

Seismic Bracing

TOLCO Fig. 1000 - "Fast Clamp" branch line restraint attachment (UL listed)

Size Range: Pipe size to be braced: 1" (25mm) thru 4" (100mm) 40 IPS.
 Pipe size used for bracing: 1" (25mm) and 1¼" (32mm) Schedule 40 IPS.
 For pipe sizes larger than 2" (50mm) please refer to TOLCO™ Fig. 1001.

Material: Steel

Function: A restraint device intended for lateral bracing.

Features: Field adjustable, making critical pre-engineering of bracing pipe unnecessary. Unique design requires no threading of bracing pipe. Steel leaf spring insert provided to assure installer and inspector necessary minimum torque has been achieved.

Installation: Fig. 1000 is the "braced pipe" attachment component of a lateral sway brace assembly. It is intended to be combined with the "bracing pipe" and TOLCO structural attachment component, Fig. 980, 910, 909 or other approved TOLCO component to form a complete bracing assembly. Follow NFPA 13 guidelines.

To Install: Place the Fig. 1000 over the pipe to be braced, insert bracing pipe through opening leaving a minimum of 1" extension. Brace pipe can be installed on top or bottom of pipe to be braced. Tighten hex nuts until leaf spring is flat. It is recommended that the brace angle be adjusted before hex nuts are fully tightened.

Approvals: Underwriters Laboratories Listed in the USA (**UL**) and Canada (**cUL**). Approved for use with engineered light wall sprinkler pipe up to 2" as a restraint device. Torque requirement is 6-8 ft./lbs. (8-10Nm). Included in our Seismic Engineering Guidelines approved by the State of California Office of Statewide Health Planning and Development (**OSHPD**). For additional load, spacing and placement information relating to OSHPD projects, please refer to our Seismic Engineering Guidelines, OPM-0052-13.

For FM Approval information refer to FM Approved page 69.

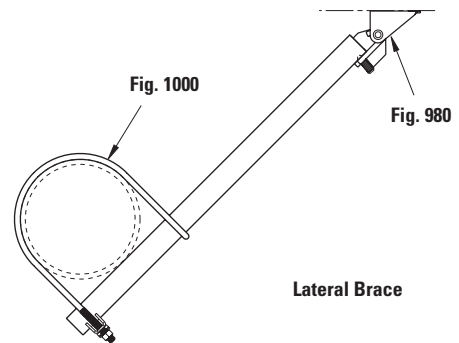
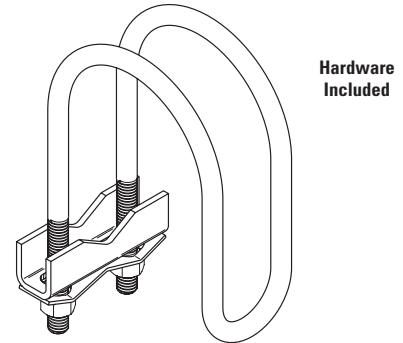
Application Note: Position Fast Clamp and tighten two hex nuts until leaf spring flattens. A minimum of 1" pipe extension beyond the Fig. 1000 is recommended.

Finish: Plain or Electro-Galvanized. Contact customer service for alternative finishes and materials.

Order By: Order by figure number, pipe size to be braced, followed by pipe size used for bracing (1" (25mm) or 1¼" (32mm)) , and finish.

Pipe Size in. (mm)	Part Number & Approx. Wt./100					
	1" (24mm) Brace Pipe		1¼" (32mm) Brace Pipe			
	Part No.	Lbs.	(kg)	Part No.	Lbs.	(kg)
1" (25)	1000-1 X 1	71.6	(32.5)	1000-1 X 1¼	75.8	(34.4)
1¼" (32)	1000-1¼ X 1	74.8	(33.9)	1000-1¼ X 1¼	79.1	(35.9)
1½" (40)	1000-1½ X 1	77.8	(35.3)	1000-1½ X 1¼	82.1	(37.2)
2" (50)	1000-2 X 1	84.1	(38.1)	1000-2 X 1¼	88.4	(40.1)

UL Listed Design Load
 1" (25mm) thru 2" (50mm) pipe size 650 Lbs. (2.89kN)



Eaton's B-Line series seismic bracing components are designed to be compatible only with other B-Line series bracing components, resulting in a listed seismic bracing assembly. Eaton B-Line Division warranty for seismic bracing components will be the warranty provided in Eaton B-Line Division standard terms and conditions of sale made available by Eaton, except that, in addition to the other exclusions from Eaton B-Line Division warranty, Eaton makes no warranty relating to B-Line series seismic bracing components that are combined with products not provided by Eaton.

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

TOLCO Fig. 1000 - "Fast Clamp" sway brace attachment (FM approved)

Size Range: Pipe size to be braced: 1" (25mm) thru 4" (100mm) 40 IPS.
 Pipe size used for bracing: 1" (25mm) and 1¼" (32mm) Schedule 40 IPS.
 For pipe sizes larger than 4" (100mm) please refer to TOLCO™ Fig. 1001.

Material: Steel

Function: For bracing pipe against sway and seismic disturbance.

Features: Field adjustable, making critical pre-engineering of bracing pipe unnecessary. Unique design requires no threading of bracing pipe. Steel leaf spring insert provided to assure installer and inspector necessary minimum torque has been achieved.

Installation: Fig. 1000 is the "braced pipe" attachment component of a lateral sway brace assembly. It is intended to be combined with the "bracing pipe" and TOLCO structural attachment component, Fig. 980 or other approved TOLCO seismic brace to form a complete bracing assembly. Follow NFPA 13 guidelines.

To Install: Place the Fig. 1000 over the pipe to be braced, insert bracing pipe through opening leaving a minimum of 1" extension. Brace pipe can be installed on top or bottom of pipe to be braced. Tighten hex nuts until leaf spring is flat. It is recommended that the brace angle be adjusted before hex nuts are fully tightened.

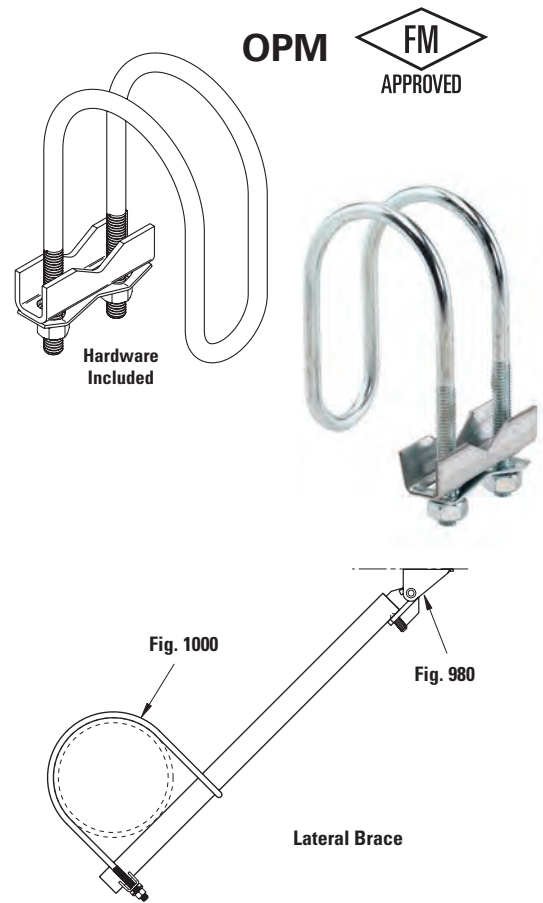
Approvals: Approved by Factory Mutual Engineering (FM). Included in our Seismic Engineering Guidelines approved by the State of California Office of Statewide Health Planning and Development (OSHPD). For additional load, spacing and placement information relating to OSHPD projects, please refer to our Seismic Engineering Guidelines, OPM-0052-13. For UL Listed information refer to UL Listed page 68.

Application Note: Position Fast Clamp and tighten two hex nuts until leaf spring flattens. A minimum of 1" pipe extension beyond the Fig. 1000 is recommended.

Finish: Plain or Electro-Galvanized. Contact customer service for alternative finishes and materials.

Order By: Order by figure number, pipe size to be braced, followed by pipe size used for bracing (1" (25mm) or 1¼" (32mm)), and finish.

Designed to meet or exceed requirements of FM DS 2-8.



Seismic Bracing

Pipe Size in. (mm)	Part Number & Approx. Wt./100				Design Load - Allowable Horizontal Capacity (lbf) Per Installation ^{1,2,3}			
	1" (24mm) Brace Pipe		1¼" (32mm) Brace Pipe		30°-44°	45°-59°	60°-74°	75°-90°
	Part No.	Lbs. (kg)	Part No.	Lbs. (kg)	Lbs. (kN)	Lbs. (kN)	Lbs. (kN)	Lbs. (kN)
1" (25)	1000-1 X 1	71.6 (32.5)	1000-1 X 1¼	75.8 (34.4)	200 (0.89)	280 (1.24)	340 (1.51)	380 (1.69)
1¼" (32)	1000-1¼ X 1	74.8 (33.9)	1000-1¼ X 1¼	79.1 (35.9)	200 (0.89)	280 (1.24)	340 (1.51)	380 (1.69)
1½" (40)	1000-1½ X 1	77.8 (35.3)	1000-1½ X 1¼	82.1 (37.2)	200 (0.89)	280 (1.24)	340 (1.51)	380 (1.69)
2" (50)	1000-2 X 1	84.1 (38.1)	1000-2 X 1¼	88.4 (40.1)	200 (0.89)	280 (1.24)	340 (1.51)	380 (1.69)
2½" (65)	1000-2½ X 1	90.2 (40.9)	1000-2½ X 1¼	94.6 (42.9)	200 (0.89)	280 (1.24)	340 (1.51)	380 (1.69)
3" (80)	1000-3 X 1	97.3 (44.1)	1000-3 X 1¼	101.7 (46.1)	230 (1.02)	320 (1.42)	400 (1.78)	450 (2.00)
3½" (90)	1000-3½ X 1	104.0 (47.2)	1000-3½ X 1¼	108.4 (49.2)	230 (1.02)	320 (1.42)	400 (1.78)	450 (2.00)
4" (100)	1000-4 X 1	110.3 (50.0)	1000-4 X 1¼	114.6 (52.0)	230 (1.02)	320 (1.42)	400 (1.78)	450 (2.00)

¹ FM Approved when used with 1, 1¼, 1½, or 2 inch NPS Schedule 40 GB/T 3091, EN 10255H, or JIS G3451 steel pipe as the brace member.

² Load rating for LW above refers to FM Approved Lightwall Pipe commonly referred to as "Schedule 7". These ratings may also be applied when EN 10220 and GB/T 8163 steel pipe.

³ Load rating for Schedule 10 above may be applied to GB/T 3092, EN 10255M and H, or JIS G3454, FM Approved Thinwall, or Schedule 40 steel pipes.

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All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.