

## Fig. 772

## Adjustable Steel Beam Attachment

**Size Range:** Beam Widths: 4" through 15"  
 Flange Thickness: 1/2" through 1 1/4"  
 Minimum Flange Thickness: 3/8" (FM), 1/2" (UL)  
 Type A: Flange Thickness Range: 1/2" - 3/4"  
 Type B: Flange Thickness Range: 7/8" - 1 1/4"

**Material:** Carbon steel

**Finish:**  Plain or  Zinc Plated

**Service:** Used to rigidly brace piping systems subjected to sway and seismic disturbances.

Structural attachment component of Anvil's 700 series sway brace assembly. For attachment to the bottom flange of structural steel beams. Can be utilized as a structural connection for either a lateral brace or a longitudinal brace.

**Approvals:** UL and ULC Listed (UL 203A:2009), and FM Approved (FM 1950:2010). Complies with seismic bracing requirements of NFPA-13. Office of Statewide Health Planning and Development (OSHPD) State of California approved.

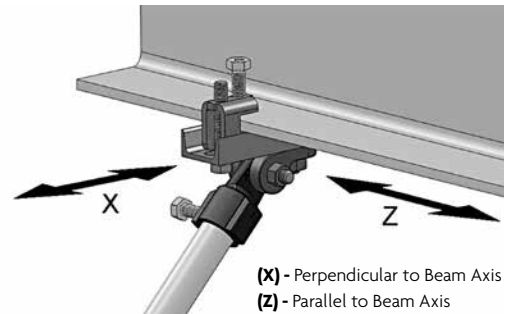
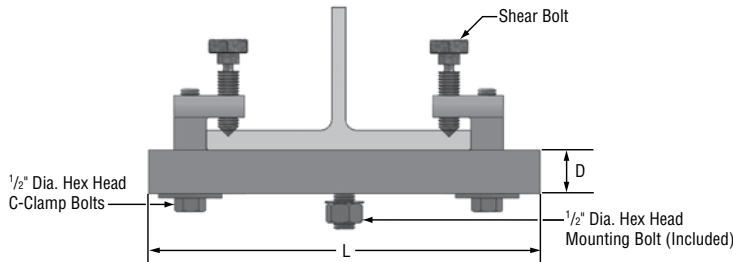
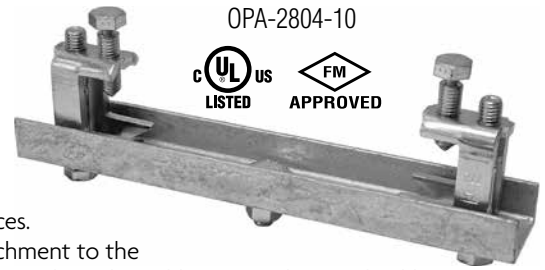
**Features:**

- Permits secure quick connection to a structural steel beam where drilling and/or welding of a brace connection is not allowed or is not easily accomplished.
- Adjustable sizes to insure a proper fit for a wide range of beam widths and flange thicknesses.
- Steel beam attachment is designed for concentric loadings of seismic connections and fasteners.
- Functions as a lateral or longitudinal structural connection of a sway brace assembly

**Installation Instructions:**

1. Place Figure 772 on structural beam by loosening 1/2" hex bolts to correctly position C-clamp bodies.
2. C-clamp bodies should fully bottom out on the flange of beam.
3. Tighten 1/2" shear bolt until the head shears off. The use of an impact wrench is not recommended.
4. Tighten 1/2" hex head bolt into C-clamp bodies until lock washers bottom out on C-channel and the required torque of 55 Ft-Lbs is achieved.
5. Attach 700 Series Anvil Brace Fittings to the center bolt and adjust orientation as needed for proper brace angle.

**Ordering:** Specify figure number, type, L channel Dim. (length), name and finish.



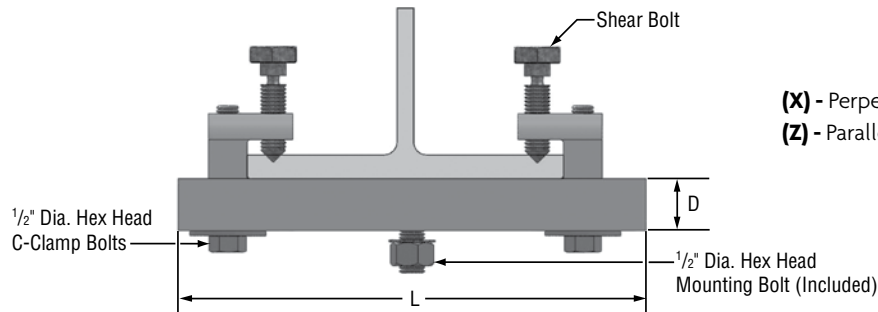
**FIG. 772 UL MAX LOADS: LOADS (LBS) • WEIGHT (LBS) • DIMENSIONS (IN)**

Type	Length (L)	Beam Flange		Perpendicular to Beam	Parallel to Beam	D	Weight
		Width Range	Thickness Range				
A	9	4 - 7	1/2" - 3/4"	1600	1000	1	3.15
	12	7 - 10					3.74
	14	9 - 12					4.19
B	9	4 - 7	7/8" - 1 1/4"	1000	1000	1	3.15
	12	7 - 10					3.90
	14	9 - 12					4.35
	17	12 - 14					4.90

PROJECT INFORMATION		APPROVAL STAMP	
Project:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			

## Fig. 772

## Adjustable Steel Beam Attachment (cont.)



(X) - Perpendicular to Beam Axis  
(Z) - Parallel to Beam Axis

FIG. 772 FM MAX LOADS*								
LOADS (LBS) • WEIGHT (LBS) • DIMENSIONS (IN) • ANGLES (DEGREES)								
Type	Length (L)	Beam Flange		Brace Angle**	X Lateral	Z Longitudinal	D	Weight
		Width Range	Thickness Range					
<b>30° - 44° BRACE ANGLE</b>								
A	9	4 - 7	3/8 - 3/4	30° - 44°	540	470	1	3.15
	12	7 - 10						3.74
	14	9 - 12						4.19
	17	12 - 15						4.74
B	12	7 - 10	7/8 - 1 1/4	30° - 44°	470	330	1	3.90
	14	9 - 12						4.35
	17	12 - 15						4.90
<b>45° - 59° BRACE ANGLE</b>								
A	9	4 - 7	3/8 - 3/4	45° - 59°	710	480	1	3.15
	12	7 - 10						3.74
	14	9 - 12						4.19
	17	12 - 15						4.74
B	12	7 - 10	7/8 - 1 1/4	45° - 59°	740	640	1	3.90
	14	9 - 12						4.35
	17	12 - 15						4.90
<b>60° - 74° BRACE ANGLE</b>								
A	9	4 - 7	3/8 - 3/4	60° - 74°	880	580	1	3.15
	12	7 - 10						3.74
	14	9 - 12						4.19
	17	12 - 15						4.74
B	12	7 - 10	7/8 - 1 1/4	60° - 74°	910	790	1	3.90
	14	9 - 12						4.35
	17	12 - 15						4.90
<b>75° - 90° BRACE ANGLE</b>								
A	9	4 - 7	3/8 - 3/4	75° - 90°	980	640	1	3.15
	12	7 - 10						3.74
	14	9 - 12						4.19
	17	12 - 15						4.74
B	12	7 - 10	7/8 - 1 1/4	75° - 90°	1000	880	1	3.90
	14	9 - 12						4.35
	17	12 - 15						4.90

\* The allowable FM approved capacity of brace subassemblies have been determined by resolving the load rating to the horizontal direction and dividing by a safety factor of 1.5 to allow the values to be used directly for Allowable Stress Design. For Load Resistance Factor Design (LRFD) capacities, the above values will need to be multiplied by 1.5.

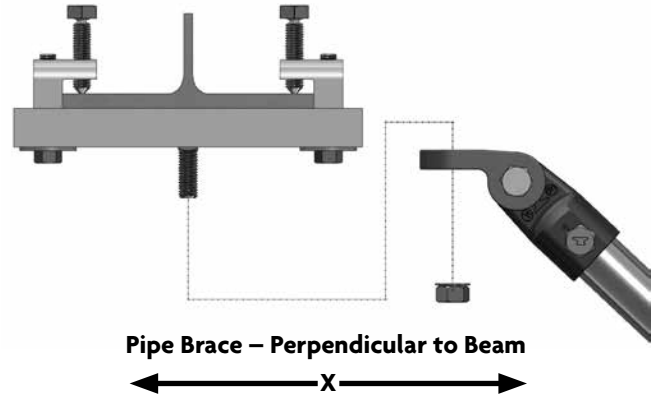
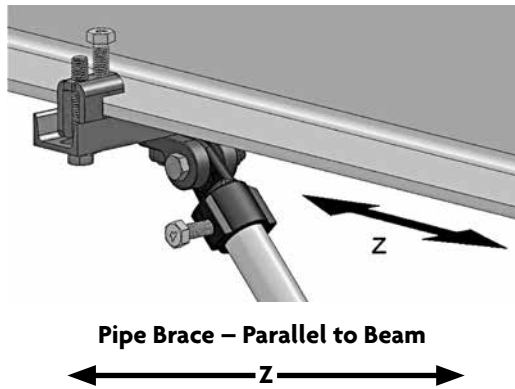
\*\* Brace Pipe Angles are determined from vertical.

For more detailed information on Anvil's Seismic Sway Brace for Fire Sprinkler Systems, see the OSHPD Manual in the Catalog Section of the Anvil Website, [www.anvilintl.com/literature/catalogs.aspx](http://www.anvilintl.com/literature/catalogs.aspx)

Seis Brace® Seismic Fire Protection Design Tool may be accessed at [www.seisbrace.com](http://www.seisbrace.com)

## Fig. 772

## Adjustable Steel Beam Attachment (cont.)



### FIG. 772 SIZE CHART: DIMENSIONS (IN)

Type	A (1/2" - 3/4" Flange Thickness)				B (7/8" - 1 1/4" Flange Thickness)		
Channel Length (L)	9"	12"	14"	17"	12"	14"	17"
Beam Width Range	4"-7"	7"-10"	9"-12"	12"-15"	7"-10"	9"-12"	12"-15"
Beam Size	W4x13	W8x35	W10x49	W12x65	W8x67	W10x77	W12x96
	W5x16	W8x40	W10x54	W12x72	W21x93	W10x88	W12x106
	W6x16	W8x48	W10x60	W12x79	W24x94	W10x100	W12x120
	W6x20	W10x39	W10x68	W14x90		W10x112	W12x136
	W8x21	W10x45	W12x58	W14x99		W14x82	W14x109
	W8x24	W10x49	W12x65	W24x104		W16x89	W14x120
	W10x22	W12x40	W14x61			W16x100	W14x132
	W10x30	W12x45	W14x68			W18x97	W21x111
	W12x26	W12x50	W16x67			W18x106	W21x122
	W12x35	W12x53	W16x77			W18x119	W21x132
	W14x30	W12x58	W18x76			W24x94	W21x147
	W14x38	W14x43	W18x86			W27x94	W24x117
	W16x26	W14x48	W24x84			W27x114	W24x131
	W16x40	W14x53	W27x84				W24x146
	W18x40	W14x61	W27x102				W24x162
	W18x46	W14x68					W27x146
	W21x50	W16x45					W27x161
	W21x57	W16x50					W27x178
		W16x57					
		W18x50					
		W18x55					
		W18x60					
		W18x65					
		W21x62					
		W21x68					
		W21x73					
		W24x68					
		W24x76					
	W27x84						
	W27x94						

#### Notes:

- For fire protection installations - sway braces are intended to be installed in accordance with NFPA-13 and Anvil's installations instructions and local codes.
- The required type, number and size of fasteners used for the structural attachment fitting shall be in accordance with NFPA-13.
- To assure proper performance, installer is responsible for:
  - Structural integrity of attachment member to safely handle load requirements.
  - Securely tightening the component on the brace pipe.
- Anvil International® brand bracing components are designed to be compatible ONLY with other Anvil International® brand bracing components, resulting in a Listed seismic bracing assembly.
- Updated UL listing information may be viewed at [www.ul.com](http://www.ul.com) and FM approvals may be viewed at [www.fmglobal.com](http://www.fmglobal.com).

**Disclaimer:** Anvil International ("Anvil") does not provide any warranties and specifically disclaims any liability whatsoever with respect to Anvil bracing products and components that are used in combination with products, parts or systems not manufactured or sold by Anvil. In no event shall Anvil be liable for any incidental, direct, consequential, special or indirect damages or lost profits where non-Anvil bracing components have been, or are used.