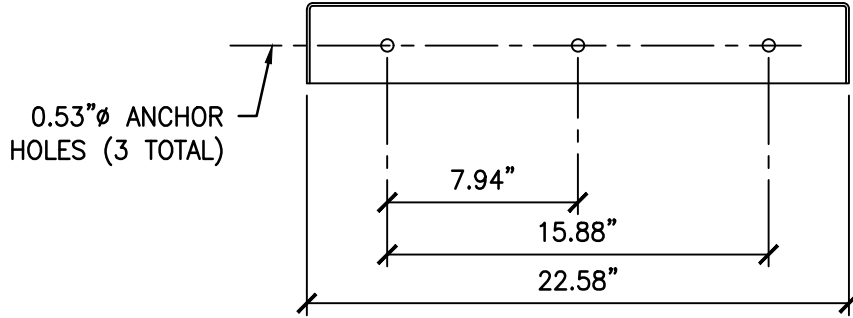
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

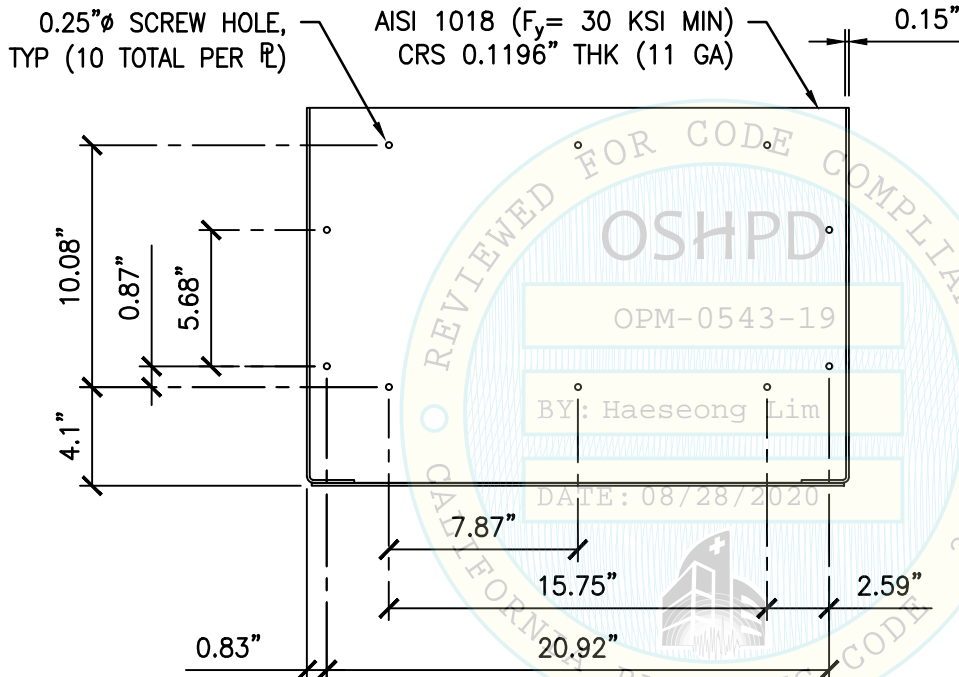
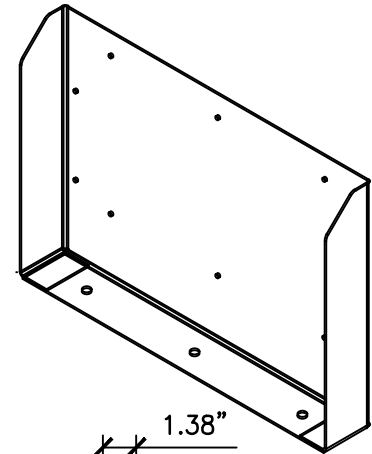
Job No: 19072.02
Date: 9-02-2020
Page: 9 of 17

L:\Jobs\19072 Siemens OSP-0263-10 & OPA-2828-10 Renewals\Task 02 - OPA-2828-10 Renewals\ACAD\SI_19072.02.dwg Time:Sep02,2020-11:48am Login:shawmm Dimstyle:1 LTScale:6

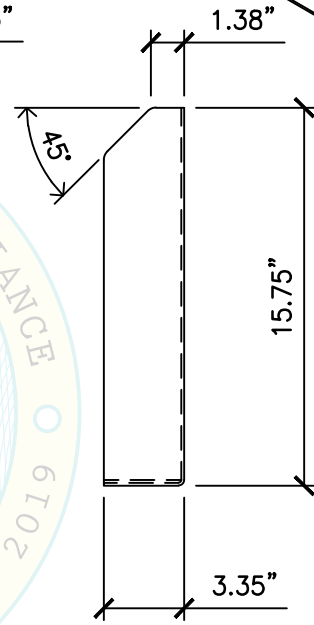
SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



PLAN VIEW

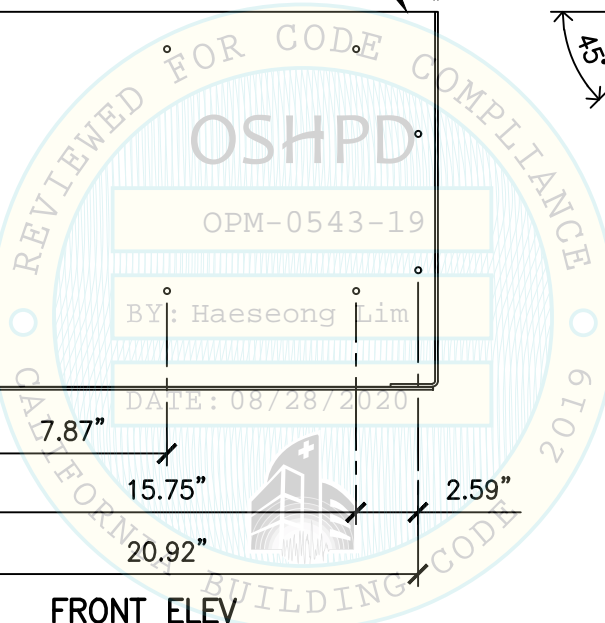


FRONT ELEV



SIDE ELEV

NOTE:
FURNISHED & INSTALLED BY SIEMENS;
SEE INSTALLATION NOTE 5 ON PG 8.

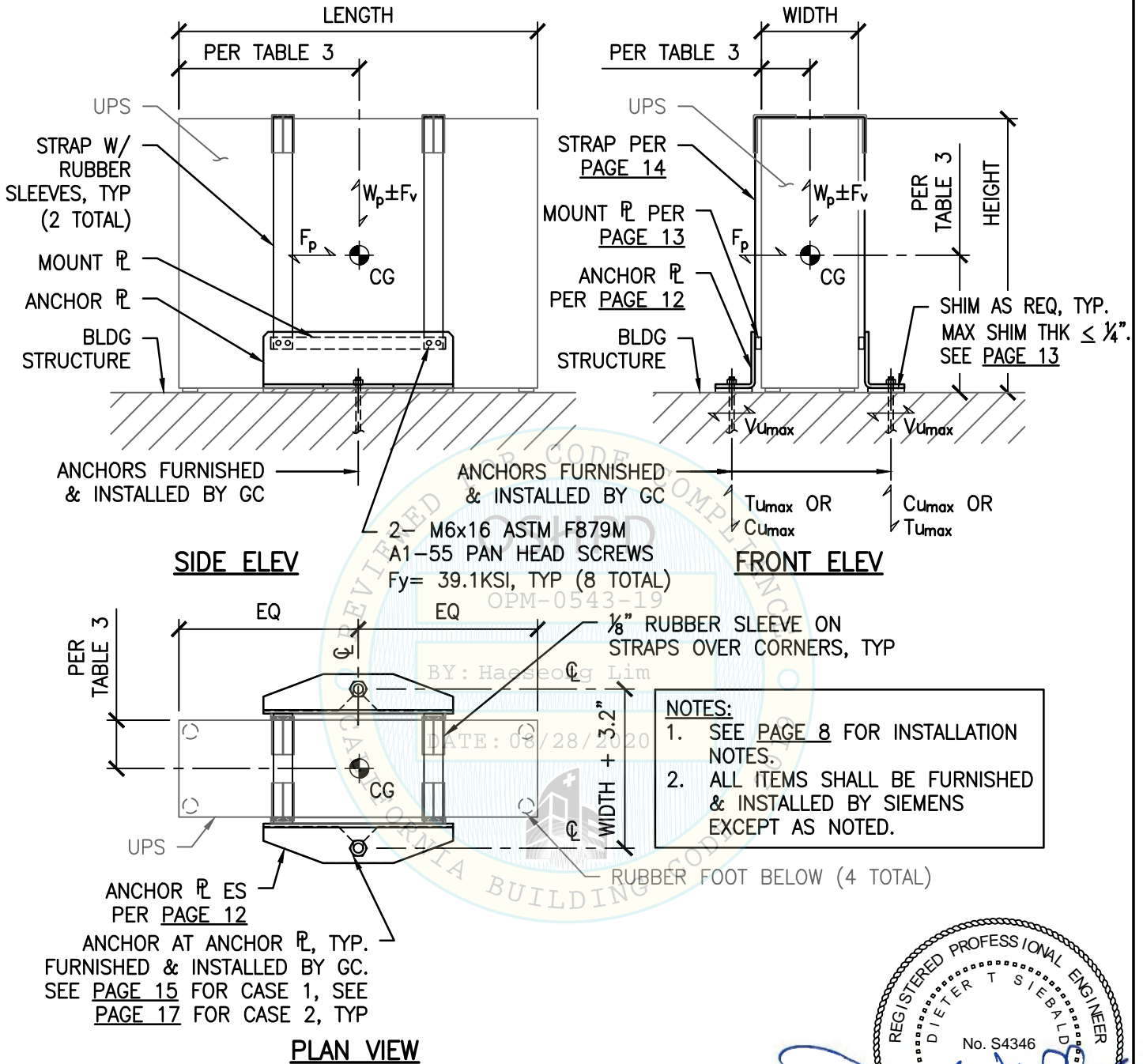


SHEET TITLE: ALPHA TECHNOLOGIES PINNACLE PLUS 6000T
ANCHOR PLATE DETAIL

<p>CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 SACRAMENTO, CA 95833</p>	TEL (916) 920-2020 www.cyseng.com	Job No: 19072.02 Date: 9-02-2020 Page: 10 of 17

L:\Jobs\19072 Siemens OSP-0263-10 & OPA-2828-10 Renewals\Task 02 - OPA-2828-10 Renewal\ACAD\SI_19072.02.dwg Time: Sep 02, 2020 - 11:48am Login: shawnm Dim: scale: 1 LTScale: 6

SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



SHEET TITLE: FALCON ELECTRIC SG2K-1T
PLAN & ELEVATIONS



CYS STRUCTURAL ENGINEERS, INC.

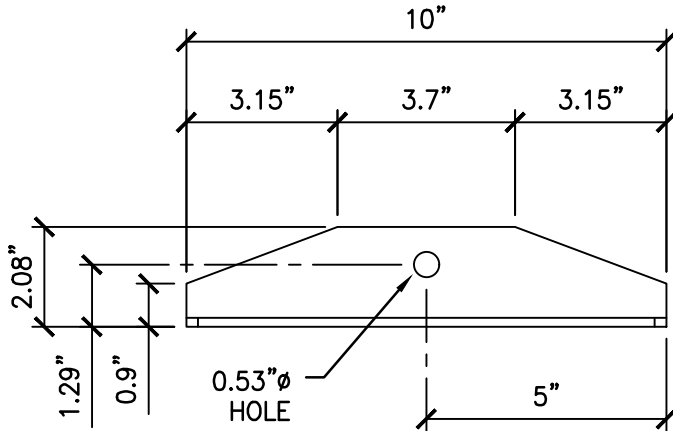
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

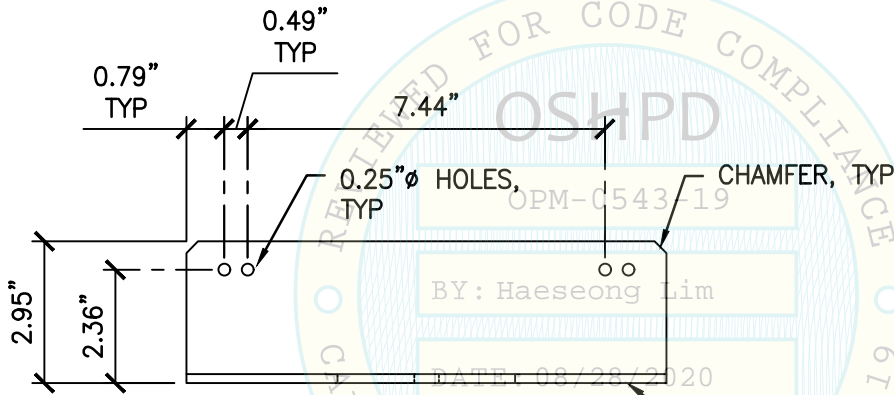
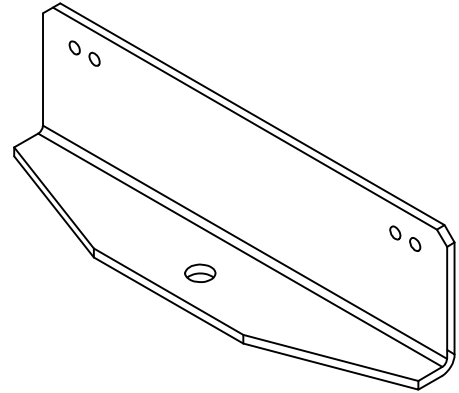
Job No: 19072.02
Date: 9-02-2020
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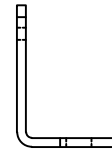
SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



PLAN VIEW



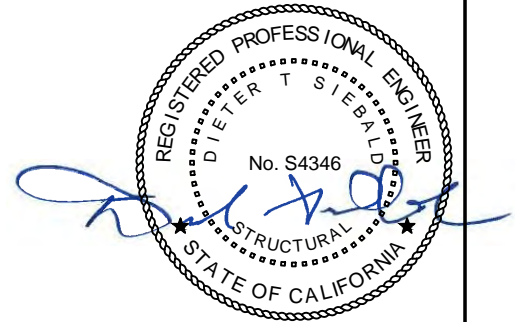
FRONT VIEW



SIDE VIEW

AISI 1018 (F_y = 30 KSI MIN)
CRS BENT PL, 0.188" THK

NOTE:
FURNISHED & INSTALLED BY SIEMENS;
SEE INSTALLATION NOTE 5 ON PAGE 8.



SHEET TITLE: FALCON ELECTRIC SG2K - 1T
ANCHOR PLATE DETAIL



CYS STRUCTURAL ENGINEERS, INC.

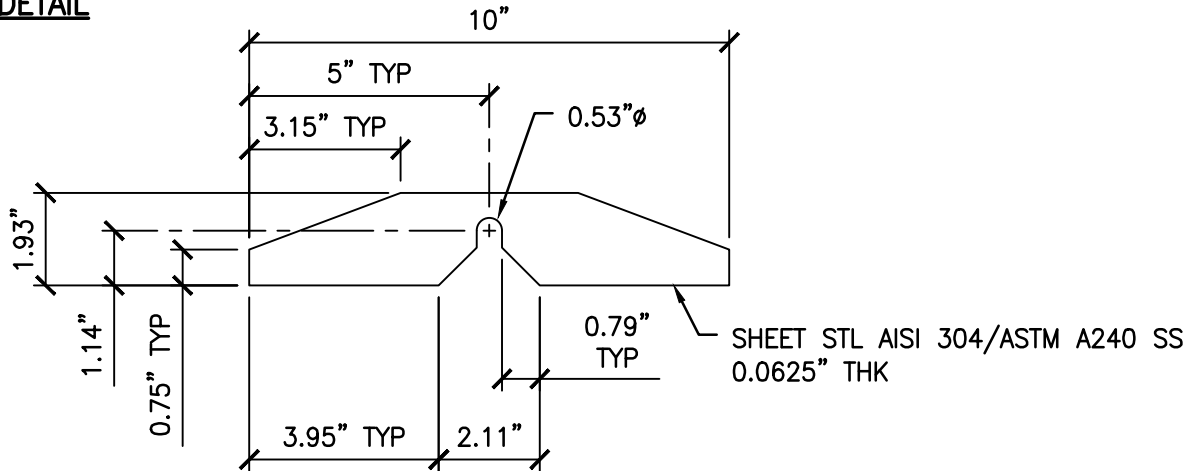
2495 NATOMAS PARK DRIVE, SUITE 650
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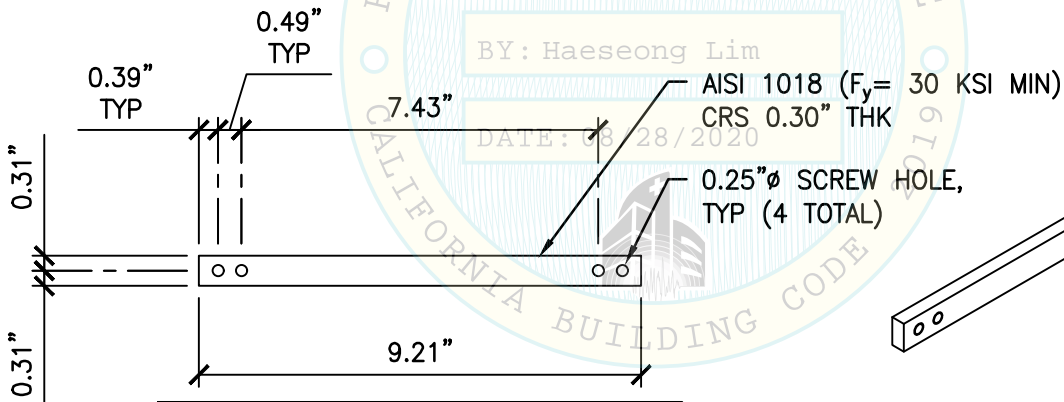
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SHIM PLATE DETAIL

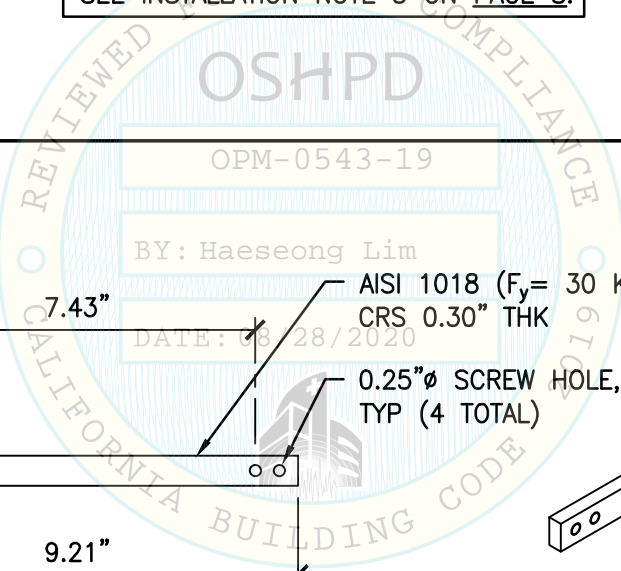


NOTE:
FURNISHED & INSTALLED BY SIEMENS;
SEE INSTALLATION NOTE 5 ON PAGE 8.

MOUNT PLATE DETAIL



NOTE:
FURNISHED & INSTALLED BY SIEMENS;
SEE INSTALLATION NOTE 5 ON PAGE 8.



SHEET TITLE: FALCON ELECTRIC SG2K - 1T
SHIM PLATE DETAIL & MOUNT PLATE DETAIL

CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
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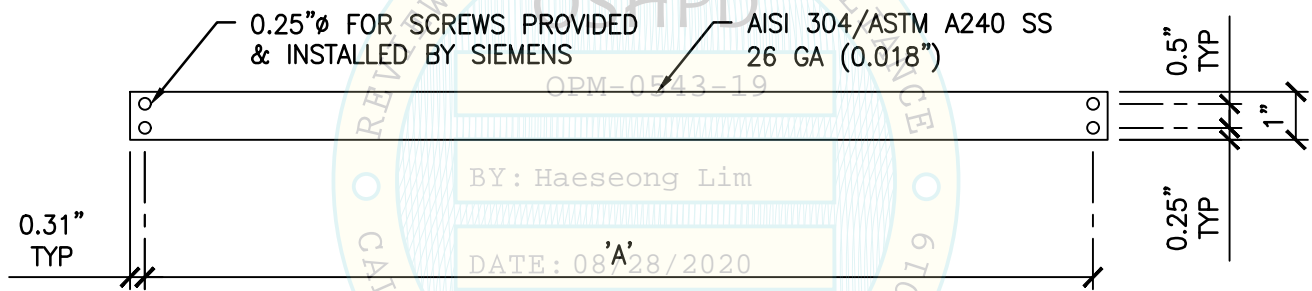
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SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



STRAP LENGTH ¹		
UPS ID	DIMENSION "A" (IN)	NOMINAL TENSION (T)-lb
2	29.438	54

1. 1/8" RUBBER SLEEVE OVER UPS CORNERS NOT SHOWN. SIEMENS FURNISHED & INSTALLED.



NOTES:

1. FURNISHED & INSTALLED BY SIEMENS; SEE INSTALLATION NOTE 5 ON PAGE 8.



SHEET TITLE: FALCON ELECTRIC SG2K - 1T
STRAP DETAIL



CYS STRUCTURAL ENGINEERS, INC.

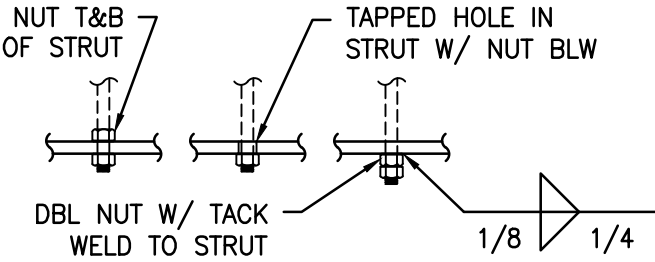
2495 NATOMAS PARK DRIVE, SUITE 650
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SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



MAX ANCHOR FORCES AT LRFD AT EA AB (LBS)		
	Tu	Vu
CASE 1 z/h ≤ 1.0	379#	252#

($\Omega_o = 2.0$) OVERSTRENGTH FACTOR IS APPLIED TO SHEAR FORCE ONLY

ANCHOR OPTIONS

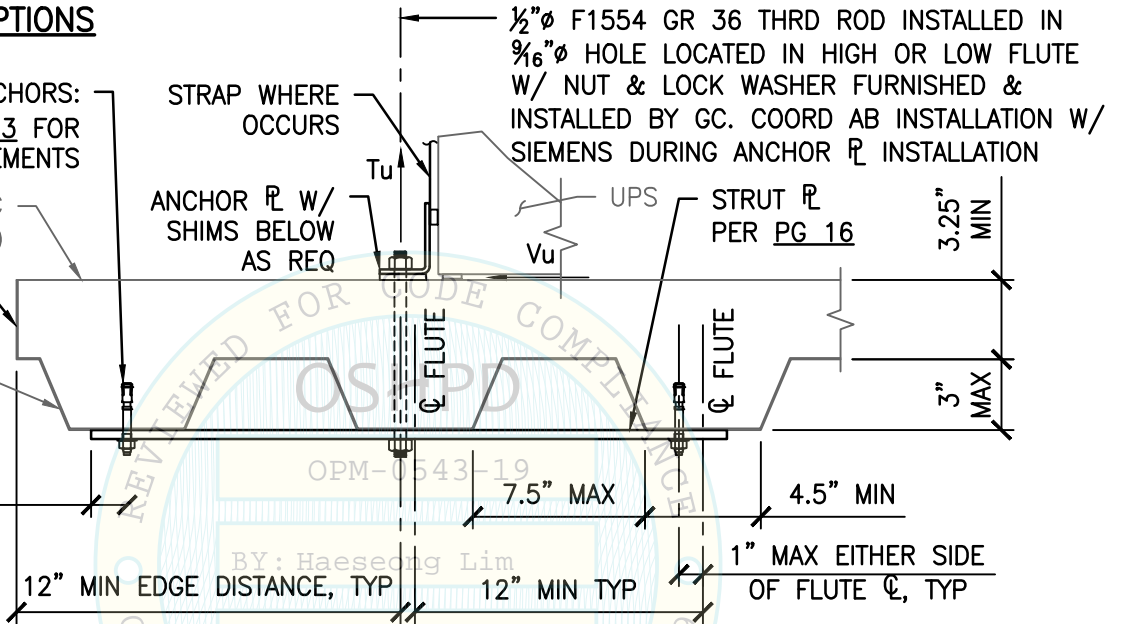
STRUT \bar{r} SUPPORT ANCHORS:
 $\frac{3}{8}$ " ϕ KB-TZ. SEE PG 3 FOR
INSTALLATION REQUIREMENTS

(E) NWC OR SLWC
($f'_c = 3000$ PSI)

MTL DECK EDGE OR
OPG WHERE OCCURS

(E) MTL DECK
(20 GA MIN)

1.5" MIN AT
 \bar{r} EDGE, TYP

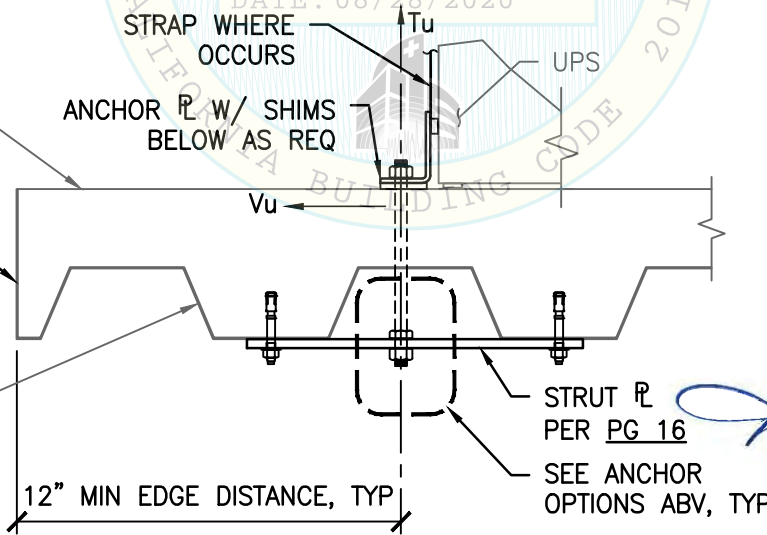


REVIEWED FOR CODE COMPLIANCE
OPM-0543-19
BY: Haeseong Lim
DATE: 08/28/2020
CALIFORNIA BUILDING CODE 2019

(E) NWC OR SLWC
($f'_c = 3000$ PSI)

MTL DECK
EDGE

(E) MTL DECK
(20 GA MIN)



SHEET TITLE: ATTACHMENT DETAIL TO
CONCRETE FILL OVER METAL DECK (CASE 1)



CYS STRUCTURAL ENGINEERS, INC.

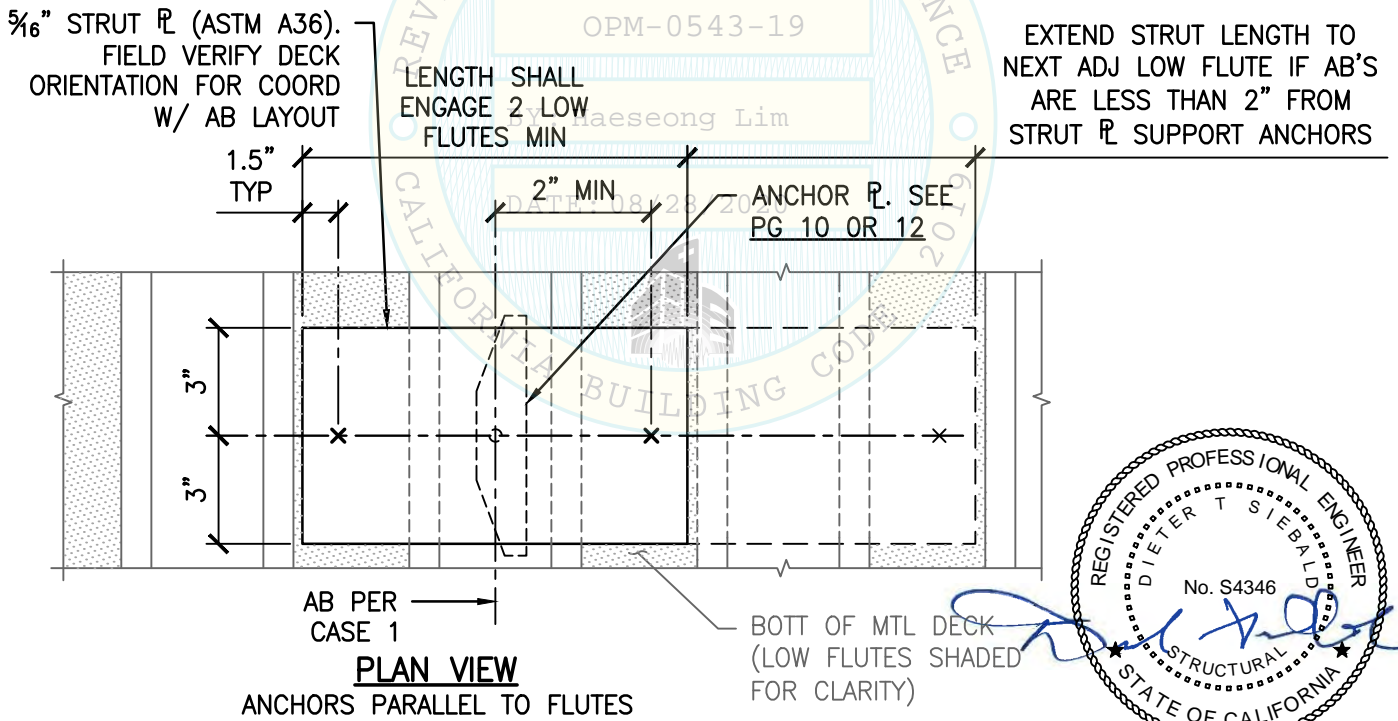
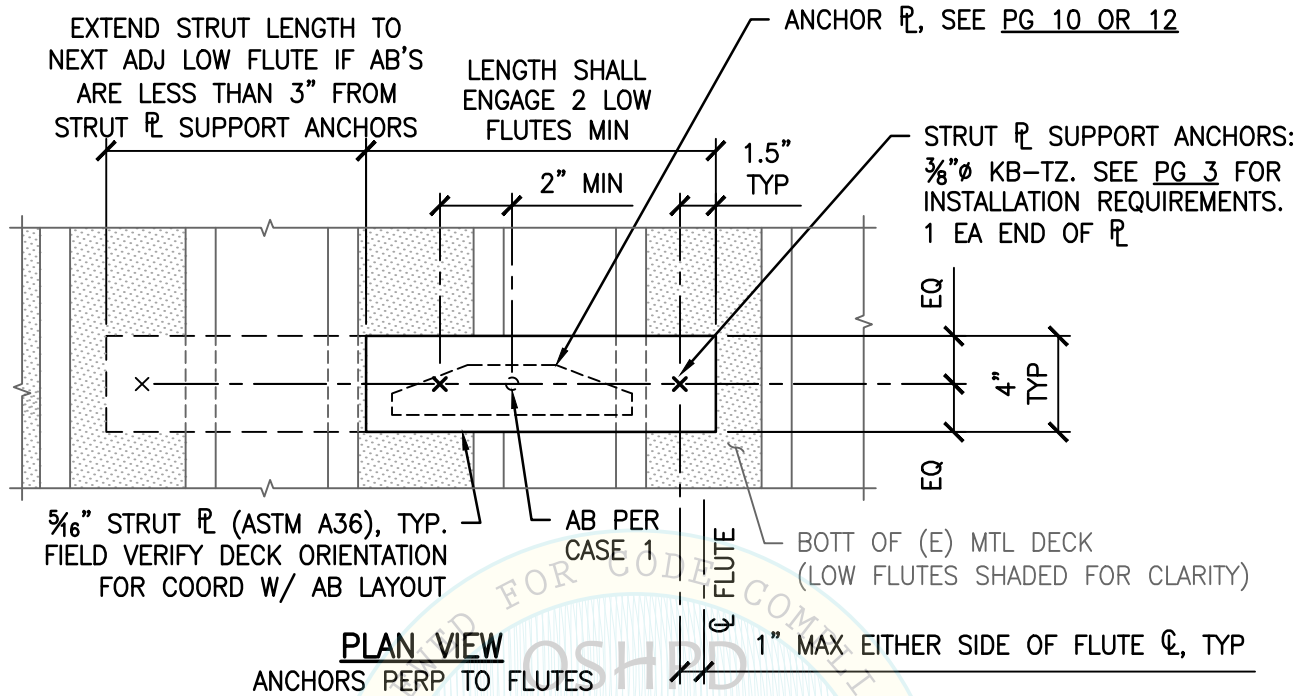
2495 NATOMAS PARK DRIVE, SUITE 650
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Date: 9-02-2020
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L:\Jobs\19072 Siemens OSP-0263-10 & OPA-2828-10 Renewals\Task 02 - OPA-2828-10 Renewals\ACAD\SI_19072.02.dwg Time: Sep 02, 2020 - 11:49am Login: shawmm Dim: scale: 1 L1: Scale: 6

SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



SHEET TITLE: ATTACHMENT DETAIL TO
CONCRETE FILL OVER METAL DECK (CASE 1)



CYS STRUCTURAL ENGINEERS, INC.

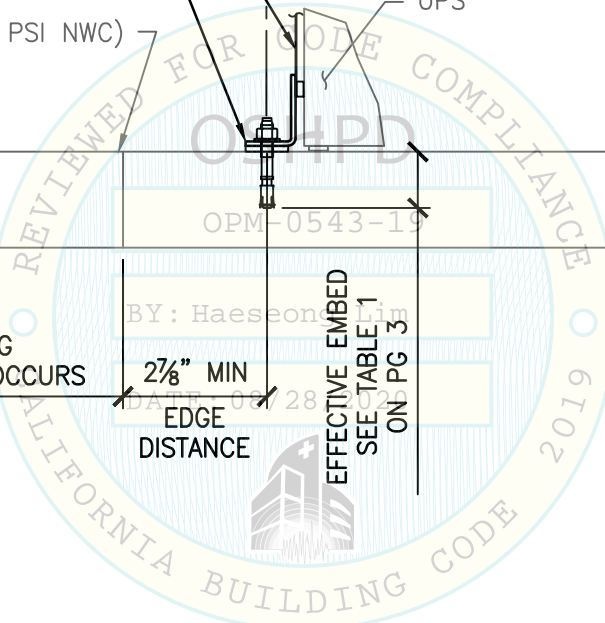
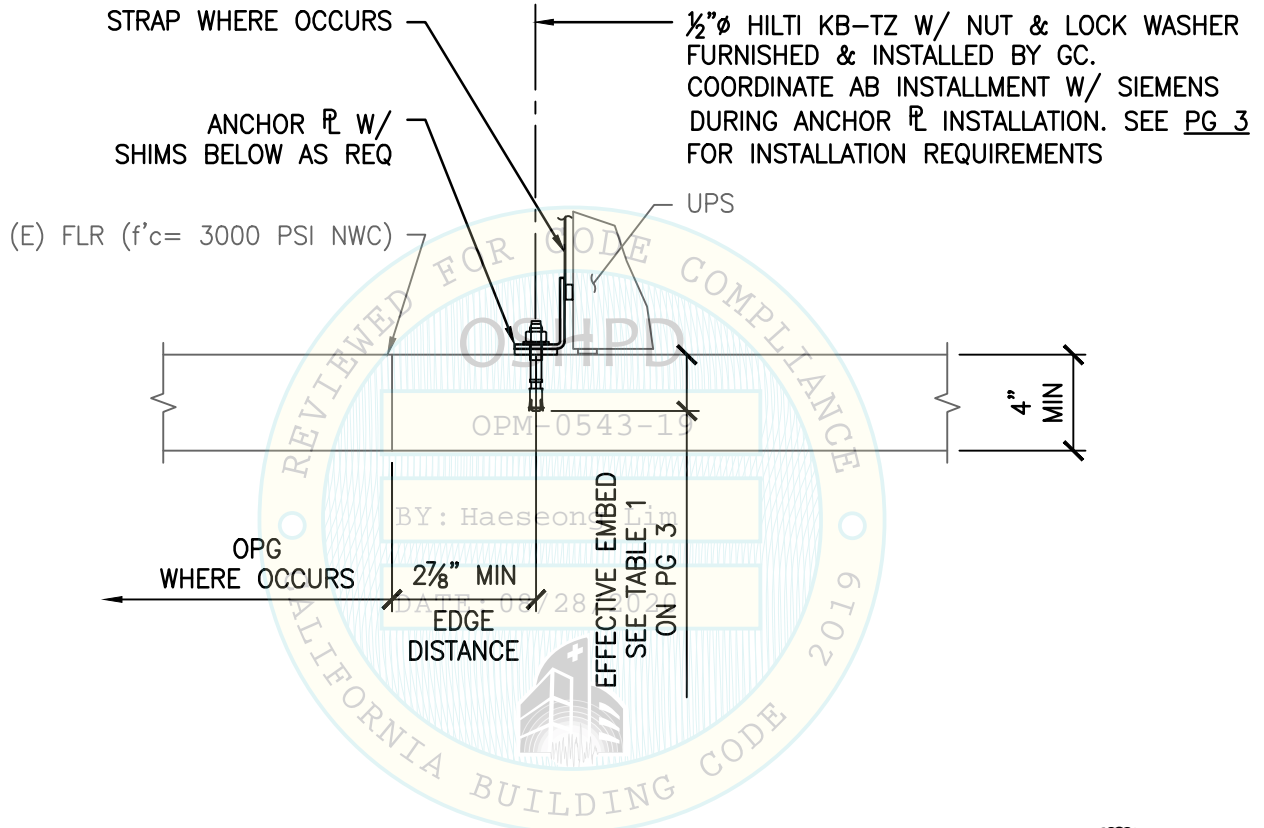
2495 NATOMAS PARK DRIVE, SUITE 650
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Job No:	19072.02
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L:\Jobs\19072 Siemens OSP-0263-10 & OPA-2828-10 Renewals\Task 02 - OPA-2828-10 Renewals\ACAD\SI_19072.02.dwg Time:Sep02,2020-11:49am Login:shawnm Dim:scale:1 L:Scale:6

SIEMENS HEALTHCARE DIAGNOSTICS
EXTERNAL UNINTERRUPTIBLE POWER SUPPLIES (UPS)



SHEET TITLE: ATTACHMENT DETAIL TO
4" CONC SOG (CASE 2)



CYS STRUCTURAL ENGINEERS, INC.

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Job No:	19072.02
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L:\Jobs\19072 Siemens OSP-0263-10 & OPA-2828-10 Renewals\Task 02 - OPA-2828-10 Renewal\ACAD\SI_19072.02.dwg Time:Sep02,2020-11:49am Login:shawnm Dimstyle:1 LTScale:6