



**EQUIPMENT ANCHORAGE  
& SEISMIC ENGINEERING**

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Office of Statewide Health Planning and Development  
**PREAPPROVAL OF MANUFACTURER'S CERTIFICATION**  
**OPM-0271-13**

**THIS PREAPPROVAL CONFORMS TO THE 2013 CALIFORNIA BUILDING CODE**

MANUFACTURER: **AMICO ACCESSORIES INC.**  
EQUIPMENT NAME: **MSR 19" WALL CHANNEL WITH EXTENSION ARM**

Sheet: 1 of 3  
Date: 9/25/15

GENERAL NOTES

1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE 2013 CBC. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE 2013 CBC
2. THIS DOCUMENT MAY ONLY BE USED WITH THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER LISTED ABOVE FOR THE SPECIFIC PROJECT SITE AND INSTALLATION LOCATION. THIS DOCUMENT IS INVALID WITHOUT SUCH CONSENT.
3. THIS PREAPPROVAL CONFORMS TO THE 2013 CALIFORNIA BUILDING CODE.
4. FORCES PER ASCE 7-10 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2 & 13.3-3,  
WHERE  $S_{Ds} = 1.00$ ,  $a_p = 2.5$ ,  $I_p = 1.5$ ,  $R_p = 2.5$ ,  $z/h \leq 1$ .  
WHERE  $S_{Ds} = 1.80$ ,  $a_p = 2.5$ ,  $I_p = 1.5$ ,  $R_p = 2.5$ ,  $z/h \leq 1$ .  
WHERE  $S_{Ds} = 2.20$ ,  $a_p = 2.5$ ,  $I_p = 1.5$ ,  $R_p = 2.5$ ,  $z/h \leq 1$ .
5. THE DETAILS IN THIS PREAPPROVAL MAY BE USED AT ANY LOCATION IN THE STATE OF CALIFORNIA, WHERE  $S_{Ds}$  IS NOT GREATER THAN 1.00, 1.80 & 2.20.
6. ALL DESIGN FORCES SHOWN ON THE DRAWINGS ARE FACTORED LOADS THAT SHALL BE USED FOR STRENGTH DESIGN.
7. SHEET METAL SCREWS SHALL BE TEKS SCREWS BY ITW BUILDEX (ICC ESR-1976).
8. THIS PREAPPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
9. RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD OF THE BUILDING
  - A. PROVIDE SUPPORTING STRUCTURE REQUIRED TO SUPPORT WEIGHTS AND FORCES SHOWN, IN ADDITION TO ALL OTHER LOADS.
  - B. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2013 CBC AND WITH THE DETAILS SHOWN IN THIS PREAPPROVAL. 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 PREAPPROVAL DOCUMENTS.
  - C. 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.
  - D. DESIGN BACKING BARS, STUDS, ETC. WHICH THE UNITS ARE ATTACHED TO AS NOTED ON THE DRAWINGS.



## AMICO ACCESSORIES INC.

DES. **J. ROBERSON**

SHEET

**2**

JOB NO. **11-1512**

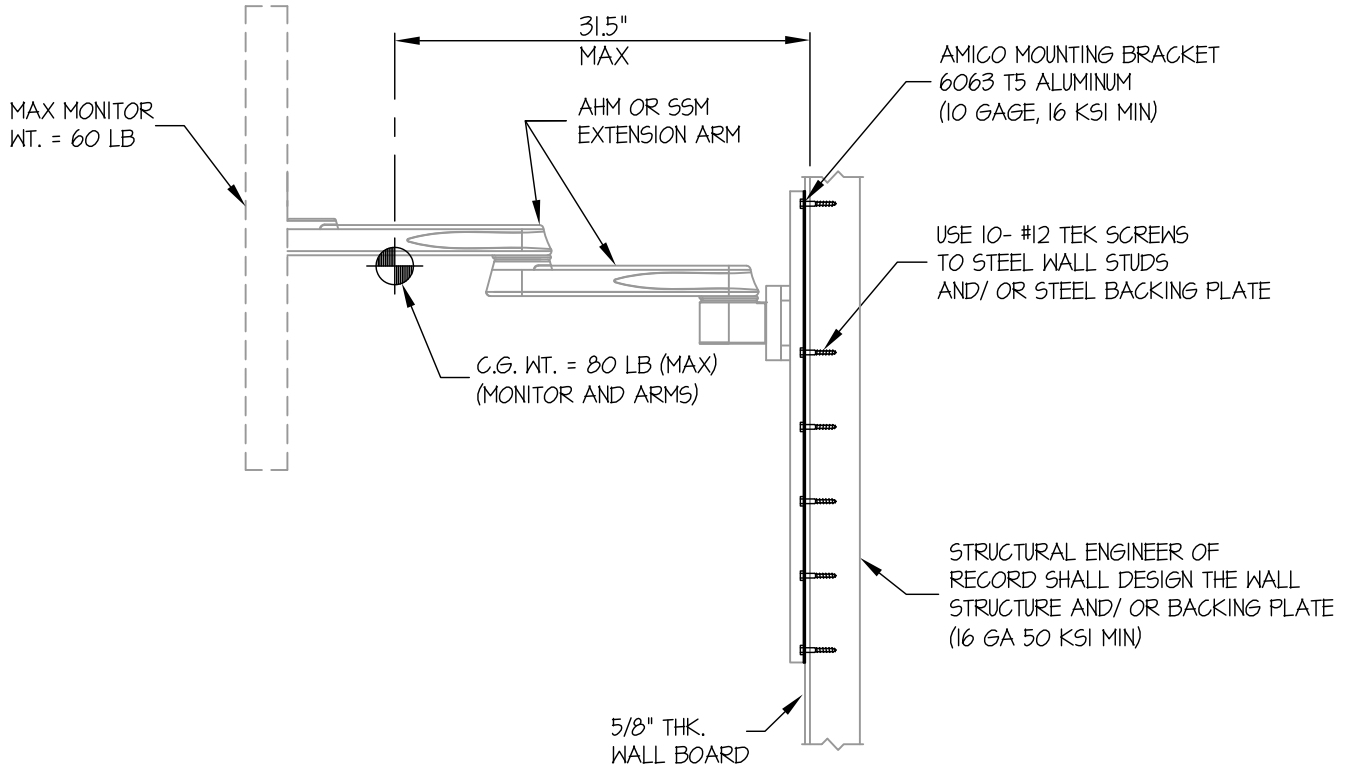
### MSR 19" WALL CHANNEL WITH EXTENSION ARM

DATE **9/25/15**

OF **3** SHEETS

SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



#### STEEL STUD WALL SECTION

**NOTES:**

- FORCES ARE DETERMINED PER 2013 CALIFORNIA BUILDING CODE AND ASCE 7-10.**  
STRENGTH DESIGN IS USED. ( $a_p = 2.5, I_p = 1.5, R_p = 2.5, z/h \leq 1$ )

S <sub>ds</sub>	2.20	1.80	1.00
HORIZONTAL FORCE (E <sub>h</sub> )	3.96 W <sub>p</sub>	3.24 W <sub>p</sub>	1.80 W <sub>p</sub>
VERTICAL FORCE (E <sub>v</sub> )	0.44 W <sub>p</sub>	0.36 W <sub>p</sub>	0.20 W <sub>p</sub>

- CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THESE CALCULATIONS ENCOMPASS ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
- STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING SHALL PROVIDE SUPPORT STRUCTURE DESIGNED TO SUPPORT WEIGHTS AND FORCES SHOWN IN COMBINATION WITH ALL OTHER LOADS THAT MAY BE PRESENT.



## AMICO ACCESSORIES INC.

DES. **J. ROBERSON**

SHEET

**3**

JOB NO. **11-1512**

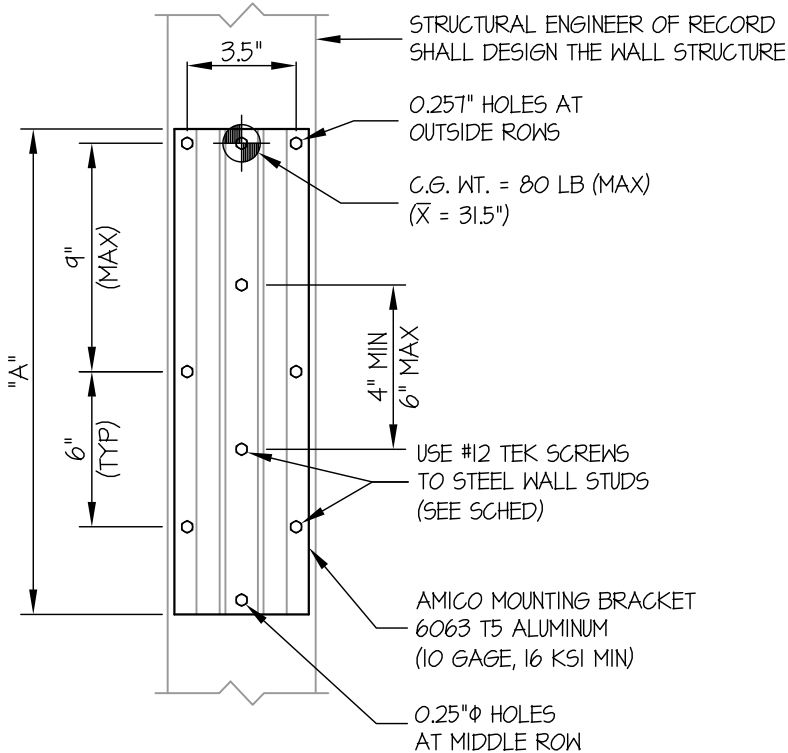
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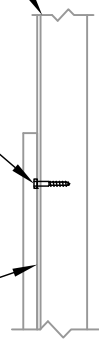
WALL MOUNTED



DOUGLAS FIR-LARCH WALL STRUCTURE BY STRUCTURAL ENGINEER OF RECORD (DF-L NO. 2 MIN)

USE #12 X 3.5" WOOD SCREWS TO WOOD STUD (PRE-DRILL HOLES TO 70% SHANK DIAMETER) (SEE SCHED)

5/8" THK. WALL BOARD



WOOD STUD WALL SECTION

ELEVATION AT WALL PLATE

"A"	# OF MIDDLE SCREWS (MIN)	# OF OUTSIDE SCREWS (MIN)	T <sub>u</sub> (lb.)	V <sub>u</sub> (lb.)	MAX Sds
16" - 22"	4	8	144	16	100
22.01" - 28"	5	10	159	90	180
28.01" - 34"	6	12	164	75	220
34.01" - 40"	7	14	152	61	220
40.01" - 46"	8	16	144	52	220
46.01" - 52"	9	18	138	45	220
52.01" - 58"	10	20	134	40	220
58.01 - 64"	11	22	131	35	220

*Jonathan Roberson*

REGISTERED PROFESSIONAL ENGINEER  
No. 4197  
EXP. 6-30-2016  
9/25/15  
STATE OF CALIFORNIA