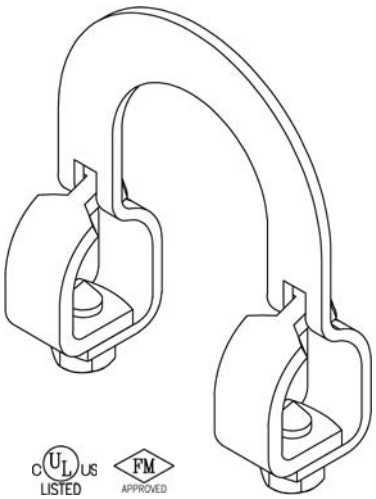
FIG. 015 LARGE SWAY BRACE PIPE ATTACHMENT



Function: Designed for bracing pipe against sway and seismic disturbance. The pipe attachment component of a sway brace system used in conjunction with a PHD Manufacturing structural attachment fitting, and joined together with a bracing pipe element forms a complete sway brace assembly. Sway brace assemblies are intended to be installed in accordance with NFPA 13 and the manufacturer's installation instructions.

Size: Pipe size $2^1/_2$" thru 8".

Material: Carbon steel

Finish: Electro-galvanized

Install: Place over the pipe to be braced, adjust brace angle, and insert bracing pipe through opening leaving a minimum of 1" extending from attachment. Brace pipe can be installed on top or bottom of pipe to be braced but must be a minimum of 6" away from a pipe joint. Tighten two hex head cone point set bolts until heads bottom out on attachment, ensuring proper torque has been applied.

Approvals: Underwriters Laboratories listed for US and Canada ($2^1/_2$" thru 6" only) and Factory Mutual approved. Listed for use with NFPA and PHD sway brace components only.

Ordering: Specify figure number, brace pipe size, and sprinkler pipe size.

NOTE: (This product is not compatible with metric pipe.) For metric piping see Fig. 010, Fig. 031, or Fig. 040.

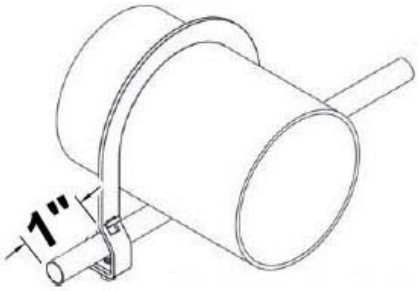
FM Maximum Design Load Brace: 1" Thru 2" SCH40 Pipe							
Pipe Size SCH 10, 40 & Flow Pipe	Brace Angle From Vertical (Degrees)	lbs.	kN	Wt. Each			
				1" Brace Pipe		1¼" Brace Pipe	
				lbs.	kg	lbs.	kg
$2^1/_2$	30°-44°	1020	(4.53)	1.31	(0.59)	1.49	(0.68)
	45°-59°	1440	(6.40)	1.31	(0.59)	1.49	(0.68)
	60°-74°	1770	(7.87)	1.31	(0.59)	1.49	(0.68)
	75°-90°	1970	(8.76)	1.31	(0.59)	1.49	(0.68)
3	30°-44°	1080	(4.80)	1.40	(0.64)	1.57	(0.71)
	45°-59°	1530	(6.80)	1.40	(0.64)	1.57	(0.71)
	60°-74°	1870	(8.31)	1.40	(0.64)	1.57	(0.71)
	75°-90°	2090	(9.29)	1.40	(0.64)	1.57	(0.71)
4	30°-44°	1020	(4.53)	1.53	(0.69)	1.70	(0.77)
	45°-59°	1450	(6.44)	1.53	(0.69)	1.70	(0.77)
	60°-74°	1770	(7.87)	1.53	(0.69)	1.70	(0.77)
	75°-90°	1980	(8.80)	1.53	(0.69)	1.70	(0.77)
6	30°-44°	640	(2.84)	1.81	(0.82)	1.98	(0.90)
	45°-59°	900	(4.00)	1.81	(0.82)	1.98	(0.90)
	60°-74°	1110	(4.93)	1.81	(0.82)	1.98	(0.90)
	75°-90°	1240	(5.51)	1.81	(0.82)	1.98	(0.90)
8	30°-44°	570	(2.53)	2.07	(0.94)	2.24	(1.02)
	45°-59°	810	(3.60)	2.07	(0.94)	2.24	(1.02)
	60°-74°	990	(4.40)	2.07	(0.94)	2.24	(1.02)
	75°-90°	1100	(4.89)	2.07	(0.94)	2.24	(1.02)

UL Maximum Design Load		
Pipe Size SCH 10 & 40	lbs.	kN
$2^1/_2$	1000	(4.45)
3	1000	(4.45)
4	1000	(4.45)
6	1600	(7.12)

PHD Manufacturing, Inc.
44018 Columbiana-Waterford Road
Columbiana, Ohio 44408-9481
Phone: 800-321-2736 • 330-482-9256
Fax: 330-482-2763
Web: www.phd-mfg.com

FIG. 015 LARGE SWAY BRACE PIPE ATTACHMENT

Pipe Braced: 2 1/2", 3", 4", 6", 8"
Bracing: 1" Or 1 1/4" SCH40 steel pipe
Function: Designed for bracing pipe against sway and seismic disturbance. The pipe attachment component of a sway brace system used in conjunction with a PHD Manufacturing structural attachment fitting, and joined together with a bracing pipe element forms a complete sway brace assembly. Sway brace assemblies are intended to be installed in accordance with NFPA 13 and the manufacturer's installation instructions.
Approvals: Underwriters Laboratories listed for US and Canada; Sizes 2 1/2" through 6"
Factory Mutual approved; Sizes 2 1/2" through 8"
Listed for use with NFPA and PHD sway brace components only
Material: Low Carbon Steel
Installation: Place over the pipe to be braced, adjust brace angle, and insert bracing pipe through opening leaving a minimum of 1" extending from attachment. Brace pipe can be installed on top or bottom of pipe to be braced but must be a minimum of 6" away from a pipe joint. Tighten two hex head cone point set bolts until heads bottom out on attachment, ensuring proper torque has been applied.
(This product is not compatible with metric pipe.)



UL Maximum Design Loads				
Pipe Size	Pipe Schedule	Brace Size	Brace Schedule	lbs.
2 1/2	10 & 40	1 & 1 1/4	40	1000
3	10 & 40	1 & 1 1/4	40	1000
4	10 & 40	1 & 1 1/4	40	1000
6	10 & 40	1 & 1 1/4	40	1600

FM Approved Loads							
			Allowable Horizontal Capacity Per Installation Angle (lbs.)				
			Brace Angle From Vertical				
Orientation	Pipe Size	Pipe Schedule	30°-44°	45°-59°	60°-74°	75°-90°	Brace Member
Lateral	2 1/2	LW, 10, 40	1020	1440	1770	1970	1" or 1 1/4" Schedule 40 Pipe
Lateral	3	LW, 10, 40	1080	1530	1870	2090	1" or 1 1/4" Schedule 40 Pipe
Lateral	4	LW, 10, 40	1020	1450	1770	1980	1" or 1 1/4" Schedule 40 Pipe
Lateral	6	LW, 10, 40	640	900	1110	1240	1" or 1 1/4" Schedule 40 Pipe
Lateral	8	LW, 10, 40	570	810	990	1100	1" or 1 1/4" Schedule 40 Pipe

NOTE: LW above refers to FM Approved Lightwall pipe, commonly referred to as Schedule 7.