



EASE
EQUIPMENT ANCHORAGE & SEISMIC ENGINEERING
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Office of Statewide Health Planning and Development
ANCHORAGE PRE-APPROVAL

OPA-2715-10

THIS PRE- APPROVAL CONFORMS TO THE 2010 CALIFORNIA BUILDING CODE

Equipment Manufacturer: Milestone, Inc.

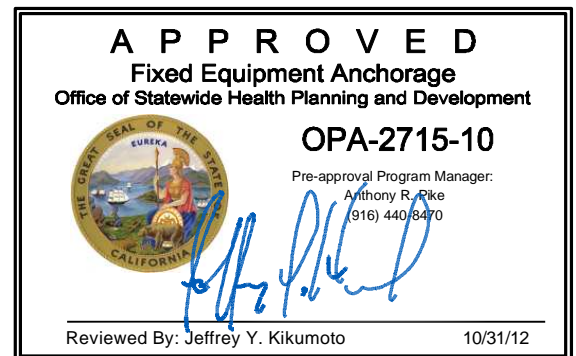
Equipment Type: W2 Fixed Wall Racks

GENERAL NOTES

1. FORCES PER ASCE 7-05 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3, WHERE $S_{ds} = 2.0$, $a_p = 1.0$, $I_p = 1.5$ & $R_p = 2.5$, $z/h \leq 1.0$
2. THIS PRE-APPROVAL CONFORMS TO THE 2010 CALIFORNIA BUILDING CODE.
3. THE DETAILS IN THIS PRE-APPROVAL MAY BE USED AT ANY HEIGHT AND AT ANY LOCATION IN THE STATE OF CALIFORNIA, WHERE SDS IS NOT GREATER THAN 2.0.
4. ALL ANCHOR FORCES SHOWN ON THE DRAWINGS ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN.
5. SHEET METAL SCREWS SHALL BE TEKS SCREWS BY ITW BUILDEX (ICC ESR-1976).
6. THIS PRE-APPROVAL COVERS ONLY THE ANCHORAGE OF THE UNIT TO THE HOSPITAL BUILDING'S STRUCTURE

RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD OF THE BUILDING

7. DESIGN BACKING BARS, STUDS, ETC. WHICH THE UNITS ARE ATTACHED TO AS NOTED ON THE DRAWINGS.
THE SEOR SHALL ALSO VERIFY THE ADEQUACY OF THE STRUCTURES (SUCH AS WALLS AND FLOORS) WHICH SUPPORT THE UNITS FOR THE LOADS IMPOSED ON THEM BY THE UNITS AS WELL AS ALL OTHER LOADS.
8. PROVIDE SUPPORTING STRUCTURE REQUIRED TO SUPPORT WEIGHTS AND FORCES SHOWN, IN ADDITION TO ALL OTHER LOADS.
9. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2010 CBC AND WITH THE DETAILS SHOWN IN THIS PRE-APPROVAL.
VERIFY THAT THE ACTUAL EQUIPMENT'S WEIGHT, CG LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS AND THE MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.
10. VERIFY THAT THE COMBINATION OF S_{ds} & z/h RESULT IN SEISMIC FORCES (E_h, E_v) THAT ARE NOT GREATER THAN THE VALUES ON THE DETAILS.



MILESTONE, INC.

W2 FIXED WALL RACKS

DES. **J. ROBERSON**

JOB NO. **11-1157**

DATE **10/31/12**

SHEET

2

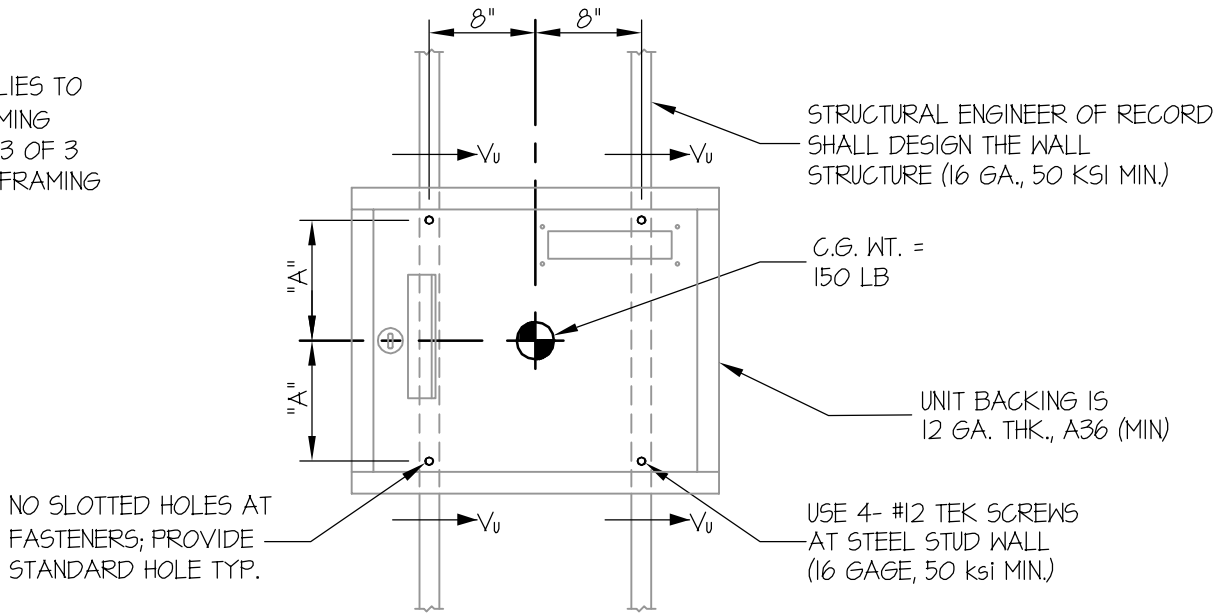
OF **3** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED

NOTE:

THIS DETAIL APPLIES TO METAL STUD FRAMING REFER TO SHEET 3 OF 3 FOR WOOD STUD FRAMING



ELEVATION AT WALL

$T_u = 159$ LB/SCREW (MAX)
 $V_u = 81$ LB/SCREW (MAX)

NOTES:

1. ANCHORAGE DESIGN PER 2010 CALIFORNIA BUILDING CODE AND ASCE 7-05. STRENGTH DESIGN IS USED.

HORIZONTAL FORCE (E_H) = $1.44 W_p$ ($S_{DS} = 2.00$, $a_p = 1.0$, $I_p = 15$, $R_p = 2.5$, $z/h \leq 10$)

VERTICAL FORCE (E_V) = $0.40 W_p$

2. CENTER OF GRAVITY (C.G.) WEIGHT IS A MAXIMUM. THIS PRE-APPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
3. STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN, IN ADDITION TO ALL OTHER LOADS.
4. SEE GENERAL NOTES: SHEET 1



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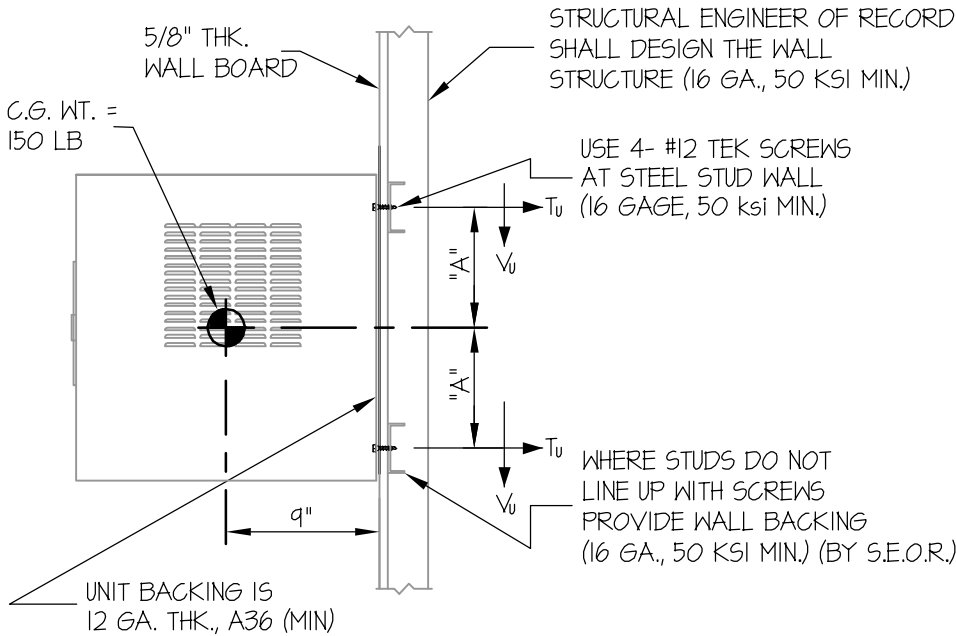
SHEET

3

OF **3** SHEETS

SEISMIC ANCHORAGE

WALL MOUNTED



STEEL STUD WALL SECTION

2 x STUDS OR 4 x BLKG (DOUGLAS-FIR LARCH NUMBER 2 MIN.) (DESIGNED BY STRUCTURAL ENGINEER OF RECORD)

USE 4- 1/4" ϕ X 4" LAG SCREWS TO WOOD STUD OR BLKG. (PRE-DRILL HOLES TO 70% SHANK DIAMETER)

5/8" THK. WALL BOARD

WOOD STUD WALL SECTION

MODEL NO.	WEIGHT	"A" (in)	T_u (lb)	V_u (lb)
W2FI218	150	10.125	130	81
W2F818	150	6.625	159	81



APPROVED
 Fixed Equipment Anchorage
 Office of Statewide Health Planning and Development

OPA-2715-10

Pre-approval Program Manager:
 Anthony R. Pike
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Reviewed By: Jeffrey Y. Kikumoto

10/31/12