SWAY BRACE - SEISMIC



Fig. 775

Lateral / Longitudinal Brace Clamp

Size Range: Service Pipe: 2¹/₂" through 8" Sch. 10 and Sch. 40 IPS Service Pipe: 2¹/₂" through 6" Flow Pipe Brace Pipe: 1" or 1¹/₄" Sch. 40 IPS

Material: Carbon steel clamp, ductile iron brace connector **Finish:** Plain or **D** Galvanized

Service: Used to rigidly brace piping systems subjected to sway and seismic disturbances. Pipe clamp component of Anvil's 700 series sway brace assembly. Can be utilized as either a lateral brace clamp or a longitudinal brace clamp. 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:

- No threading of bracing pipe
- Functions as a lateral or longitudinal brace clamp

Installation Instructions:

- 1. Installation of the pipe must be at a minimum 6" away from a pipe joint.
- 2. Position pipe clamp at desired location and loosely tighten the clamp hex bolts. Ensure that the spacer and brace pipe connector are positioned between the pipe clamp ears.
- 3. Place the Schedule 40 brace pipe into the brace pipe connector until it bottoms out.
- 4. Tighten shear bolt until the head shears off. Then position the brace pipe to the appropriate angle. The use of an impact wrench is not recommended.
- Tighten the pipe clamp hex bolts equally and alternately until metal-to-metal contact is achieved with the following torque values. Clamp Bolt Minimum Torque Values : 2¹/₂" thru 3" Dia. Clamps (80 Ft-Lbs) , 4" & 5" Dia. Clamps (100 Ft-Lbs), 6" Dia. Clamp (120 Ft-Lbs), 8" Dia. Clamp (140 Ft-Lbs),
- 6. Note: For 6" and 8" service pipe, a thread lubricant such as Gruvlok® Xtreme™ Lubricant should be used to ease assembly of pipe clamp hex bolts and nuts.

Ordering: Specify service pipe diameter x brace pipe diameter, figure number, name and finish.





Lateral Brace Orientation (Brace Pipe Perpendicular to Service Pipe Axis)

Longitudinal Brace Orientation (Brace Pipe Parallel to Service Pipe Axis)

PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	



Seismic-10.13

SWAY BRACE - SEISMIC



Fig. 775

Lateral / Longitudinal Brace Clamp (cont.)



FIG. 775: WEIGHT (LBS) • DIMENSIONS (IN)								
Service Pipe Size	В	L	J		Y	Weight		
			Brace Pipe		Brace Pipe	Brace Pipe		
			1"	1 ¹ /4"	1" & 1 ¹ /4"	1"	1 ¹ /4	
2 ¹ / ₂	2 ³ /8	6	2.85			2.19	2.54	
3	2 ³ /4	6 ³ /4		2.85 2.98		2.36	2.71	
4	3 ¹ / ₂	8 ¹ / ₂			2 00	1 20	2.62	2.97
5	4	9 ¹ / ₂			1.30	3.74	4.09	
6	4 ⁷ /8	11 ¹ /2				6.32	6.67	
8	6	13 ³ /4					7.42	7.77

FIG. 775 UL MAX LOAD: LOADS (LBS) • DIMENSIONS (IN)				
Service Pipe Size (1" or 1 ¹ /4" Brace Pipe)	UL Max Load* Sch. 10/Sch. 40			
2 ¹ / ₂ 3 4	1000			
5 6	- 1600			
8	2015			

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.
- 2. 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:

 a. Structural integrity of attachment member to safely handle load requirements.

b. Securely tightening the component on the brace pipe.

- 4. 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.
- 5. Updated UL listing information may be viewed at <u>www.ul.com</u> and FM approvals may be viewed at <u>www.fmgobal.com</u>

LOADS (LDS) • DIM	ENSIONS	(IIII) · AINGLE	S (DEGREES)	
Service Pine Size	Brace	FM Max Load**		
(1" or 1 ¹ / ₄ " Brace Pipe)	Angle***	Sch. 10 Sch. 40	Flow Pipe	
	30-44	1300	1500	
01/	45-59	2100	2200	
2.12	60-74	2300	1600	
	75-90	2600	1800	
	30-44	1300	1500	
2	45-59	2100	2200	
3	60-74	2300	1600	
	75-90	2600	1800	
4	30-44	1200	1500	
	45-59	1800	1000	
	60-74	1600	900	
Γ	75-90	1800	1000	
	30-44	1300	1500	
5	45-59	2100	2200	
	60-74	2300	1600	
	75-90	2600	1800	
6	30-44	1500	1500	
	45-59	2100	2200	
	60-74	2500	900	
	75-90	2800	1000	
	30-44	1500	_	
o [45-59	2200	_	
8	60-74	2700	_	
	75-90	3100	_	

FIG. 775 FM MAX LOAD:

DIMENSIONS (INI) - ANCLES (DECREES

* See FM Approval guide for approved flow pipe.

** 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.

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.

Go to <u>www.anvilintl.com/OPA</u> for State of California Office of Statewide Health Planning and Development (OSHPD) for design information relating to OSHPD projects.

Seis Brace® Seismic Fire Protection Design Tool may be accessed at <u>www.seisbrace.com</u>