



Sway Brace Fittings



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".
Pipe size used for bracing 1" or 1-1/4" Schedule 40 IP.

FINISH: Electro-galvanized

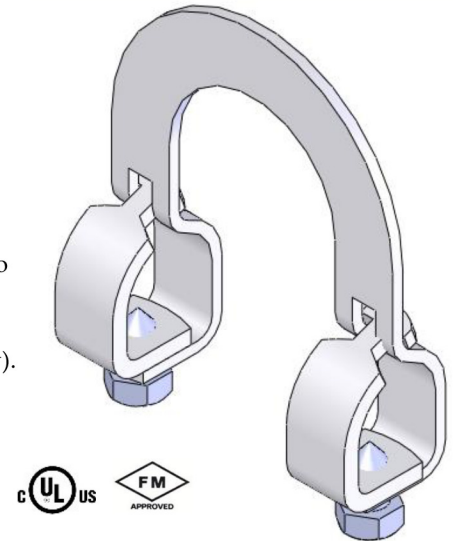
MATERIAL: Low Carbon Steel

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). Factory Mutual approved.

ORDERING: Listed for use with NFPA and PHD sway brace components only
Specify figure number, brace pipe size, and sprinkler pipe size
(This product is not compatible with metric pipe.)
For metric piping see Fig. 010, Fig. 031, or Fig. 040.

Fig. 015
LARGE SWAY BRACE
PIPE ATTACHMENT



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

| 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) |

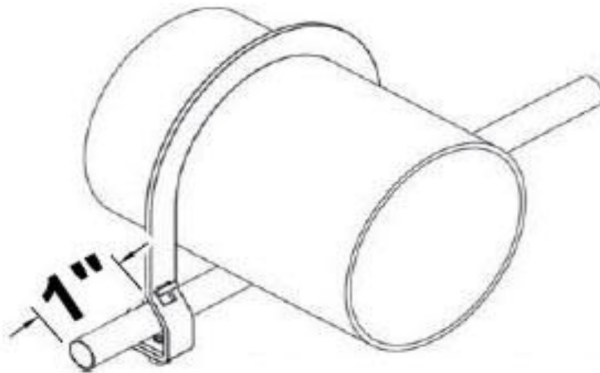




PHD Manufacturing, Inc.
 44018 Columbiana-Waterford Road
 Columbiana, Ohio 44408-9481
 Phone: 800-321-2736 • 330-482-9256
 Fax: 330-482-2763
 Web: www.phd-mfg.com

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 | | | | | | | |
|-------------------|-----------|---------------|---|---------|---------|---------|-------------------------------|
| Orientation | Pipe Size | Pipe Schedule | Allowable Horizontal Capacity Per Installation Angle (lbs.) | | | | Brace Member |
| | | | Brace Angle From Vertical | | | | |
| | | | 30°-44° | 45°-59° | 60°-74° | 75°-90° | |
| 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.