

Fig. 770

Q Brace Clamp

Size Range: Service Pipe: 1" through 6" Sch. 10 and Sch. 40 IPS UL and FM Approved
 Service Pipe: 1" through 6" Flow Pipe FM Approved
 Brace Pipe: 1" or 1 1/4" Sch. 40 IPS

Material: Carbon steel

Finish: Brace Rod Plain or Galvanized, Channel bracket EG

Service: Used to rigidly brace piping systems subjected to sway and seismic disturbances. Pipe clamp component of Anvil's 700 series sway brace assembly. Primarily a lateral brace clamp and applicable as a riser/four way 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:

- Used to brace schedules 10 IPS, 40 IPS (UL and FM), and Sch. 7 IPS flow pipe (FM).
- Field adjustable design requires no threading of bracing pipe
- Can be used as a component of a four-way brace support
- Functions as a lateral brace application

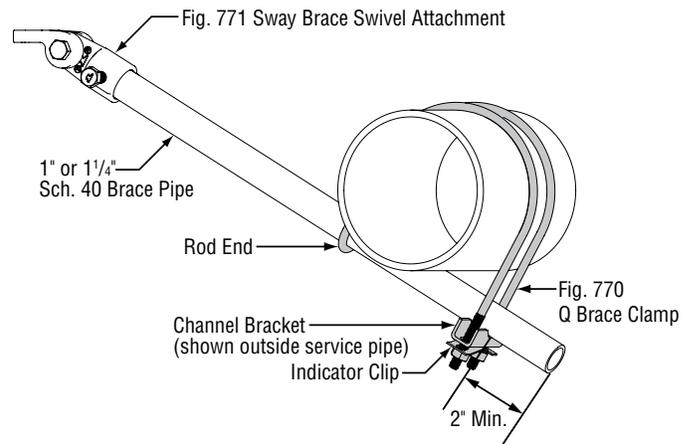
Installation Instructions:

1. Minimum brace pipe extension 2" beyond channel bracket or brace clamp rod end. Note: 6" sizes are supplied with retaining plate that assembles between sprinkler system pipe and brace pipe. Not required for FM applications.
2. The brace clamp channel bracket can be installed inside or outside the service pipe at the end of the brace pipe.
3. The Q brace clamp must be a minimum of 6" away from a pipe joint in order to not weaken the pipe joint.
4. Riser/4-way brace - The Q brace clamps must be installed within 6" of each other.
5. Adjust brace angle as necessary.
6. Tighten hex nuts until spring indicating clip is completely flattened and the required torque of 14 Ft-Lbs is achieved. For sizes 2" - 3", 4" x 1", 5" x 1", and 6" continue tightening to a torque of 16 Ft-Lbs.

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

Notes:

1. 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.
3. 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 www.ul.com and FM approvals may be viewed at www.fmgobal.com

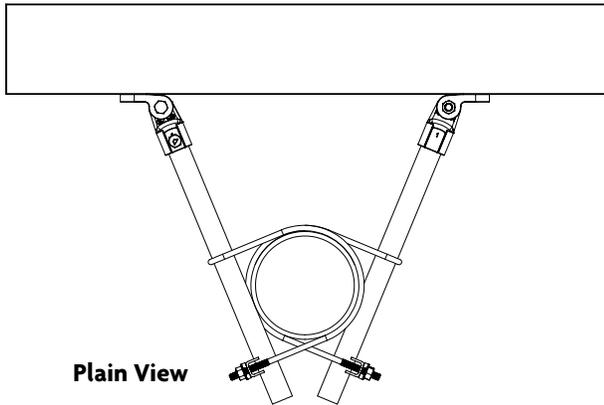


**Typical Assembly
 (Brace Pipe Below Service Pipe)**

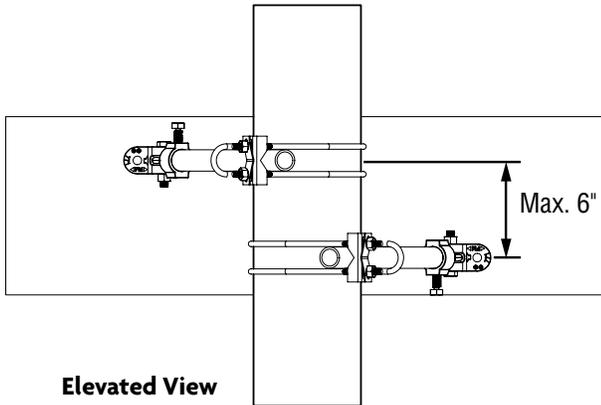
PROJECT INFORMATION		APPROVAL STAMP	
Project:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			

Fig. 770

Q Brace Clamp (cont.)



Plain View



Elevated View

Riser/4-Way Brace Assembly

**FIG. 770 FM MAX LOAD:
LOADS (LBS) • DIMENSIONS (IN) • ANGLES (DEGREES)**

Service Pipe Size (1" or 1 1/4" Brace Pipe)	Brace Angle***	FM Max Load** (Horizontal)	
		Sch. 10 Sch. 40	Flow Pipe
1	30-44	1110	250
	45-59	1500	360
	60-74	1900	440
	75-90	2100	500
1 1/4	30-44	570	250
	45-59	810	360
	60-74	1000	440
	75-90	1100	500
1 1/2	30-44	570	250
	45-59	810	360
	60-74	1000	440
	75-90	1100	500
2	30-44	570	250
	45-59	810	360
	60-74	1000	440
	75-90	1100	500
2 1/2	30-44	570	250
	45-59	810	360
	60-74	1000	440
	75-90	1100	500
3	30-44	570	250
	45-59	810	360
	60-74	1000	440
	75-90	1100	500
4	30-44	760	410
	45-59	1070	590
	60-74	1320	720
	75-90	1470	800
5	30-44	760	410
	45-59	1070	590
	60-74	1320	720
	75-90	1470	800
6	30-44	770	450
	45-59	1090	630
	60-74	1340	780
	75-90	1490	870

**FIG. 770 UL MAX LOAD:
LOADS (LBS) • WEIGHT (LBS) • DIMENSIONS (IN)**

Service Pipe Size	UL Max Load	Weight	
	Sch. 10 Sch. 40	1" Brace Pipe	1 1/4" Brace Pipe
1 (A, B)	1000	.82	.87
1 1/4 (B)		.86	.90
1 1/2 (B)		.90	.95
2 (B)		.96	1.00
2 1/2		1.02	1.06
3		1.09	1.13
4	1600	1.23	1.26
5		1.32	Not Listed
6		1.49	1.53

A - Schedule 40 only.
B - UL Listed as a restraint and sway brace.

* 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.

FIG. 770: TORQUE VALUE (FT-LBS)

Service Pipe Size	Torque Value
1 thru 1 1/2, 4 x 1 1/4, 5 x 1 1/4	14
2 thru 3, 4 x 1, 5 x 1, 6	16

Go to www.anvilintl.com/OPA 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 www.seisbrace.com

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