



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

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

<b>OFFICE USE ONLY</b>	
<b>APPLICATION #:</b>	<b>OPM-0114-13</b>

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

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

**Manufacturer Information**

Manufacturer: Panduit Corporation

Manufacturer's Technical Representative: Nathan Gleghorn

Mailing Address: 412 Rockwell Court, Burr Ridge, Illinois 60527

Telephone: 708-532-1800 x84249    Email: NAGL@panduit.com

**Product Information**

Product Name: Net-Access S-Type Cabinet

Product Type: Network equipment cabinet.    OPM-0114-13

Product Model Number: All S6, S7 and S8 model numbers as listed on OPM drawings.

General Description: Data center network equipment cabinets.

**Applicant Information**

Applicant Company Name: Panduit Corporation

Contact Person: Robert Fritz

Mailing Address: 412 Rockwell Court, Burr Ridge, Illinois 60527

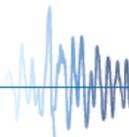
Telephone: 708-532-1800 x84346    Email: RLFR@panduit.com

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: *Robert L. Fritz*    Date: 06/04/2014

Title: Senior Manager Engineering    Company Name: Panduit Corporation

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





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

Company Name: Degenkolb Engineers

Name: Adrian M. Nacamuli California License Number: S 4857

Mailing Address: 1300 Clay Street, 9<sup>th</sup> Floor, Oakland, California 94612

Telephone: 510-250-1216 Email: nacamuli@degenkolb.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 1950-10
- Other\* (Please Specify): \_\_\_\_\_

\*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: 04/07/15

Print Name: Jeff Kikumoto

Title: SSE

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

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OPM-0114-13**

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**PANDUIT NET-ACCESS S-TYPE CABINETS**



MODELS S6212B, S6212BP, S6512B, S6512BP, S6812B, S6812BP, S6222B, S6222BP, S6522B, S6522BP, S6822B, S6822BP, S7212B, S7219B, S7512B, S7519B, S7812B, S7819B, S7222B, S7229B, S7522B, S7529B, S7822B, S7829B, SS8212B, S8219B, S8212BF, S8219BF, S8219BS, S8512B, S8219B, S8212BF, S8219BF, S8219BS, S8512B, S8519B, S8512BF, S8519BF, S8519BS, S8812B, S8819B, S8512BF, S8519BF, S8519BS, S8222B, S8229B, S85222B, S8529B, S8822B, S829B

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. PRE-APPROVED DESIGN AND MATERIALS CONFORM WITH THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE. DETAILS WITHIN THIS APPROVAL MAY BE USED ANYWHERE IN THE STATE OF CALIFORNIA WHERE  $S_{DS} \leq 1.8$
3. SEISMIC FORCES ON EQUIPMENT DETERMINED PER THE 2013 CBC & ASCE 7-10. ALL LOADS BELOW ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN.
4. EQUIPMENT MAY BE MOUNTED TO AN ELEVATED SLAB AT ANY FLOOR USING THE THROUGH BOLT CONDITION OR TO A NORMAL WEIGHT CONCRETE SLAB ON GRADE. THE MINIMUM REQUIRED SLAB PROPERTIES ARE AS FOLLOWS:

SLAB ON GRADE	ELEVATED SLAB
THICKNESS $\geq 5"$ $f_c \geq 3000$ PSI NORMAL WEIGHT CONCRETE PROVIDE 12" MIN DISTANCE TO OPENINGS OR THE EDGE OF SLAB MINIMUM SPACING = 11"	CONCRETE ON METAL DECK $f_c \geq 3000$ PSI NORMAL OR SAND LIGHT-WEIGHT CONCRETE SEE FIGURE ON PAGE 2 FOR MINIMUM STEEL DECK REQUIREMENTS

5. THE FACTORS USED TO CALCULATE THE SEISMIC DEMANDS ARE THE FOLLOWING:

a.  $S_{DS} = 1.8$ ,  $a_p = 2.5$ ,  $R_p = 6.0$ ,  $I_p = 1.5$ ,  $\Omega_o = 2.5$ ,

WHERE  $z/h \leq 1$

WHERE  $z/h = 0$

- |                                |  |
|--------------------------------|--|
| i. $F_p = 1.35 W_p$            | i. $F_p = 0.81 W_p$  |
| ii. $E_v = 0.36 W_p$           | ii. $E_v = 0.36 W_p$                                       |
| iii. $\Omega_o F_p = 3.37 W_p$ | iii. $\Omega_o F_p = 2.02 W_p$ (FOR ANCHORAGE TO CONCRETE) |

6. THE STRUCTURAL ENGINEER-OF-RECORD (S.E.O.R.) OR PRINCIPAL-IN-CHARGE OF A PROJECT SPECIFIC SITE IS RESPONSIBLE FOR THE FOLLOWING:

- a. VERIFY THAT THE ATTACHMENTS ARE A MINIMUM 12" FROM ANY OPENINGS OR EDGES.
- b. VERIFY THAT THE ATTACHMENTS ARE 12" MINIMUM DISTANCE FROM ANY NEW OR EXISTING ANCHORS.
- c. DESIGN ANY SUPPLEMENTARY MEMBERS TO WHICH THE UNIT IS ATTACHED, TO SUPPORT WEIGHTS AND FORCES SHOWN. VERIFY THE ADEQUACY OF ANY EXISTING MEMBERS AND THEIR ATTACHMENTS FOR THE FORCES EXERTED ON THEM BY THE UNIT IN ADDITION TO ALL OTHER LOADS AND FORCES.
- d. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2013 CBC AND WITH THE DETAILS SHOWN IN THIS PRE-APPROVAL. VERIFY THAT THE EQUIPMENT'S ACTUAL WEIGHT, CG LOCATION, ANCHOR LOCATIONS, DETAILS AND THE MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN IN THIS PRE-APPROVAL.
- e. THE ATTACHMENTS TO THE ELEVATED AND ON GRADE SLABS HAVE BEEN EVALUATED FOR THE WORST CASE LOADING PER THE 2013 CBC. STRUCTURAL ENGINEER-OF-RECORD (S.E.O.R.) OR PRINCIPAL-IN-CHARGE OF A SITE SPECIFIC PROJECT SHALL EVALUATE THE ATTACHMENT FOR CONDITIONS THAT VARY FROM THIS PRE-APPROVAL.

7. THIS OPM COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE UNIT TO THE STRUCTURE.

8. EXPANSION OR WEDGE ANCHORS INTO CONCRETE: HILTI KB-TZ (ICC ESR-1917). INSTALL ANCHORS IN ACCORDANCE WITH THE ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS. TEST AT LEAST 50% OF ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATIONS. TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO OSHPD. TEST PER ONE OF THE FOLLOWING METHODS:

- a. DIRECT PULL TENSION TEST. ANCHOR IS ACCEPTABLE IF NO MOVEMENT IS OBSERVED FOR A MINIMUM OF 15 SECONDS AT THE TEST LOAD GIVEN IN TABLE ON THE FOLLOWING PAGE. MOVEMENT MAY BE DETERMINED WHEN THE WASHER UNDER THE NUT BECOMES LOOSE.
- b. TORQUE WRENCH TEST: TEST ANCHORS TO THE REQUIRED TORQUE LOAD GIVEN IN TABLE ON THE FOLLOWING PAGE WITHIN THE LIMIT OF ONE-HALF TURN OF THE NUT.



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GENERAL NOTES

ANCHOR TEST LOAD VALUES						
ANCHOR DIAMETER (IN)	EMBED $h_{ef}$ (IN)	TENSION LOAD (LBS)	TORQUE LOAD (FT-LB)	CONCRETE TYPE	MINIMUM EDGE DISTANCE	MINIMUM SPACING
5/8"	3-1/8"	3,134	60	NORMAL WEIGHT	12"	11"
3/8"	2"	SEE NOTE a	25	SAND LIGHT-WEIGHT	12"	11"

a. TEST 3/8" EXPANSION ANCHORS USING THE TORQUE WRENCH TEST METHOD PER MANUFACTURER'S RECOMMENDATION AND AS DESCRIBED IN PAGE 1 OF 6

9. IF ANY ANCHOR FAILS DURING TESTING, UNIT MUST BE MOVED SO THAT NO ANCHOR IS WITHIN 11" OF AN ABANDONED ANCHOR.

10. CONTRACTOR OR SEOR MUST VERIFY ANCHOR SPACING TO ADJACENT EQUIPMENT ANCHORS IS TO BE GREATER THAN 12".

11. ALL MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

THROUGH BOLTS	A307 GR. A.
STEEL ANGLES	A36

12. THE TABLE ON PAGE 3 SHOWS THE MOST CRITICAL FORCES CALCULATED FOR THE SUPPORT AND ATTACHMENT DESIGN.

13. FOR THE SUPPORT AND ATTACHMENT DESIGN, THE MOST CRITICAL LOAD COMBINATION IS (0.9 - 0.2S<sub>d</sub>s) D + E.

14. WHEN  $z/h = 0$ , THE DESIGN FORCES FOR THE EXPANSION ANCHORS INTO CONCRETE WERE SCALED UP BY  $\Omega_0$  AS REQUIRED BY ASCE 7-10, SUPPLEMENT NO. 1, TABLE 13.6-1.

15.  $T_{ult} + q$  IS THE FORCE DEMAND IN THE ANCHOR INCLUDING EFFECTS OF PRYING

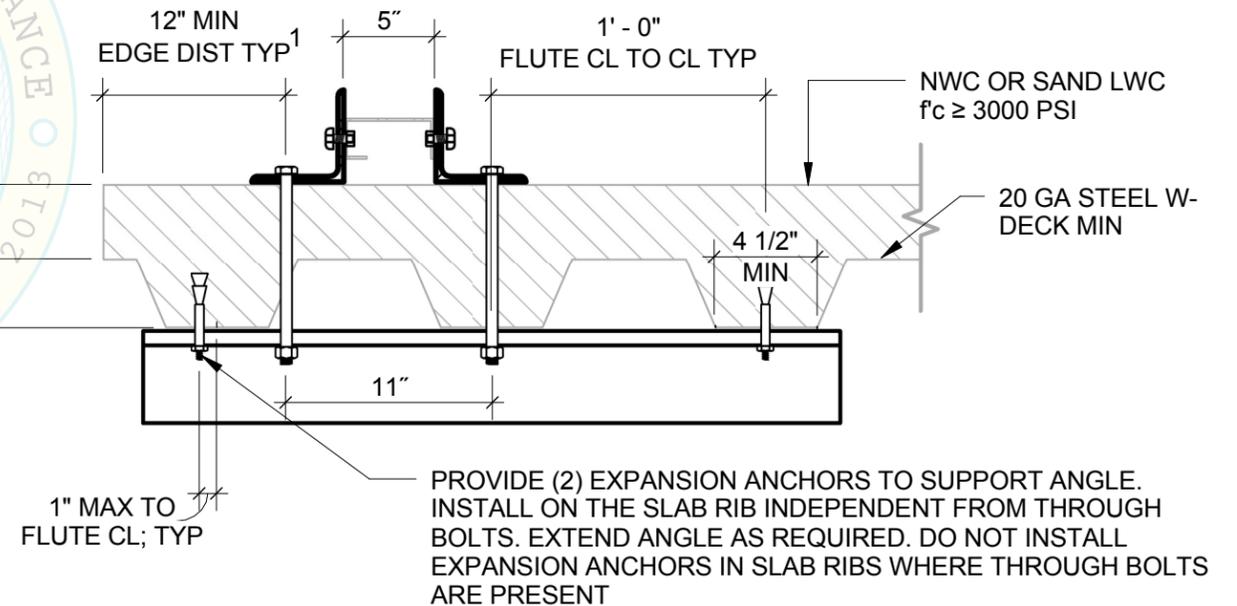
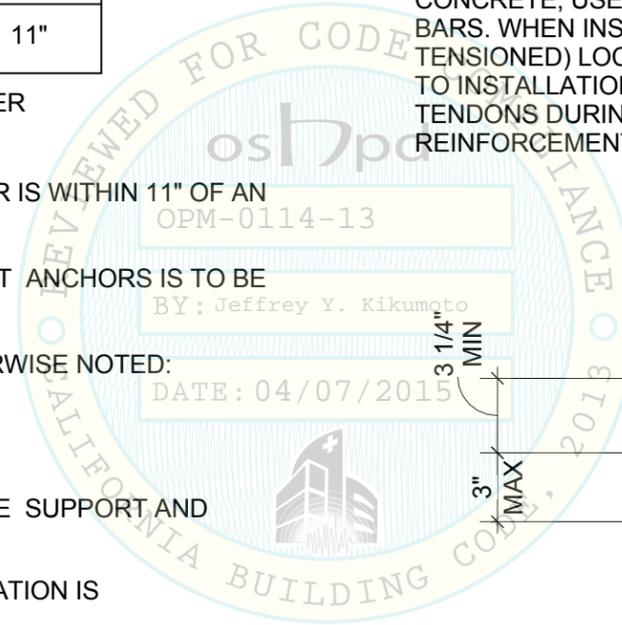
16. THE TABLE ON PAGE 4 SHOWS THE PROPERTIES OF THE DIFFERENT MODELS CONSIDERED IN THIS SUBMITTAL.

17. WHERE  $q = 0$  AS INDICATED ON THE TABLE OF PAGE 3, EITHER THE SUPPORT AND ATTACHMENT MECHANISM IS GOVERNED BY THE CAPACITY OF THE BASE BRACKET OR THE FITTING HAS SUFFICIENT STIFFNESS AND STRENGTH TO DEVELOP THE FULL BOLT AVAILABLE TENSILE STRENGTH AND ELIMINATE PRYING ACTION AS DESCRIBED IN THE FOURTEENTH EDITION OF THE AISC STEEL CONSTRUCTION MANUAL

18. CENTER OF GRAVITY (C.G.) WEIGHT IS A MAXIMUM. THIS PREAPPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM SHOWN.

19. EQUIPMENT MANUFACTURER MUST DESIGN UNIT TO MAKE C.G. EQUAL OR LESS THAN THE C.G. HEIGHT DIMENSION SHOWN ON THE TABLE ON PGE 4 OF 6

20. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED) LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR.



NOTES:

1. PROVIDE 12" MINIMUM DISTANCE TO EDGE OF SLAB, OPENINGS OR OTHER ATTACHMENTS
2. REFER TO SHEET 6 OF 6 FOR ADDITIONAL NOTES

**MINIMUM STEEL DECK REQUIREMENTS**



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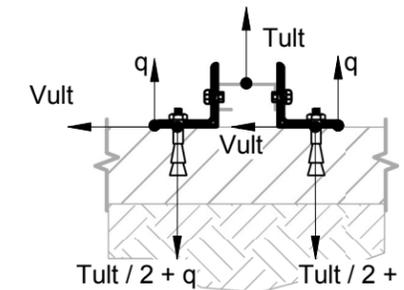
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	PART NUMBER	z / h = 0						z / h ≤ 1					
		Wp MAX (LBS)	LOAD RATING (LBS)	Tult <sup>4</sup> (LBS)	q (LBS)	Tult + q <sup>4</sup> (LBS)	Vult <sup>4</sup> (LBS)	Wp MAX (LBS)	LOAD RATING (LBS)	Tult <sup>4</sup> (LBS)	q (LBS)	Tult + q <sup>4</sup> (LBS)	Vult <sup>4</sup> (LBS)
600x1070 FAMILY	S6212B, S6212BP	1,950	1,680	1,900	0	1,900	198	1,480	1,215	2,540	0	2,540	250
	S6512B, S6512BP	1,823	1,540	1,900	0	1,900	185	1,390	1,110	2,540	0	2,540	235
	S6812B, S6812BP	1,710	1,420	1,900	0	1,900	173	1,305	1,015	2,540	0	2,540	221
600x1200 FAMILY	S6222B, S6222BP	2,000	1,715	1,900	0	1,900	203	1,520	1,230	2,540	0	2,540	257
	S6522B, S6522BP	1,850	1,570	1,900	0	1,900	189	1,420	1,125	2,540	0	2,540	240
	S6822B, S6822BP	1,750	1,440	1,900	0	1,900	178	1,335	1,030	2,540	0	2,540	226
700x1070 FAMILY	S7212B, S7219B	2,170	1,885	1,900	0	1,900	220	1,640	1,355	2,540	0	2,540	277
	S7512B, S7519B	2,030	1,725	1,900	0	1,900	205	1,535	1,235	2,540	0	2,540	260
	S7812B, S7819B	1,900	1,580	1,900	0	1,900	193	1,445	1,125	2,540	0	2,540	244
700x1200 FAMILY	S7222B, S7229B	2,240	1,925	1,900	0	1,900	227	1,690	1,370	2,540	0	2,540	286
	S7522B, S7529B	2,090	1,760	1,900	0	1,900	212	1,585	1,255	2,540	0	2,540	268
	S7822B, S7829B	1,960	1,615	1,900	0	1,900	199	1,490	1,145	2,540	0	2,540	251
800x1070 FAMILY	S8212B, S8219B, S8212BF, S8219BF, S8219BS	2,395	2,050	1,900	0	1,900	243	1,800	1,475	2,540	0	2,540	304
	S8512B, S8519B, S8512BF, S8519BF, S8519BS	2,230	1,890	1,900	0	1,900	226	1,685	1,345	2,540	0	2,540	284
	S8812B, S8819B, S8812BF, S8819BF,	2,090	1,735	1,900	0	1,900	212	1,580	1,225	2,540	0	2,540	267
800x1200 FAMILY	S8222B, S8229B	2,485	2,140	1,900	0	1,900	252	1,860	1,520	2,540	0	2,540	314
	S8522B, S8529B	2,315	1,925	1,900	0	1,900	235	1,740	1,350	2,540	0	2,540	294
	S8822B, S8829B	2,165	1,725	1,900	0	1,900	220	1,635	1,640	2,540	0	2,540	276

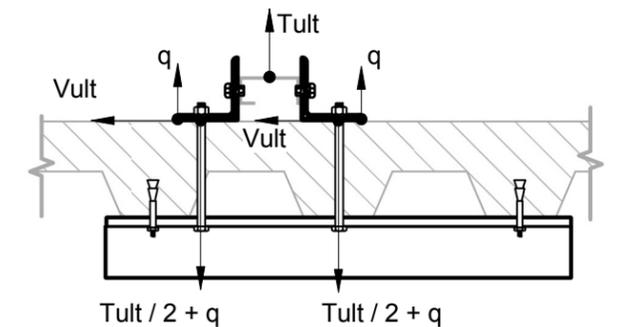
**NOTES:**

- WHERE  $z/h = 0$ , THE DESIGN IS GOVERNED BY THE CAPACITY OF THE EXPANSION ANCHORS INTO CONCRETE.
- WHERE  $z/h \leq 1$ , THE DESIGN IS GOVERNED BY THE CAPACITY OF THE BOLTS CONNECTING THE ANGLES TO THE BUILT-UP HORIZONTAL MEMBER
- THE LOAD RATING IS IN ADDITION OF THE SELF-WEIGHT SHOWN ON PAGE 4;  $Wp = \text{LOAD RATING} + \text{SELF-WEIGHT}$
- Tult, q AND Vult SHOWN ON THE TABLE ARE THE MAXIMUM FORCES AT THE STRENGTH LEVEL AND HAVE NOT BEEN AMPLIFIED BY  $\Omega_0$ . FOR ANCHORAGE TO CONCRETE, LOADS ARE REQUIRED TO BE AMPLIFIED BY  $\Omega_0$ .
- PER DIAGRAM BELOW, NOTE THAT Tult IS THE TENSION FORCE APPLIED TO TWO ANCHORS AND Vult IS THE SHEAR FORCE APPLIED TO EACH ANCHOR
- PROVIDE A STEEL PLATE ATTACHED TO THE CABINET THAT CLEARLY SHOWS THE DESIGN LOAD RATING THAT THE SUPPORT AND ATTACHMENT IS DESIGNED TO.
- BOLTS THROUGH CONCRETE ON METAL DECK

- A. BOLTS SHALL BE TORQUED BY 3/4 TURN OF THE NUTS AFTER THE SNUG TIGHT CONDITION (THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQUIRED TO BRING THE CONNECTED PLIES INTO FIRM CONTACT) IS ACHIEVED.
- B. THROUGH BOLTS IN CONCRETE SHALL RECEIVE SPECIAL INSPECTION AND TESTING IN ACCORDANCE WITH REQUIREMENTS FOR POST-INSTALLED ANCHORS.



**CABINET ON SLAB  
ON GRADE**



**CONCRETE ON  
ELEVATED SLAB**



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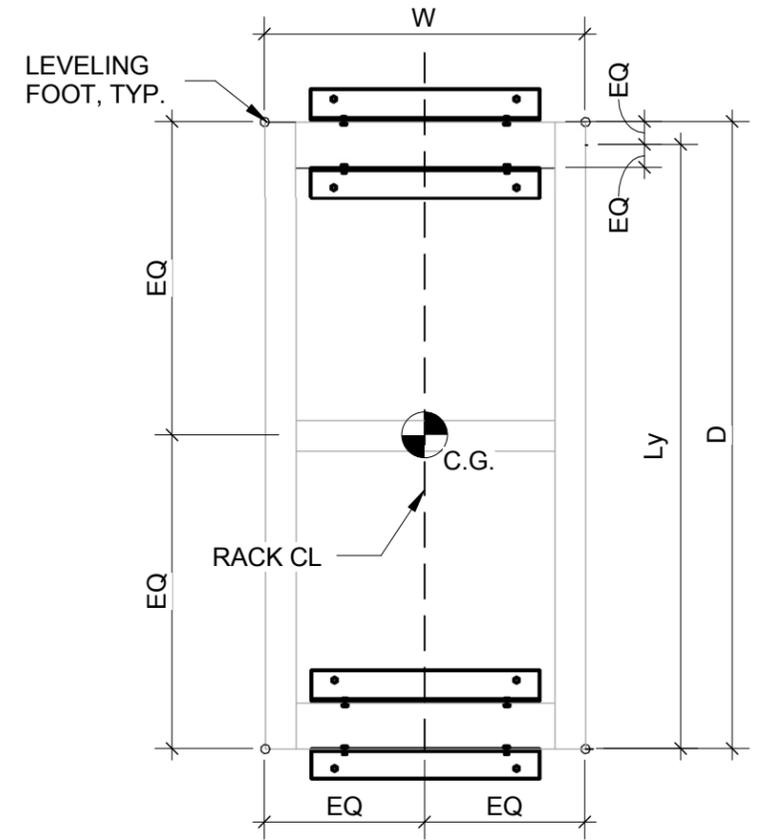


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	PART NUMBER	DEPTH "D" (IN)	WIDTH "W" (IN)	Ly MIN (IN)	HEIGHT "H" (IN)	CG HEIGHT "Hcg" (IN)	MAX. UNIT SELF- WEIGHT (LBS)
600x1070 FAMILY	S6212B, S6212BP	39.5	18.0	35.0	79.8	39.9	270
	S6512B, S6512BP	39.5	18.0	35.0	85.0	42.5	280
	S6812B, S6812BP	39.5	18.0	35.0	90.2	45.1	290
600x1200 FAMILY	S6222B, S6222BP	45.5	18.0	41.0	79.8	39.9	290
	S6522B, S6522BP	45.5	18.0	41.0	85.0	42.5	300
	S6822B, S6822BP	45.5	18.0	41.0	90.2	45.1	310
700x1070 FAMILY	S7212B, S7219B	39.5	21.9	35.0	79.8	39.9	290
	S7512B, S7519B	39.5	21.9	35.0	85.0	42.5	305
	S7812B, S7819B	39.5	21.9	35.0	90.2	45.1	320
700x1200 FAMILY	S7222B, S7229B	45.5	21.9	41.0	79.8	39.9	320
	S7522B, S7529B	45.5	21.9	41.0	85.0	42.5	330
	S7822B, S7829B	45.5	21.9	41.0	90.2	45.1	345
800x1070 FAMILY	S8212B, S8219B, S8212BF, S8219BF, S8219BS	39.5	25.9	35.0	79.8	39.9	325
	S8512B, S8519B, S8512BF, S8519BF, S8519BS	39.5	25.9	35.0	85.0	42.5	340
	S8812B, S8819B, S8812BF, S8819BF, S8819BS	39.5	25.9	35.0	90.2	45.1	355
800x1200 FAMILY	S8222B, S8229B	45.5	25.9	41.0	79.8	39.9	340
	S8522B, S8529B	45.5	25.9	41.0	85.0	42.5	390
	S8822B, S8829B	45.5	25.9	41.0	90.2	45.1	440

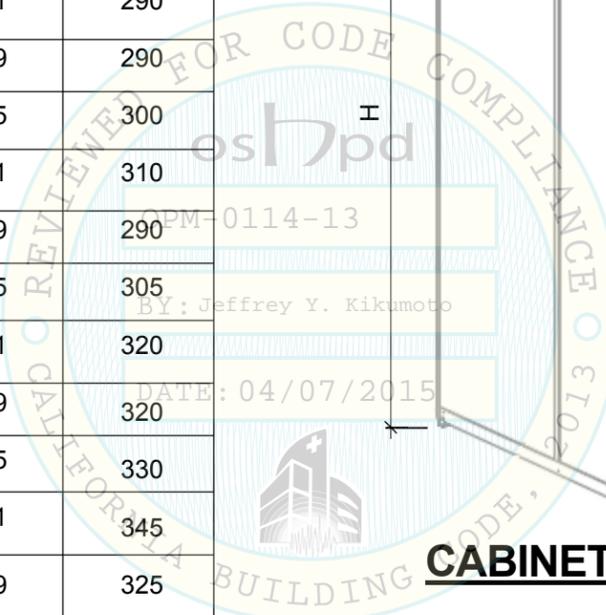


**CABINET ISOMETRIC VIEW**



**CABINET BASE FRAME PLAN**

- NOTES**
1. Ly DENOTES THE DISTANCE FROM THE LEVELING LEG TO THE ANCHOR BOLT CENTER OF GRAVITY
  2. W AND D REPRESENT THE WIDTH AND DEPTH DISTANCE BETWEEN LEVELING LEGS
  3. H IS THE HEIGHT FROM THE TOP OF THE STRUCTURAL SLAB TO THE TOP OF THE CABINET. IT CAN VARY BY ± 1" DUE TO ADJUSTMENTS TO LEVELING LEGS.

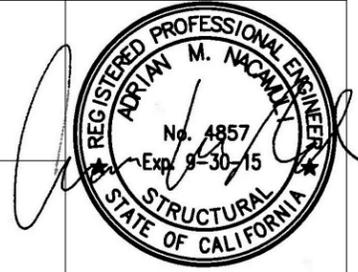




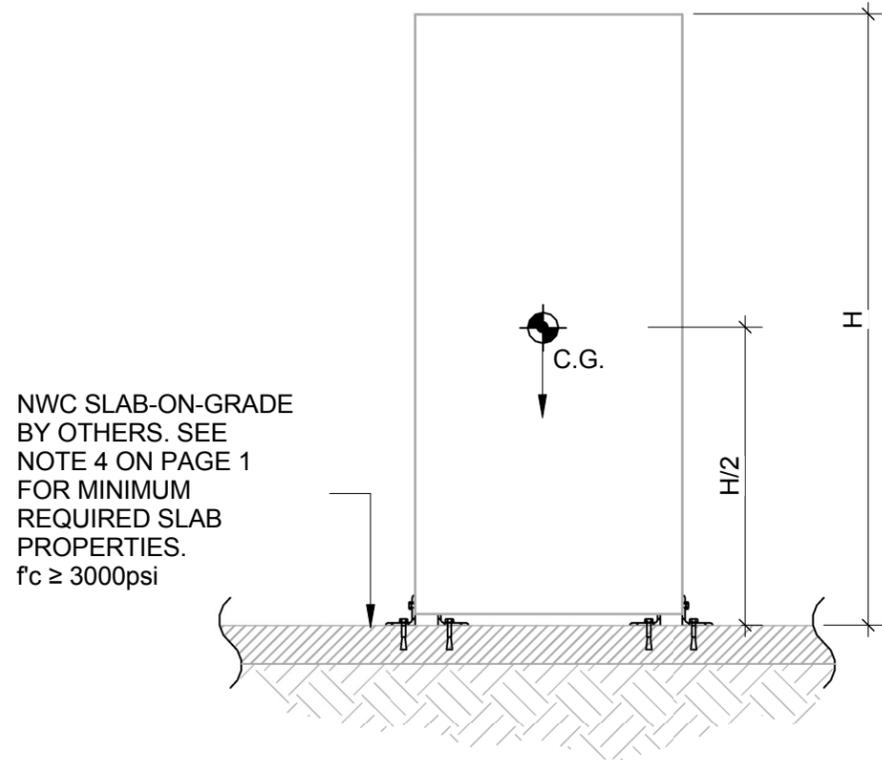
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415.981.3157 Fax  
www.degenkolb.com

**PANDUIT NET-ACCESS S-TYPE CABINETS**

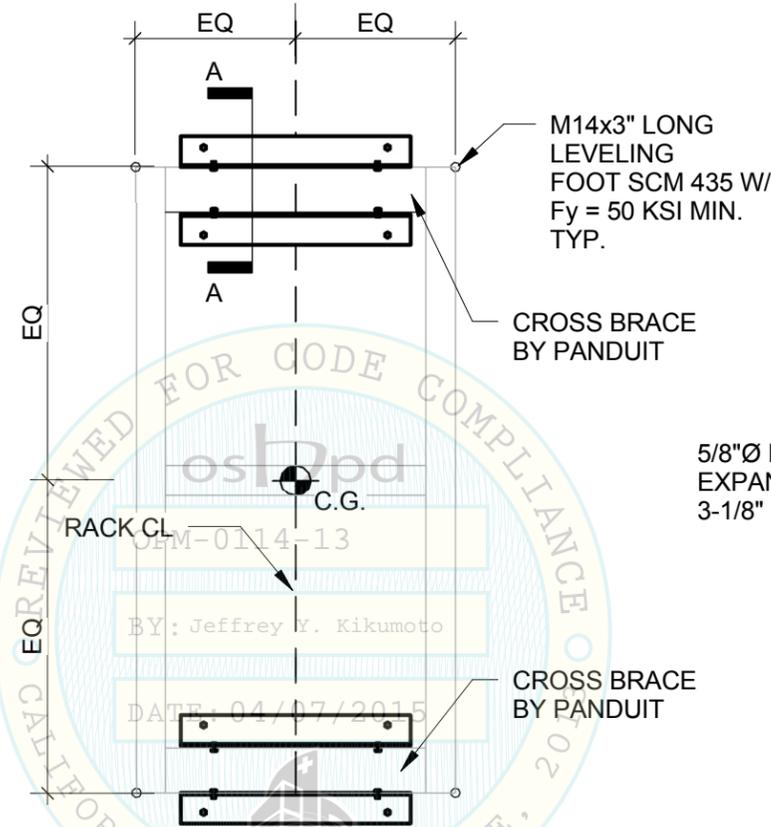


MODELS S6212B, S6212BP, S6512B, S6512BP, S6812B, S6812BP, S6222B, S6222BP, S6522B, S6522BP, S6822B, S6822BP, S7212B, S7219B, S7512B, S7519B, S7812B, S7819B, S7222B, S7229B, S7522B, S7529B, S7822B, S7829B, SS8212B, S8219B, S8212BF, S8219BF, S8219BS, S8512B, S8219B, S8212BF, S8219BF, S8219BS, S8512B, S8519B, S8512BF, S8519BF, S8519BS, S8812B, S8819B, S8512BF, S8519BF, S8519BS, S8222B, S8229B, S85222B, S8529B, S8822B, S829B



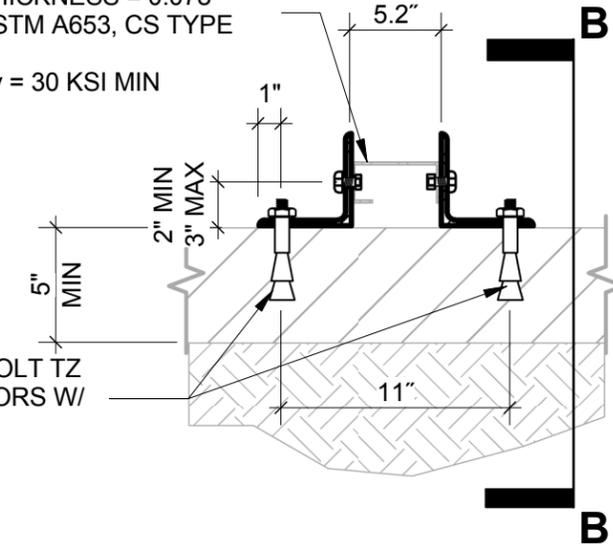
NWC SLAB-ON-GRADE  
BY OTHERS. SEE  
NOTE 4 ON PAGE 1  
FOR MINIMUM  
REQUIRED SLAB  
PROPERTIES.  
 $f_c \geq 3000\text{psi}$

**FRONT ELEVATION**



**RACK BASE FRAME PLAN**

CROSS-BRACE BY  
PANDUIT  
THICKNESS = 0.078"  
ASTM A653, CS TYPE  
B  
 $F_y = 30\text{ KSI MIN}$



**SECTION A-A**

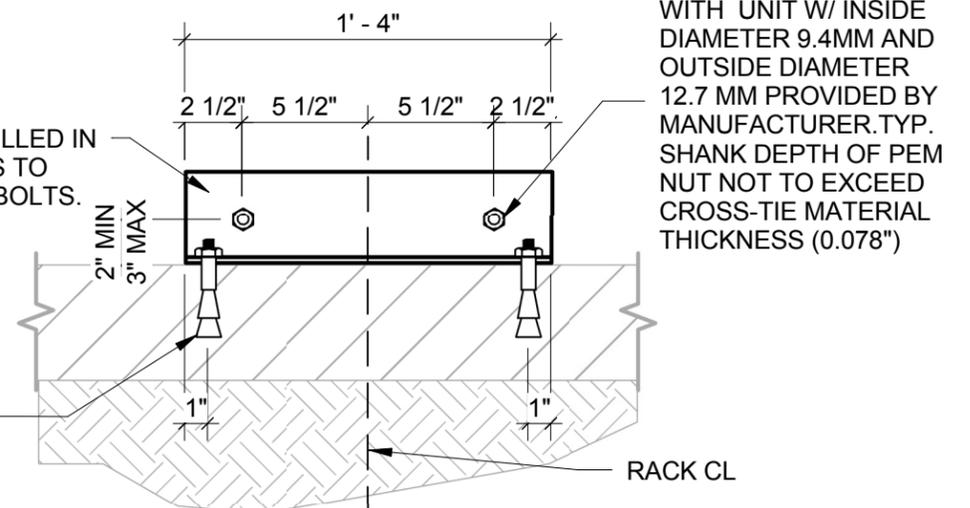
5/8"Ø HILTI KWIK BOLT TZ  
EXPANSION ANCHORS W/  
3-1/8" EMBED ( $h_{ef}$ )

**NOTES:**

1. DESIGN CONFORMS TO CBC 2013. FORCES GIVEN ARE AT STRENGTH LEVEL
2. SEE GENERAL NOTES SECTION ON PAGES 1 AND 2
3. SEE RESULTANT FORCES AND GEOMETRIC PROPERTIES OF THE CABINETS ON PAGES 3 AND 4
4. S.E.O.R. MAY RECALCULATE MAX. ANCHOR FORCES  $V_u$  AND  $T_u$  AT THEIR DISCRETION BASED ON PROJECT SPECIFIC DEMANDS
5. ALL HOLES THROUGH STEEL FOR BOLTS SHALL BE STANDARD SIZE HOLES PER AISC 14TH EDITION, TABLE J3.3

L4x4x1/4" W/ (2) STD SIZE HOLES, DRILLED IN  
FIELD TO ALLOW FOR ADJUSTMENTS TO  
LEVELING FOOT, FOR (2) M8 GR. 8.8 BOLTS.

5/8"Ø HILTI KWIK BOLT TZ  
EXPANSION ANCHORS W/  
3-1/8" EMBED



**SECTION B-B**

M8 GR. 8.8 BOLT INTO  
P.E.M NUT INTEGRAL  
WITH UNIT W/ INSIDE  
DIAMETER 9.4MM AND  
OUTSIDE DIAMETER  
12.7 MM PROVIDED BY  
MANUFACTURER.TYP.  
SHANK DEPTH OF PEM  
NUT NOT TO EXCEED  
CROSS-TIE MATERIAL  
THICKNESS (0.078")

