



# MASON INDUSTRIES, Inc.

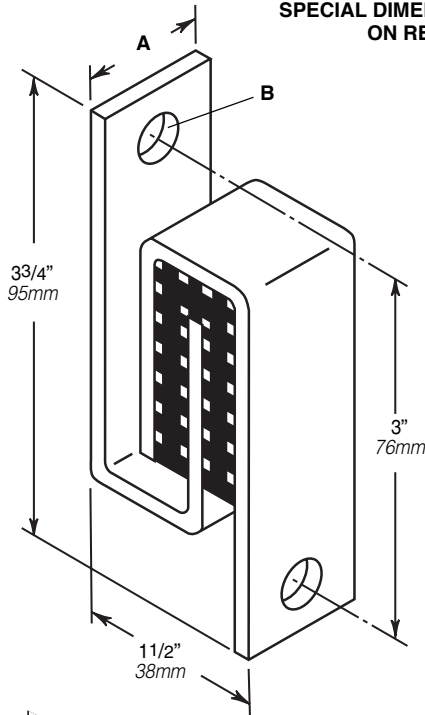
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**CERTIFIED FOR** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**CUSTOMER** \_\_\_\_\_  
**CUSTOMER P.O.** \_\_\_\_\_  
**MASON M.I.** \_\_\_\_\_ **DWG No.** \_\_\_\_\_

TYPE  
**WIC**  
 SWAY  
 BRACE

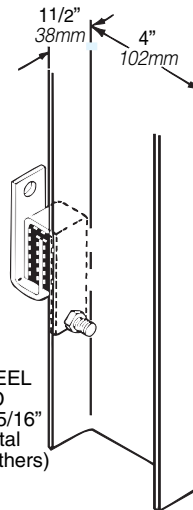
### SPECIAL DIMENSIONS ON REQUEST



### COMMON WALL WEIGHTS

Thickness (in)(mm)	Material	(lbs/ft <sup>2</sup> ) (kg/m <sup>2</sup> )	Thickness (in)(mm)	Material	(lbs/ft <sup>2</sup> ) (kg/m <sup>2</sup> )
4 102	Brick	35 175	4 102	Steel Studding Alone	1.5 7.5
8 203		75 365	2x4 51x102	Wood Studding Alone	2.0 10
12 305		115 560	1/2 13	Gypsum Board	2.1 10
4 102	Heavy Aggregate	35 175	5/8 16		2.7 13
6 152	Hollow	50 245	3/4 19		3.2 16
8 203	Concrete Block	58 285	1 25	Cement Plaster	10.0 50
12 305		90 440	1 25	Gypsum Plaster	5.0 25
4 102		Poured Concrete	48 235	-	Metal Lath
6 152	Masonry	72 350	-	Gypsum Lathing Board	2.0 10
8 203		96 470			
12 305		144 705			

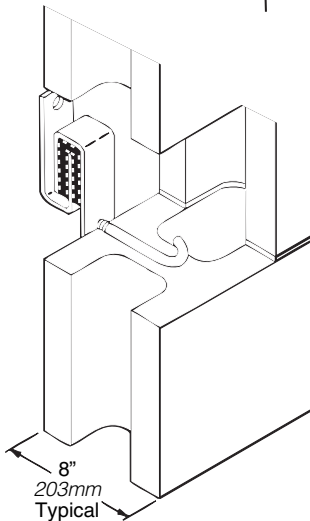
**MATERIAL:**  
 Standard 40 Durometer  
 5/16" (8mm) Neoprene Waffle Pad



STANDARD STEEL  
 STUDDING END  
 WIC Brace with 5/16"  
 8mm Bolt for Metal  
 Studs (Bolt by Others)

### TYPE WIC DIMENSIONS (in mm)

Type & Size	A	B Hole Diameter
WIC-1	1 25	3/8 10
WIC-2	2 51	3/8 10



STANDARD  
 CONCRETE  
 BLOCK END  
 WIC Brace with 5/16"  
 8mm Diameter Rod  
 with 2" 51mm I.D.  
 Hooked End for  
 Masonry Walls  
 (Hook by Others)

### TYPE WIC LOAD RATINGS

Type & Size	Rated Horizontal Restraint & Deflection if Stressed		Maximum Assigned Wall Weight (lb)(kg)	Minimum Assigned Weight to Establish 15Hz (lb)(kg)
	Load (lb)(kg)	Defl (in)(mm)		
WIC-1	90 41	0.05 1.3	250 113	50 23
WIC-2	260 118	0.05 1.3	500 227	100 45

- Sway braces prevent buckling or overturning of tall or long walls.
- Buckling forces are extremely small when braces are reasonably spaced both horizontally and vertically as the brace spacing maintains a very low l/r column ratio.
- Our general recommendation is spacing on four foot centers both horizontally and vertically.
- The maximum axial restraint rating is approximately 33% of the maximum assigned wall weight and extremely conservative.
- Vertical resistance information is provided for checking embedment requirements in walls and shear or pullout forces on both ends of the sway braces. Sway braces are not to be used for vertical supports.

- Response frequency is a function of the attached mass and the dynamic stiffness in the direction of vibration. The 15 Hz response is normally lower and more desirable than what is usually specified. Heavier weight assignments than the specified minimum will lower the response frequency by the square root of the ratio of the minimum weight to the assigned value multiplied by 15 Hz. Lighter loads will increase the frequency by the same proportion.

EXAMPLE: Steel stud wall with 2 layers of 3/4 inch gypsum board weighing 7.9 lbs. per sq/ft. Sway braces on 4 foot centers both ways.

Assigned Weight = 16 x 7.9 = 126 lbs.

WIC-1 Selection (Maximum 250 lbs)

Frequency = 15Hz x  $\sqrt{126/250}$  = 10.65 Hz

DWN \_\_\_\_\_ CHKD \_\_\_\_\_ DATE \_\_\_\_\_

DWG No. \_\_\_\_\_