



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
FACILITIES DEVELOPMENT DIVISION**

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

OFFICE USE ONLY

**APPLICATION #: OPM-0547**

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

Type:  New  Renewal/Update

**Manufacturer Information**

Manufacturer: Smoke Guard, Inc.

Manufacturer's Technical Representative: Herb Kaup

Mailing Address: 287 N. Maple Grove, Boise, ID 83704

Telephone: (208) 639-7871

Email: herb@smokeguard.com

**Product Information**

Product Name: Smoke Curtain

Product Type: Other mechanical and electrical components

Product Model Number: M200 & M400 & M400B

General Description: Closes off elevator openings to curtail smoke migration between spaces.

**Applicant Information**

Applicant Company Name: SGW Designworks

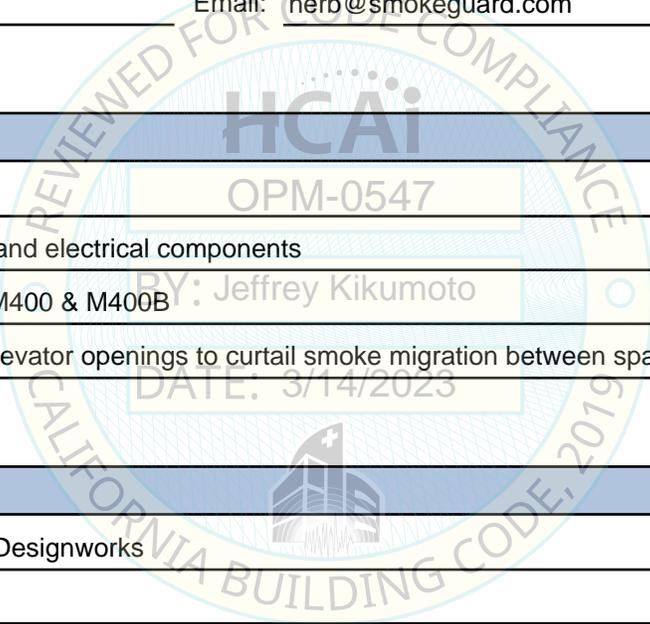
Contact Person: Mike Witt

Mailing Address: 3131 W. State St, suite 230, Boise, ID 83703

Telephone: (208) 391-4019

Email: mike.witt@sgwdesignworks.com

Title: COO



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

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
FACILITIES DEVELOPMENT DIVISION**

**Registered Design Professional Preparing Engineering Recommendations**

Company Name: STRUCTURAL ENGINEERING CONSULTANTS

Name: Patrick D Van Kleek California License Number: CE49971

Mailing Address: 410 South Orchard St, Suite 116, Boise, ID 83705

Telephone: (280) 887-7760 Email: pat@secidaho.com

**HCAI 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

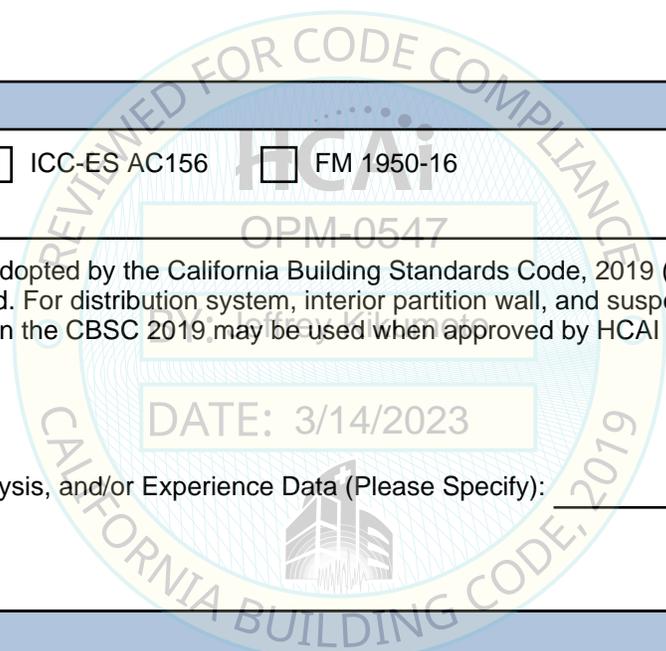
Other(s) (Please Specify): \_\_\_\_\_

\*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 HCAI prior to testing.

Analysis

Experience Data

Combination of Testing, Analysis, and/or Experience Data (Please Specify): \_\_\_\_\_



**HCAI Approval**

Date: 3/14/2023

Name: Jeffrey Kikumoto Title: Senior Structural Engineer

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

“Access to Safe, Quality Healthcare Environments that Meet California’s Diverse and Dynamic Needs”

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
**PREAPPROVAL OF MANUFACTURER'S CERTIFICATION**  
**OPM-0547-19**

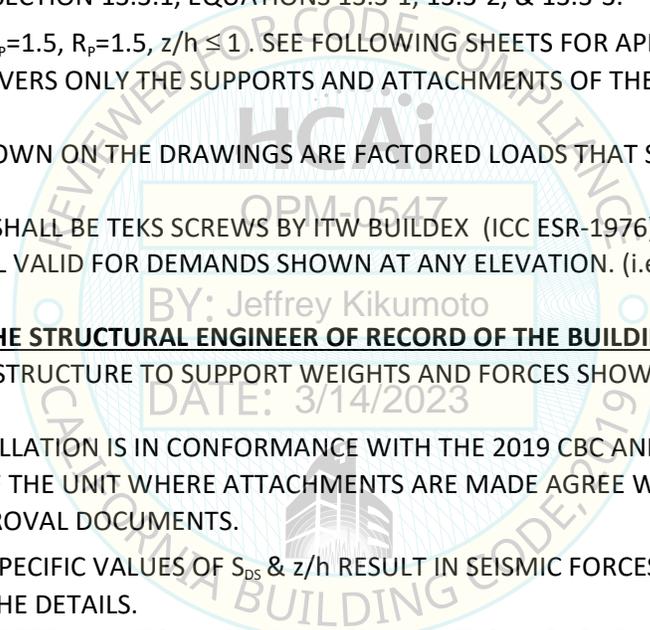
THIS PREAPPROVAL CONFORMS TO THE 2019 CALIFORNIA BUILDING CODE  
**MANUFACTURER:** SMOKE GUARD  
**EQUIPMENT NAME:** M200, M400, AND M400B SMOKE CURTAIN



Digitally signed by Patrick D. VanKleeck  
 Date: 03/13/2023

**GENERAL NOTES**

1. THIS OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMANDS (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2019.
2. THIS DOCUMENT MAY ONLY BE USED WITH THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER LISTED BELOW FOR THE SPECIFIC PROJECT SITE AND INSTALLATION LOCATION. THIS DOCUMENT IS INVALID WITHOUT SUCH CONSENT.
3. THIS PRE-APPROVAL CONFORMS TO THE 2019 CALIFORNIA BUILDING CODE WHERE  $S_{DS}$  IS NOT GREATER THAN 2.5.
4. FORCES PER ASCE 7-16 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2, & 13.3-3.  
 WHERE  $S_{DS} = 2.5$ ,  $a_p = 1.0$ ,  $I_p = 1.5$ ,  $R_p = 1.5$ ,  $z/h \leq 1$ . SEE FOLLOWING SHEETS FOR APPLICABILITY OF  $\Omega_0$ .
5. THIS PRE-APPROVAL COVERS ONLY THE SUPPORTS AND ATTACHMENTS OF THE EQUIPMENT TO THE STRUCTURE.
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. CONCRETE WALL DETAIL VALID FOR DEMANDS SHOWN AT ANY ELEVATION. (i.e.  $z/h \leq 1$ )
- 9. RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD OF THE BUILDING**
  - A. PROVIDE SUPPORTING STRUCTURE TO SUPPORT WEIGHTS AND FORCES SHOWN IN ADDITION TO ALL OTHER LOADS.
  - B. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2019 CBC AND WITH THE DETAILS, MATERIAL AND GAUGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.
  - C. VERIFY THAT PROJECT SPECIFIC VALUES OF  $S_{DS}$  &  $z/h$  RESULT IN SEISMIC FORCES ( $E_h$ ,  $E_v$ ) THAT DO NOT EXCEED THE VALUES ON THE DETAILS.
  - D. VERIFY THAT THE CONCRETE WALL TO WHICH THE EQUIPMENT IS ANCHORED MEETS THE REQUIREMENTS OF THE APPLICABLE ICC ESR REPORT AND THIS OPM.
  - E. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY CONCRETE WALL EDGES OR OPENINGS (SEE TYPICAL DETAILS ON SHEET 2).
  - F. VERIFY THAT ALL NEW OR EXISTING ANCHORS ARE AN ADEQUATE DISTANCE FROM THE UNIT ATTACHMENTS AND CHECK FOR INTERACTION WHERE OTHER ANCHORS ARE WITHIN 18" OR  $6h_{ef}$  FROM THIS UNIT'S ANCHORS.
  - G. DESIGN BACKING BARS, STUDS, ETC. WHICH THE UNITS ARE ATTACHED TO AS NOTED ON THE DRAWINGS.



MANUFACTURER:		NAME	DATE
Smoke Guard		J. WALIN	5/15/2019
PRODUCT:		CHKD BY	4/22/2020
M200 & M400 & M400B		SC	
REV:	SIZE: A	SHEET 1 OF 10	CUST. APPR.

**PROPRIETARY & CONFIDENTIAL**

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SMOKE GUARD ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SMOKE GUARD IS PROHIBITED.



**DESIGNWORKS**

10. EXPANSION ANCHORS:

A) ATTACHMENT IS TO BE MADE WITH THE ANCHORS LISTED BELOW AND INSTALLED AS DESCRIBED IN THE CORRESPONDING ICC REPORT.

Anchor Diameter	Concrete Type	Min. F'c (psi)	Anchor Type	ICC Report No.	Min. Embed.	Min. Spacing.	Min. Edge Dist.	Min. Conc. Thickness	Install Torque	Direct Tension
1/4"	Normal Weight	3000	Hiti Kwik Bolt Hus-EZ	ESR-3027	1.92"	6"	6"	6"	18 FT-LB	799lb

B) THIS PRE-APPROVAL ALLOWS FOR UP TO A MAXIMUM OF 2 ADJACENT CONCRETE WALL EDGES, 6" AWAY MINIMUM (i.e. - CORNER). SEE ADJACENT DETAIL FOR ADDITIONAL MINIMUM ALLOWABLE CONCRETE EDGE DISTANCES.

C) TESTING AND SPECIAL INSPECTION OF SCREW ANCHORS SHALL BE PREFORMED BY AN APPROVED INDEPENDENT AGENCY EMPLOYED BY THE FACILITY OWNER PER CBC 1704A & 1910A.5 AND CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER, AND THE ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE.

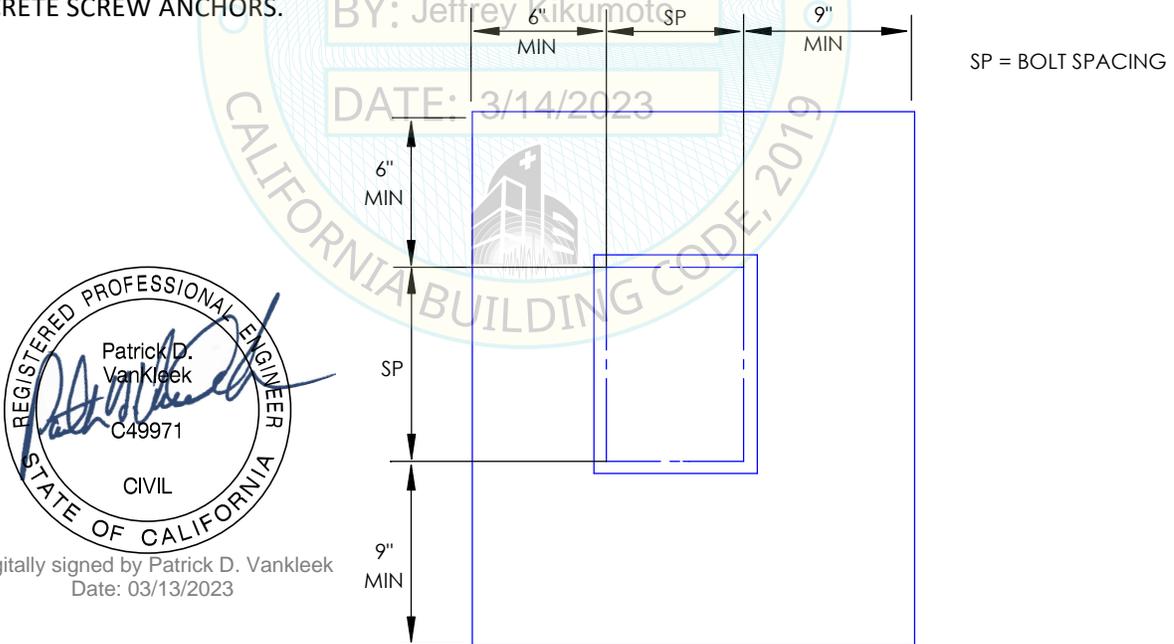
i. AFTER AT LEAST 24 HOURS HAVE ELAPSED SINCE INSTALLATION, DIRECT PULL TENSION TEST AT LEAST 50% OF THE ANCHORS.

ii. ACCEPTANCE CRITERIA:

- DIRECT TENSION TEST: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE TEST LOAD. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER BECOMES LOOSE.

iii. IF ANY ANCHORS FAIL, TEST ALL ANCHORS.

D) AVOID DAMAGING EXISTING STEEL REINFORCING IN CONCRETE WALL WHEN INSTALLING CONCRETE SCREW ANCHORS.



Digitally signed by Patrick D. Vankleek
   
 Date: 03/13/2023

MANUFACTURER:		NAME	DATE
Smoke Guard		J. WALIN	5/15/2019
PRODUCT:		ENG APPR.	
M200 & M400 & M400B		CHKD BY	4/22/2020
REV:	SIZE: A	SHEET 2 OF 10	CUST. APPR.

**PROPRIETARY & CONFIDENTIAL**

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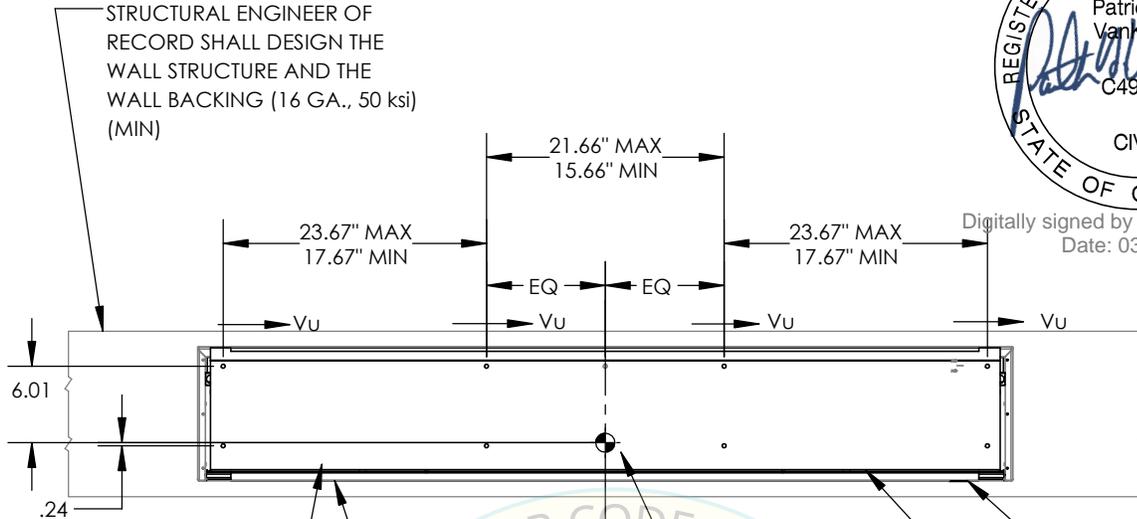


SEISMIC SUPPORTS & ATTACHMENTS

WALL MOUNTED



Digitally signed by Patrick D. Vankleek  
Date: 03/13/2023



BLIND HOLE, THREADED SELF CLINCHING STANDOFF ON FAR SIDE OF MOUNTING BRACKET TYP OF (6) SEE SHT 4 OF 10

UNIT BACK (ASTM A153 TUBE STEEL; 20ga, 23ksi MIN)

C.G. WT. = 75 LB AT 55\"/>

MOUNTING BRACKET (ASTM A653 TYPE B; 14ga, 30ksi MIN)

**FRONT ELEVATION**

BY: (M200/M400)

DATE: 3/14/2023

NOTES:

- FORCES ARE DETERMINED PER 2019 CALIFORNIA BUILDING CODE AND ASCE 7-16. STRENGTH DESIGN IS USED:  $S_{Ds}=2.5g$  ( $a_p = 1.0, I_p = 1.5, R_p = 1.5, \Omega_0 = 1.5, z/h \leq 1$ ) PER ASCE 7-16 TABLE 13.5-1, OTHER RIGID COMPONENTS  
 HORIZONTAL FORCE ( $E_h$ ) =  $3.0W_p = (3.0) \cdot (85LBS) = 255LBS$   
 HORIZONTAL FORCE ( $E_{mh}$ ) =  $4.5W_p = (4.5) \cdot (85LBS) = 383 LBS$   
 VERTICAL FORCE ( $E_v$ ) =  $0.5W_p = (0.5) \cdot (85LBS) = 43LBS$   
 ( $E_{mh} = E_h \times \Omega_0$ ; FOR CONCRETE ANCHORAGE)
- CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THIS PRE-APPROVAL ENCOMPASSES 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.
- SEE GENERAL NOTE: PAGES 1 AND 2

MANUFACTURER: Smoke Guard		NAME	DATE
PRODUCT: M200 & M400 & M400B		DRWN BY J. WALIN	5/15/2019
REV:		ENG APPR.	
SIZE: A	SHEET 3 OF 10	CHKD BY SC	4/22/2020
		CUST. APPR.	

PROPRIETARY & CONFIDENTIAL

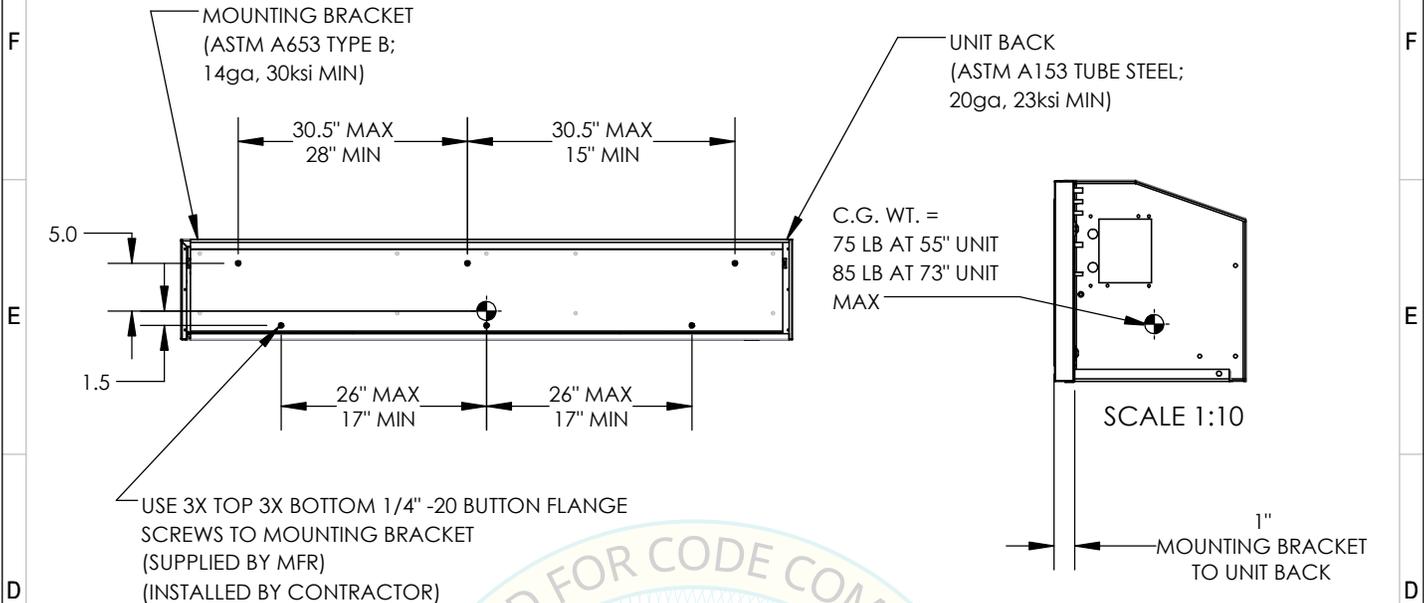
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DESIGNWORKS

SEISMIC SUPPORTS & ATTACHMENTS  
FOR MOUNTING BRACKET TO UNIT BACK CONNECTION

WALL MOUNTED



**REAR ELEVATION  
(M200/M400)**

**SIDE ELEVATION  
(M200/M400)**

The M200 and M400 are attached to the mounting bracket with 3 top and 3 bottom fasteners.

Mounting Bracket to Unit

Top Screws:  $T_u = 45$  lb/screw  
 $V_u = 56$  lb/screw  
 Bot Screws:  $T_u = 115$  lb/screw  
 $V_u = 56$  lb/screw



Digitally signed by Patrick D. Vankleek  
Date: 03/13/2023

MANUFACTURER:		NAME	DATE
Smoke Guard		J. WALIN	5/15/2019
PRODUCT:		ENG APPR.	
M200 & M400 & M400B		CHKD BY	SC 4/22/2020
REV:	SIZE: A	SHEET 4 OF 10	CUST. APPR.

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DESIGNWORKS

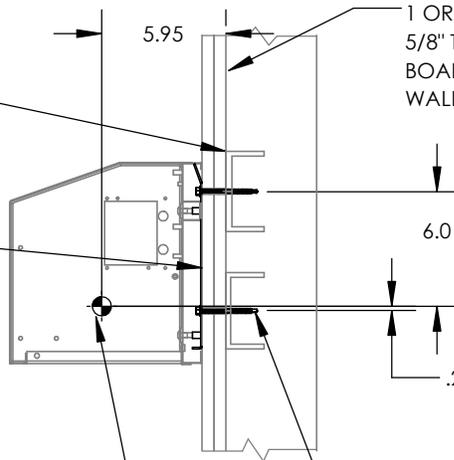
**SEISMIC SUPPORTS & ATTACHMENTS  
FOR MOUNTING BRACKET TO STEEL AND WOOD STUD WALL**

**WALL MOUNTED**

The mounting bracket is attached to wall through 4 top and 4 bottom fasteners.

STRUCTURAL ENGINEER OF RECORD SHALL DESIGN THE WALL STRUCTURE AND THE WALL BACKING (16 GA., 50ksi MIN)

MOUNTING BRACKET (ASTM A653 TYPE B 14 GA., 30ksi MIN)



1 OR 2 LAYERS OF 5/8" THK. WALL BOARD AT FIRE RATED WALL PER ARCH. DWGS.

Mounting Bracket to Structure

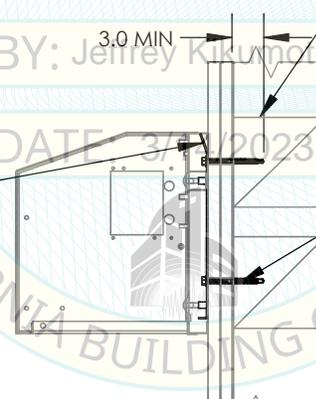
Top Screws: Tu = 33 lb/screw  
Vu = 125 lb/screw  
Bot Screws: Tu = 100 lb/screw  
Vu = 125 lb/screw

C.G. WT. = 75 LB. AT 55" UNIT  
85 LB. AT 73" UNIT  
MAX

USE (4) TOP (4) BOTTOM 1/4" Ø TEK SCREWS TO WALL STRUCTURE (BY STRUCTURAL ENGINEER OF RECORD)

**SECTION AT STEEL STUD WALL (M200/M400)**

1 OR 2 LAYERS OF 5/8" THK. WALL BOARD AT FIRE RATED WALL PER ARCH. DWGS.



3X STUDS OR 4X BLKG (DOUGLAS-FIR LARCH NUMBER 2 MIN) DESIGNED BY STRUCTURAL ENGINEER OF RECORD

USE (4) TOP AND (4) BOTTOM SIMPSON SDWH19600DB SCREW TO WOOD STUD OR BLKG. W/ 3" PENTR. (MIN) (PRE-DRILL HOLES TO 70% SHANK DIAMETER)

NOTE:  
MIN EDGE DISTANCE = 1"  
MIN END DISTANCE = 2"

Mounting Bracket to Structure

Top Screws: Tu = 33 lb/screw  
Vu = 29 lb/screw  
Bot Screws: Tu = 164 lb/screw  
Vu = 69 lb/screw

**SECTION AT WOOD STUD WALL (M200/M400)**



Digitally signed by Patrick D. Vankleek  
Date: 03/13/2023

MANUFACTURER: Smoke Guard		NAME	DATE
PRODUCT: M200 & M400 & M400B		DRWN BY J. WALIN	5/15/2019
REV:		ENG APPR.	
SIZE: A	SHEET 5 OF 10	CHKD BY SC	4/22/2020
		CUST. APPR.	

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**DESIGNWORKS**

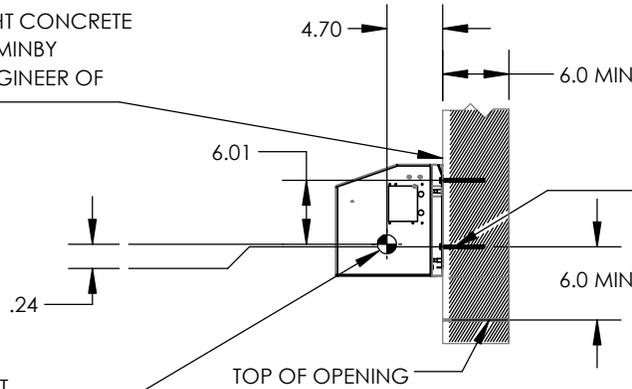
**SEISMIC SUPPORTS & ATTACHMENTS  
FOR MOUNTING BRACKET TO CONCRETE AND BLOCK WALL**

**WALL MOUNTED**

The mounting bracket is attached to wall through 4 top and 4 bottom fasteners. Mounting Bracket to Structure

(Values Include  $\Omega_0$ )  
 Top Screws:  $T_u = 31$  lb/screw  
 $V_u = 187$  lb/screw  
 Bot Screws:  $T_u = 144$  lb/screw  
 $V_u = 187$  lb/screw

NORMAL WEIGHT CONCRETE  
 WALL (3000 PSI MIN BY  
 STRUCTURAL ENGINEER OF  
 RECORD)



USE (4) TOP AND (4)  
 BOTTOM 1/4" HILTI HUS-EZ  
 CONCRETE SCREWS  
 (MIN. EMBED. hef = 1.92")

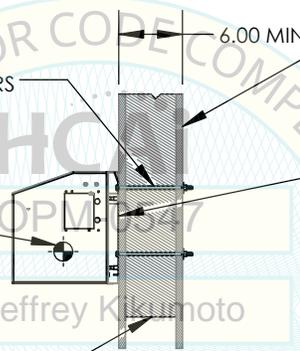
C.G. WT. =  
 75 LB. AT 55" UNIT  
 85 LB. AT 73" UNIT  
 MAX

**SECTION AT CONCRETE WALL  
(M200/M400)**

USE (4) TOP AND (4)  
 BOTTOM 1/4"  $\emptyset$   
 A307 BOLTS THRU WALL  
 W/ 11/2"  $\emptyset$  x 1/8" WASHERS

C.M.U. WALL FULLY GROUTED  
 DESIGNED BY STRUCTURAL  
 ENGINEER OF RECORD  
 ( $f'_m = 2000$ psi)

C.G. WT. =  
 75 LB. AT 55" UNIT  
 85 LB. AT 73" UNIT  
 MAX



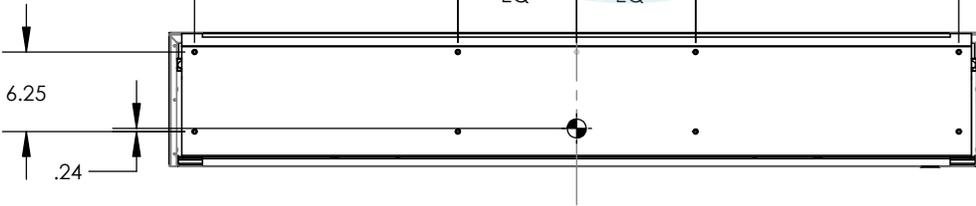
MOUNTING BRACKET  
 (ASTM A653 TYPE B  
 14 GA., 30 ksi MIN)

TOP OF OPENING

**SECTION AT BLOCK WALL  
(M200/M400)**



MIN AND MAX VALUES  
 BASED ON OVERALL WIDTH  
 OF UNIT (73" MAX/55" MIN)



**SCREW SPACING  
(M200/M400)**



Digitally signed by Patrick D. VanKleek  
 Date: 03/13/2023

MANUFACTURER: <b>Smoke Guard</b>		NAME	DATE
PRODUCT: <b>M200 &amp; M400 &amp; M400B</b>		DRWN BY J. WALIN	5/15/2019
REV:		ENG APPR.	
SIZE: A SHEET 6 OF 10		CHKD BY SC	4/22/2020
CUST. APPR.			

**PROPRIETARY & CONFIDENTIAL**

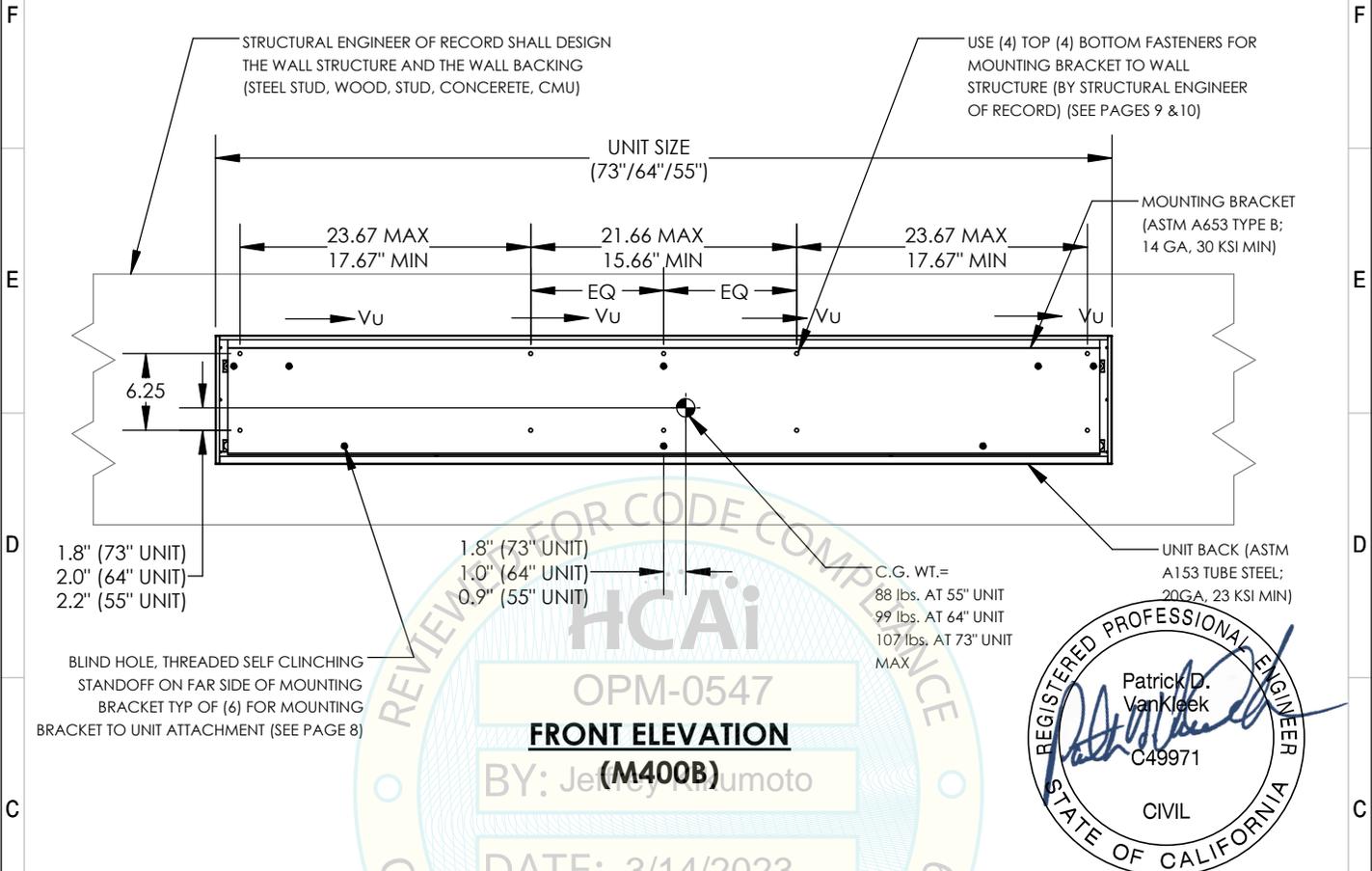
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**DESIGNWORKS**

SEISMIC SUPPORTS & ATTACHMENTS

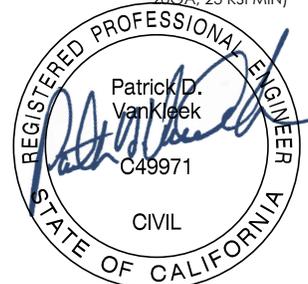
WALL MOUNTED



**FRONT ELEVATION**  
**(M400B)**

BY: Jeffrey Kikumoto

DATE: 3/14/2023



Digitally signed by Patrick D. VanKleek  
Date: 03/13/2023

**NOTES:**

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 HORIZONTAL FORCE ( $E_h$ ) =  $3.0W_p = (3.0) \cdot (107LBS) = 321LBS$   
 HORIZONTAL FORCE ( $E_{mh}$ ) =  $4.5W_p = (4.5) \cdot (107LBS) = 482 LBS$   
 VERTICAL FORCE ( $E_v$ ) =  $0.5W_p = (0.5) \cdot (107LBS) = 54LBS$   
 ( $E_{mh} = E_h \times \Omega_0$ ; FOR CONCRETE ANCHORAGE)
- CENTER OF GRAVITY (C.G.) AND WEIGHT ARE THE GOVERNING PARAMETERS FOR DESIGN. THIS PRE-APPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
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- SEE GENERAL NOTE: PAGES 1 AND 2

MANUFACTURER:		NAME	DATE
Smoke Guard		J. WALIN	5/15/2019
PRODUCT:		ENG APPR.	
M200 & M400 & M400B		CHKD BY	4/22/2020
REV:	SIZE: A	SHEET 7 OF 10	CUST. APPR.

**PROPRIETARY & CONFIDENTIAL**

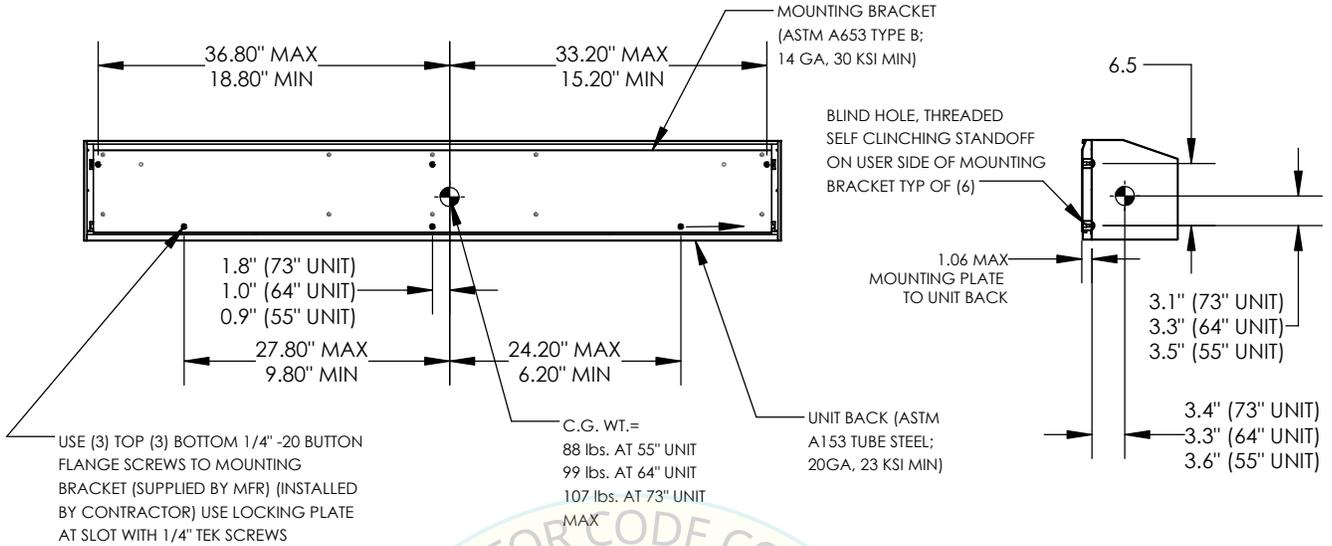
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DESIGNWORKS

**SEISMIC SUPPORTS & ATTACHMENTS**  
FOR MOUNTING BRACKET TO UNIT BACK CONNECTION

**WALL MOUNTED**



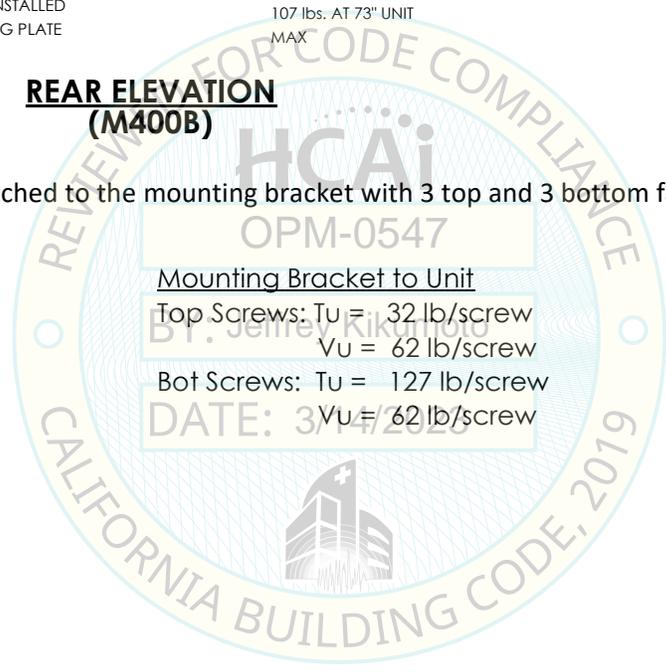
**REAR ELEVATION (M400B)**

**SIDE ELEVATION (M400B)**

The M400B is attached to the mounting bracket with 3 top and 3 bottom fasteners.

Mounting Bracket to Unit

Top Screws:  $T_u = 32$  lb/screw  
 $V_u = 62$  lb/screw  
 Bot Screws:  $T_u = 127$  lb/screw  
 $V_u = 62$  lb/screw



Digitally signed by Patrick D. Vankleek  
Date: 03/13/2023

MANUFACTURER: <b>Smoke Guard</b>		NAME	DATE
PRODUCT: <b>M200 &amp; M400 &amp; M400B</b>		DRWN BY J. WALIN	5/15/2019
REV:	SIZE: A	CHKD BY SC	4/22/2020
SHEET 8 OF 10		CUST. APPR.	

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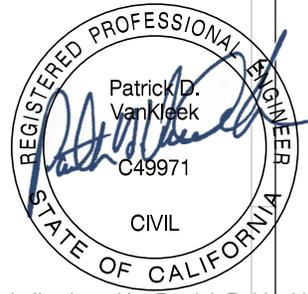


**DESIGNWORKS**

**SEISMIC SUPPORTS & ATTACHMENTS  
FOR MOUNTING BRACKET TO STEEL AND WOOD STUD WALL**

WALL MOUNTED

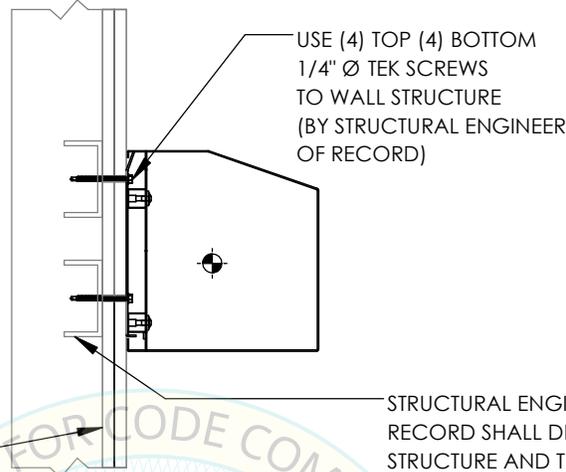
The mounting bracket is attached to wall through 4 top and 4 bottom fasteners.



Digitally signed by Patrick D. Vankleek  
Date: 03/13/2023

Mounting Bracket to Steel and Wood Stud Wall:

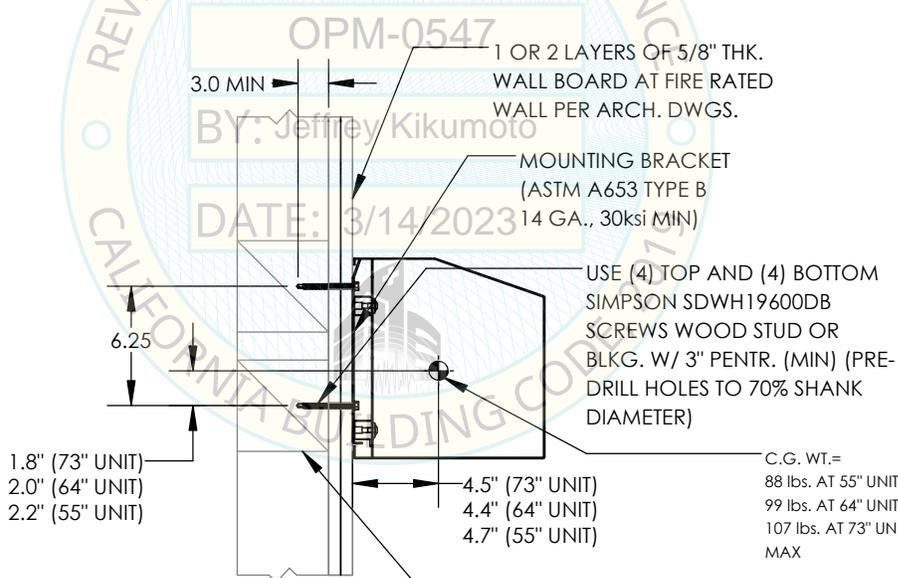
Top Screws: Tu = 32 lb/screw  
Vu = 114 lb/screw  
Bot Screws: Tu = 127 lb/screw  
Vu = 114 lb/screw



1 OR 2 LAYERS OF  
5/8" THK. WALL  
BOARD AT FIRE RATED  
WALL PER ARCH. DWGS.

STRUCTURAL ENGINEER OF  
RECORD SHALL DESIGN THE WALL  
STRUCTURE AND THE WALL  
BACKING (16 GA., 50ksi MIN)

**SECTION AT STEEL STUD WALL  
(M400B)**



1.8" (73" UNIT)  
2.0" (64" UNIT)  
2.2" (55" UNIT)

C.G. WT.=  
88 lbs. AT 55" UNIT  
99 lbs. AT 64" UNIT  
107 lbs. AT 73" UNIT  
MAX

NOTE:  
MIN EDGE DISTANCE = 1"  
MIN END DISTANCE = 1"

3X STUDS OR 4X BLKG  
(DOUGLAS-FIR LARCH  
NUMBER 2 MIN) DESIGNED  
BY STRUCTURAL ENGINEER  
OF RECORD)

**SECTION AT WOOD STUD WALL  
(M400B)**

MANUFACTURER: Smoke Guard		NAME	DATE
PRODUCT: M200 & M400 & M400B		DRWN BY J. WALIN	5/15/2019
REV:	SIZE: A	CHKD BY SC	4/22/2020
	SHEET 9 OF 10	CUST. APPR.	

**PROPRIETARY & CONFIDENTIAL**

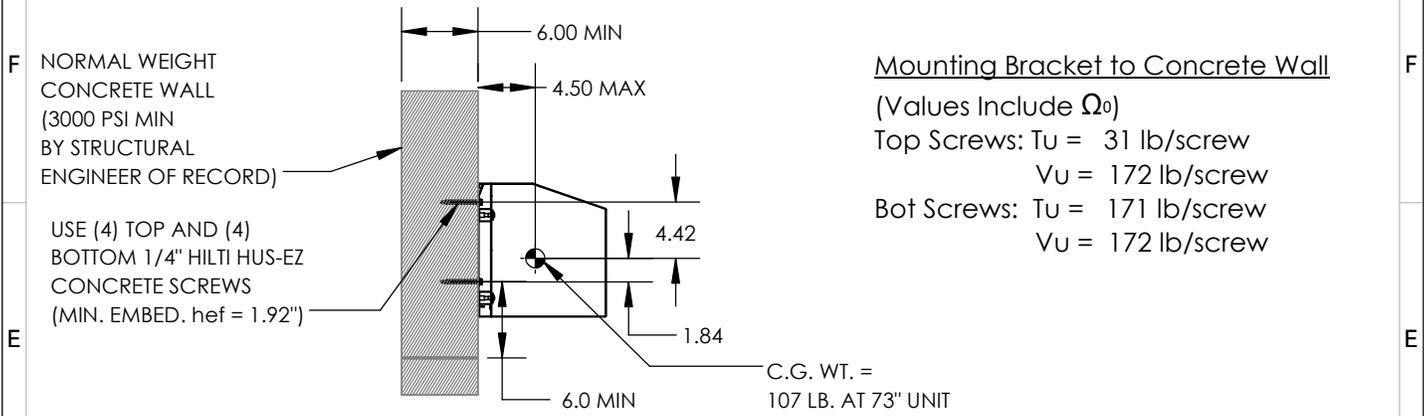
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SMOKE GUARD ANY  
REPRODUCTION IN PART  
OR AS A WHOLE  
WITHOUT THE WRITTEN  
PERMISSION OF  
SMOKE GUARD  
IS PROHIBITED.



DESIGNWORKS

SEISMIC SUPPORTS & ATTACHMENTS  
FOR MOUNTING BRACKET TO CONCRETE AND BLOCK WALL

WALL MOUNTED



Mounting Bracket to Concrete Wall

(Values Include  $\Omega_0$ )

Top Screws:  $T_u = 31$  lb/screw

$V_u = 172$  lb/screw

Bot Screws:  $T_u = 171$  lb/screw

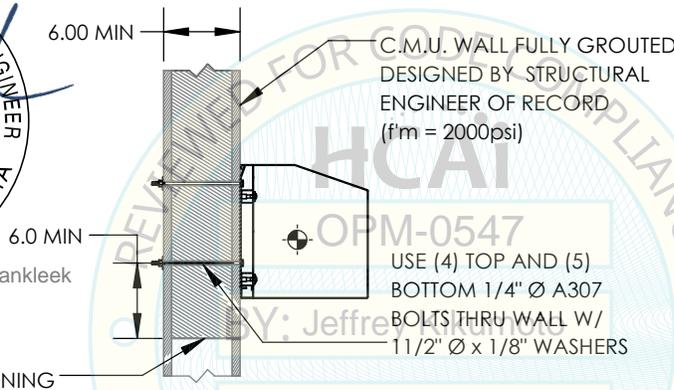
$V_u = 172$  lb/screw

The mounting bracket is attached to concrete wall through 4 top and 4 bottom fasteners.

**SECTION AT CONCRETE WALL  
(M400B)**



Digitally signed by Patrick D. VanKleek  
Date: 03/13/2023



Mounting Bracket to Block Wall

(Values Include  $\Omega_0$ )

Top Screws:  $T_u = 31$  lb/screw

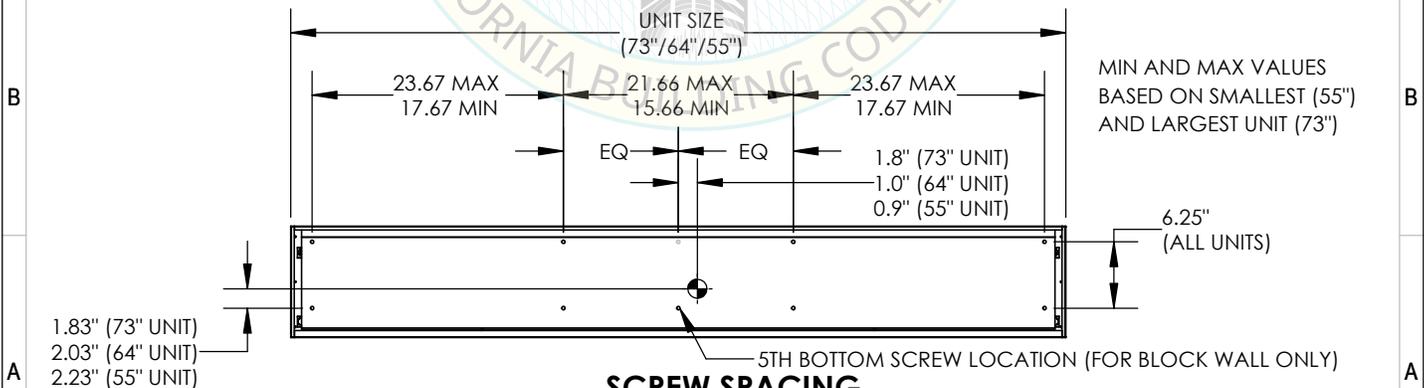
$V_u = 172$  lb/screw

Bot Screws:  $T_u = 147$  lb/screw

$V_u = 172$  lb/screw

The mounting bracket is attached to block wall through 4 top and 5 bottom fasteners.

**SECTION AT BLOCK WALL  
(M400B)**



MIN AND MAX VALUES  
BASED ON SMALLEST (55")  
AND LARGEST UNIT (73")

**SCREW SPACING  
(M400B)**

MANUFACTURER: Smoke Guard		NAME	DATE
PRODUCT: M200 & M400 & M400B		DRWN BY J. WALIN	5/15/2019
REV:		ENG APPR.	
SIZE: A	SHEET 10 OF 10	CHKD BY SC	4/22/2020
		CUST. APPR.	

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DESIGNWORKS