



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0113-13

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: PanZone Wall Mount Cabinets and Enclosures

Product Type: Computer and network equipment cabinet/enclosure.

Product Model Number: PZAEWM3, PZAEWM6E, PZBASE3E, PZC12S, PZC12P, PZC12W

General Description: Wall mounted cabinets and enclosures for network and computer equipment.

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

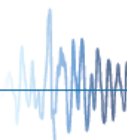
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.

Signature of Applicant: 

Date: 06/04/2014

Title: Senior Manager Engineering

Company Name: Panduit Corporation





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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, 9th 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.

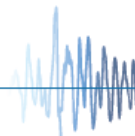
- Analysis
- Experience Data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify): _____

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: <u>12/17/2014</u>
Print Name: <u>Jeffrey Kikumoto</u>	
Title: <u>SSE</u>	
Condition of Approval (if applicable): _____	





OSHPD PRE-APPROVAL OF
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PANDUIT PANZONE WALL MOUNTED CABINETS & ENCLOSURES

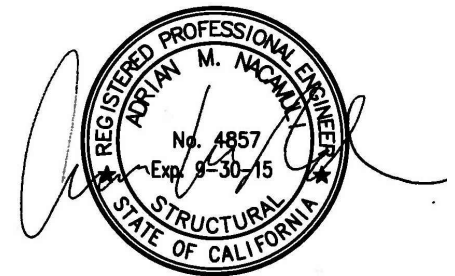
MODELS PZAEWM3, PZAEWM6E, PZBASE3E, PZC12S, PZC12P, PZC12W

I. GENERAL NOTES:

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2013 CALIFORNIA BUILDING CODE (CBC). 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 $S_{DS} \leq 2.5$.
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.

ADJUST FOR ALLOWABLE STRESS (ASD) DESIGN USING LOAD COMBINATIONS OF ASCE 7-10 SECTION 12.4.2.3 AS REQUIRED. EQUIPMENT MAY BE MOUNTED TO ANY METAL STUD WALL OR CONCRETE WALL THAT MEETS THE REQUIREMENTS OF THIS DOCUMENT. EQUIPMENT MAY BE INSTALLED ON ANY FLOOR.

- a. $S_{DS} = 2.5$, $a_p = 2.5$, $R_p = 6.0$, $I_p = 1.5$, $\Omega_o = 2.5$, $z/h \leq 1$
 - i. $F_p = 1.875W_p$
 - ii. $\Omega_o * F_p = 4.69W_p$ (FOR ANCHORAGE TO CONCRETE ONLY)
 - iii. $F_v = 0.5W_p$
4. 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 ANCHORS ARE A MINIMUM 8" FROM ANY OPENINGS OR EDGES.
 - b. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS.
 - c. DESIGN ANY SUPPLEMENTARY MEMBERS AND THEIR ATTACHMENTS WHICH THE UNIT IS ATTACHED TO. VERIFY THE ADEQUACY OF ANY EXISTING MEMBERS AND THEIR ATTACHMENTS WHICH THE UNIT IS ATTACHED TO 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 PREAPPROVAL. VERIFY THAT THE EQUIPMENT'S ACTUAL WEIGHT, CG LOCATION, ANCHOR AND METAL SCREW LOCATIONS, ANCHOR AND METAL SCREW DETAILS AND THE MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN IN THIS PREAPPROVAL.
5. THE WALL ATTACHMENTS 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.





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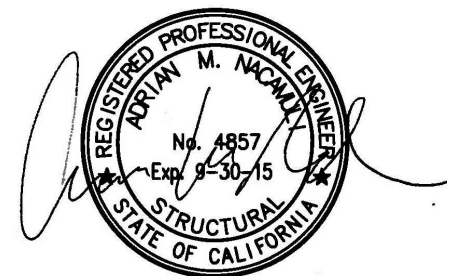
PANDUIT PANZONE WALL MOUNTED CABINETS & ENCLOSURES
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- 6. THIS OPM COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE UNIT TO THE HOSPITAL BUILDING'S STRUCTURE.
- 7. EXPANSION OR WEDGE ANCHORS INTO CONCRETE: HILTI KB-TZ (ICC ESR-1917). INSTALL ANCHORS IN ACCORDANCE WITH THE ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS. TEST AT LEAST 50% OF ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATION. 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 THE FOLLOWING METHOD:
 - a. TORQUE WRENCH TEST: TEST ANCHORS TO THE REQUIRED TORQUE LOAD GIVEN IN TABLE BELOW WITHIN THE LIMIT OF ONE-HALF TURN OF THE NUT.

ANCHOR TEST LOAD VALUES NORMAL WEIGHT AND SAND LIGHT WEIGHT CONCRETE		
ANCHOR DIAMETER (IN)	TORQUE LOAD (FT-LBS)	MINIMUM EDGE DIST. REQ.
3/8"	25	8"

- 8. IF ANY ANCHOR FAILS DURING TESTING, UNIT MUST BE MOVED SO THAT NO ANCHOR IS WITHIN 8" OF AN ABANDONED ANCHOR.
- 9. 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 ANCHORS INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED) LOCATE THE PRESTRESSING TENDONS BY A USING 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.
- 10. CONTRACTOR/IOR MUST VERIFY ANCHOR SPACING TO ADJACENT EQUIPMENT ANCHORS IS TO BE GREATER THAN 8".
- 11. ALL MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

LIGHT GAGE STEEL 18 GA. MIN, ASTM A653-09A
FY = 33 KSI OR 50 KSI (16 GA AND HEAVIER)
- 12. SHEET METAL SCREWS MAY HAVE ANY HEAD TYPE (HEX HEAD, PAN HEAD, ETC) AND SHALL COMPLY WITH ICC-ES ESR-1976.



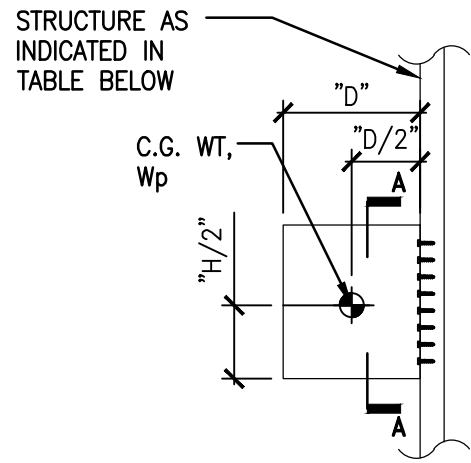


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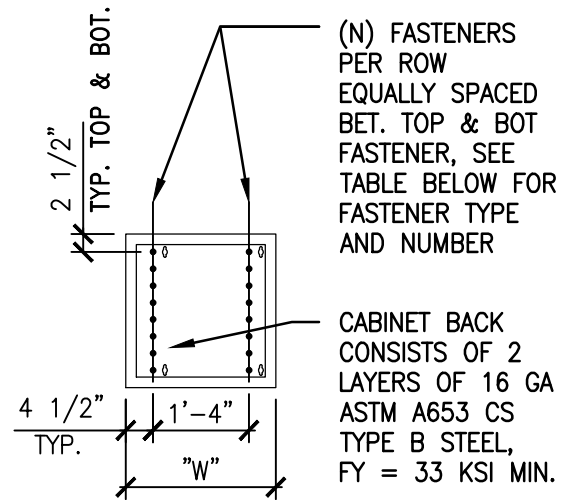
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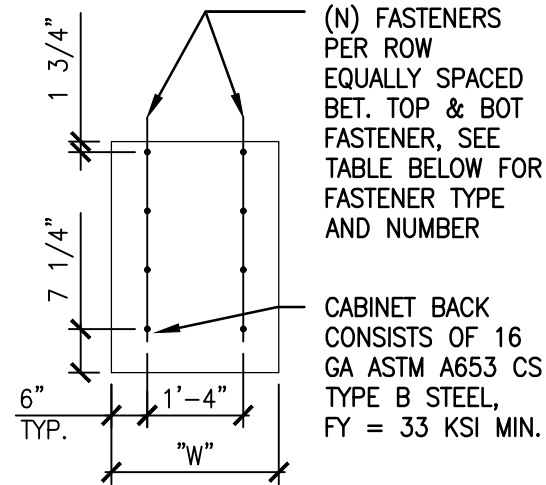
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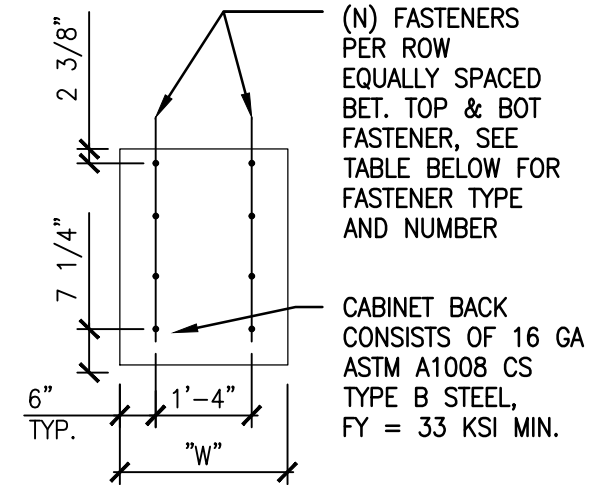
SIDE VIEW



SECTION A-A @ PZC12(x)



SECTION A-A @ PZAEWM3



SECTION A-A @ PZAEWM6E & PZBASE3E

EQUIPMENT ID, DIMS. AND WEIGHT					FASTENER SCHEDULE								FASTENER LOAD DEMANDS (LBS)			
EQUIPMENT ID	DEPTH "D" [IN.]	HEIGHT "H" [IN.]	WIDTH "W" [IN.]	WEIGHT "Wp" [LBS.] (EQUIP. WT + LOAD RATING)	ATTACHMENT TO 18 GA. MIN. STEEL STUD OR BACKING (UP TO 1 LAYER OF 5/8" THICK WALL FINISH)		ATTACHMENT TO 18 GA. MIN. STEEL STUD OR BACKING (UP TO 2 LAYERS OF 5/8" THICK WALL FINISH)		ATTACHMENT TO NORMALWEIGHT CONCRETE WALL		ATTACHMENT TO SAND LIGHTWEIGHT CONCRETE WALL		AT METAL STUDS		AT CONC. WALL (W/ Ω_0)	
					NO. OF SCREWS (N) PER ROW	TOTAL NO. OF SCREWS	NO. OF SCREWS (N) PER ROW	TOTAL NO. OF SCREWS	NO. OF ANCHORS (N) PER ROW	TOTAL NO. OF ANCHORS	NO. OF ANCHORS (N) PER ROW	TOTAL NO. OF ANCHORS	Tu	Vu	Tu	Vu
PZC12S	22.8	25.8	25	340	8	16	8	16	2	4	4	8	96	95	858	543
PZC12P	22.8	25.8	25	340	8	16	8	16	2	4	4	8				
PZC12W	22.8	25.8	25	340	8	16	8	16	2	4	4	8				
PZAEWM3	8.61	38.5	27.92	213.2	3	6	4	8	2	4	2	4				
PZAEWM6E	9.5	36	28	159	3	6	3	6	2	4	2	4				
PZBASE3E	9.5	36	28	119												

- NOTES:
- SUPPORT AND ATTACHMENT DESIGN CONFORMS TO THE 2013 CALIFORNIA BUILDING CODE. S.E.O.R. SHALL PROVIDE STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.
 - Fp SEISMIC FORCES PER GENERAL NOTES.
 - SEE SHEETS 4 AND 5 FOR ATTACHMENT DETAILS AND WALL STRUCTURE REQUIREMENTS.



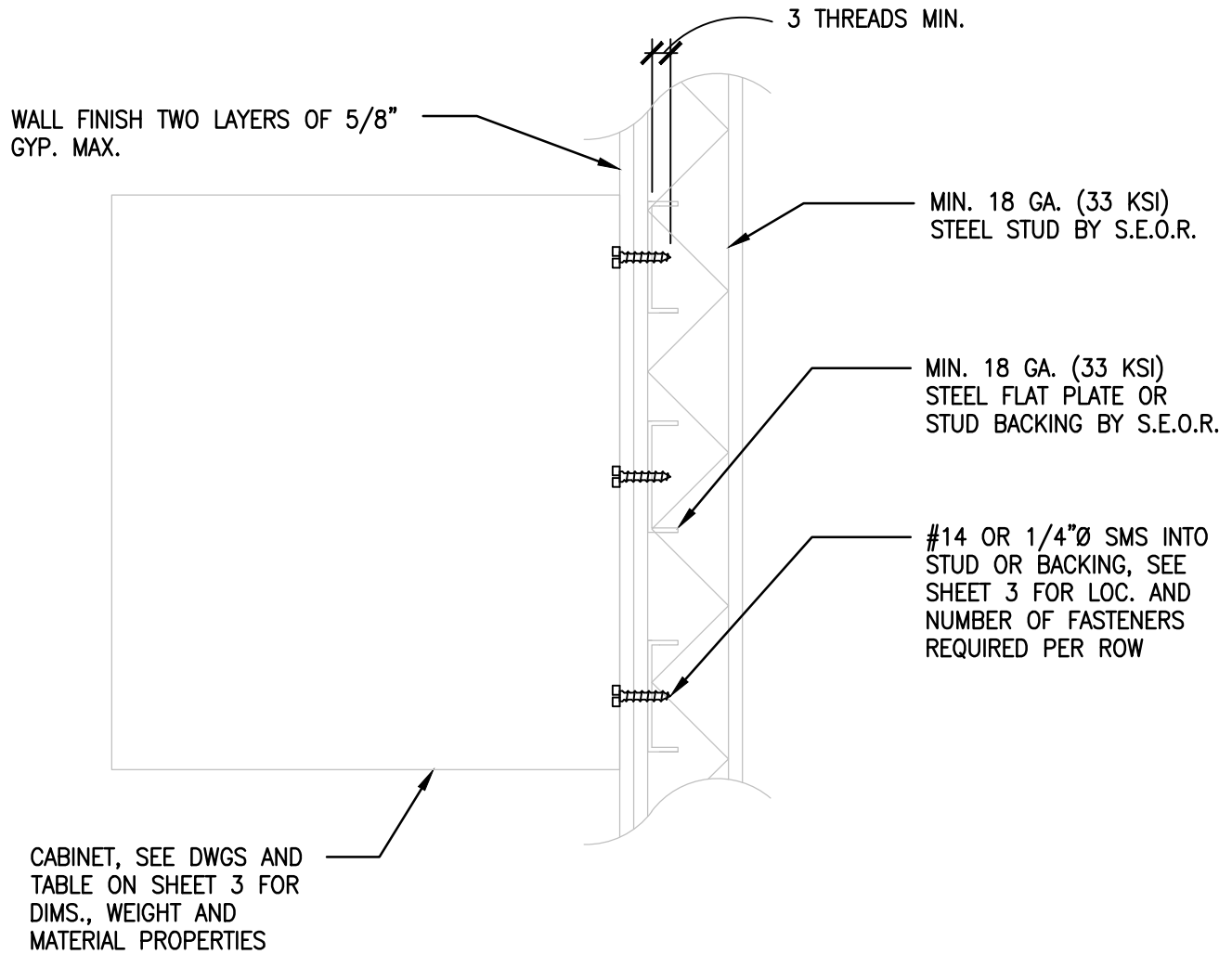
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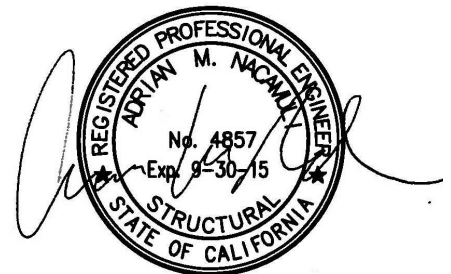
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NOTE:

PRE-DRILL HOLE (MAX 1/16" LARGER THAN SCREW DIA.) IN CABINET BACK FOR INSTALLATION OF SCREWS

ATTACHMENT TO STEEL STUD WALL





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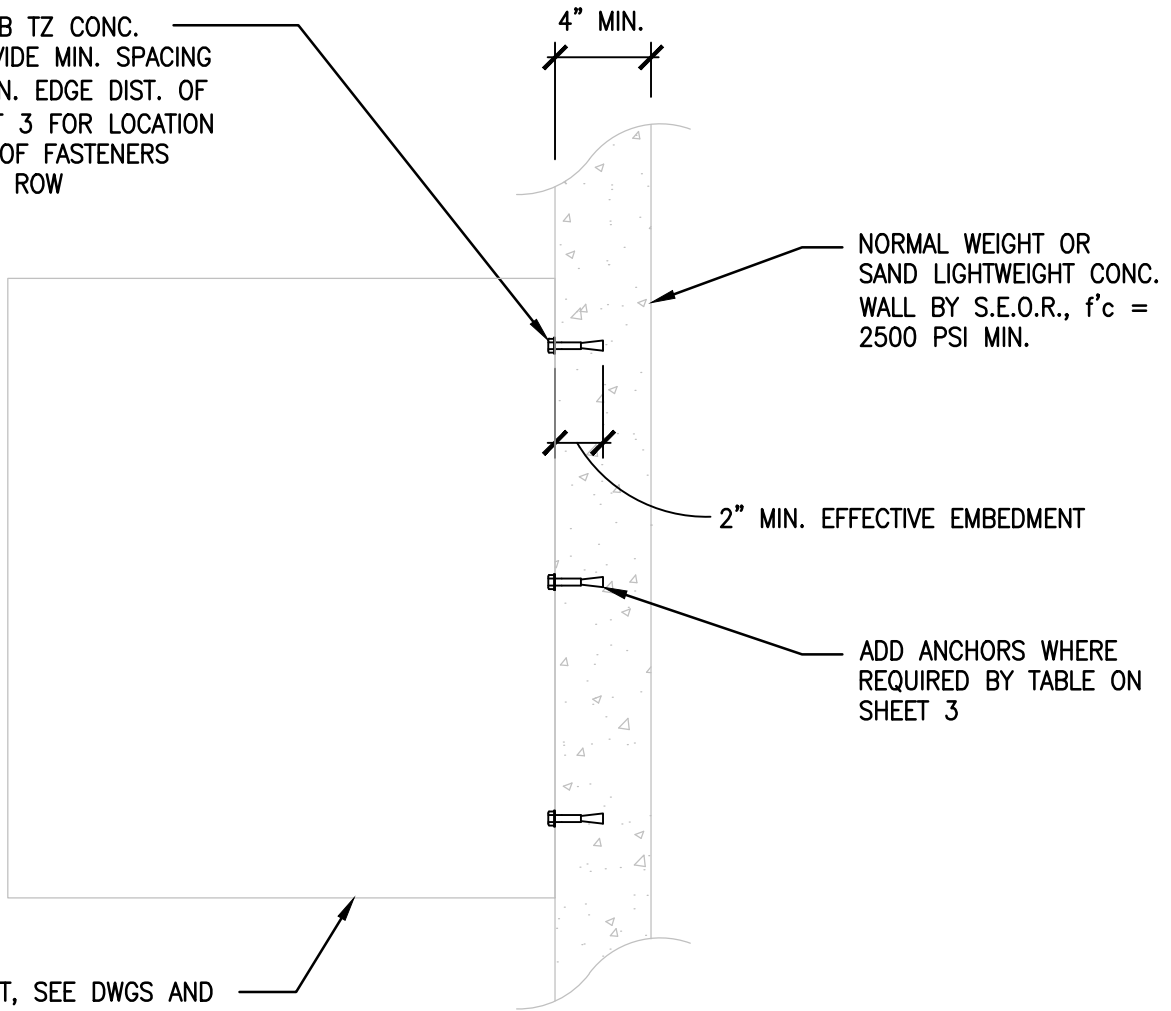
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3/8"Ø HILTI KB TZ CONC.
ANCHOR, PROVIDE MIN. SPACING
OF 6" AND MIN. EDGE DIST. OF
8", SEE SHEET 3 FOR LOCATION
AND NUMBER OF FASTENERS
REQUIRED PER ROW



CABINET, SEE DWGS AND
TABLE ON SHEET 3 FOR
DIMS., WEIGHT AND
MATERIAL PROPERTIES

NOTE:
PRE-DRILL HOLE IN CABINET BACK FOR INSTALLATION OF
ANCHORS, HOLE SIZE SHALL BE 7/16"Ø

ATTACHMENT TO CONCRETE WALL

