

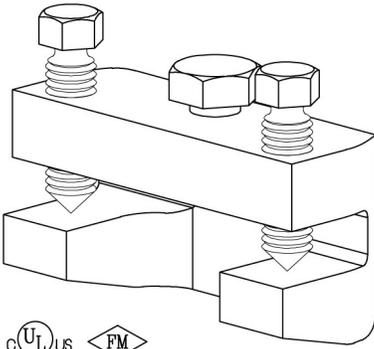


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# SEISMIC BRACING

**FIG. 035**

## SWAY BRACE BAR JOIST ADAPTER



**Function:**

Sway brace adapter used to attach a PHD Manufacturing sway brace assembly to a steel bar joist or structural member of  $\frac{3}{8}$ " maximum thickness. To provide a point of connection when drilling or welding is not allowed or not practical. Sway brace assemblies are intended to be installed in accordance with NFPA 13 and the manufacturer's installation instructions.

**Size:**

Braces up to 8" Pipe MAX. Attaches to  $\frac{3}{8}$ " thick MAX structural members. When attaching to a structure thicker than  $\frac{3}{8}$ ", please see PHD Manufacturing Fig. 045.

**Material:**

Ductile iron

**Finish:**

Electro-galvanized

**Install:**

Place on structural member with the flange contacting the back of the jaw. Tighten set screws finger tight, then evenly tighten until hex heads break off. Attach PHD structural attachment to Fig. 035 with the supplied attachment bolt, ensuring that the attachment bolt head bottoms out securely. Please note that the maximum load will be limited by the PHD Manufacturing structural attachment utilized with this adapter.

**Approvals:** Underwriters Laboratories listed for US and Canada and Factory Mutual approved. Listed for use with NFPA fastener tables and PHD sway brace components only.

**Ordering:** Specify figure number.

**UL Maximum Design Load**

Pipe Size	lbs.	kN	Wt. Each	
			lbs.	kg
8" MAX (200)	1370	(6.09)	2.38	(1.08)

UL's current Listings, shown above, are predicated on installation in accordance with the latest edition of NFPA 13. The 2016 and earlier editions of NFPA 13 referenced a minimum safety of 1.5 for the load rating as compared to 2.2 for the current edition.

The load ratings noted in table below, Previously Listed Loads, are consistent with the historical cULus Listings that were evaluated to the requirements of UL 203A, Outline of Investigation for Sway Brace Devices for Fire Sprinkler System Piping, based upon a minimum safety factor of 1.5 in accordance with the earlier editions of NFPA 13. The load ratings based upon the 2016 or earlier editions of NFPA 13 should only be used where approved by the Authority Having Jurisdiction (AHJ).

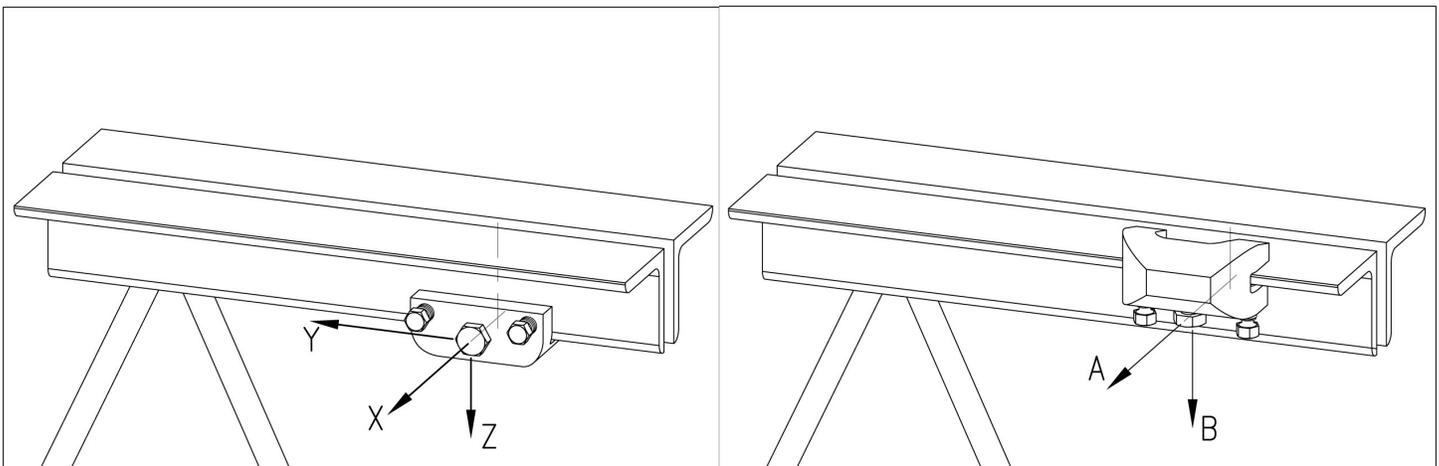
**Previously Listed UL Loads**

Pipe Size	lbs.	kN	Wt. Each	
			lbs.	kg
8" MAX (200)	*2015	*(8.96)	2.38	(1.08)

\*Load ratings are based on a minimum safety factor of 1.5 in accordance with NFPA 13-2016 Section A.9.3.5.2.3.

FM Maximum Design Load							
Beam Flange Thickness	Brace Angle From Vertical (Degrees)	X-Z		Y-Z		A-B	
		lbs.	kN	lbs.	kN	lbs.	kN
$\frac{3}{8}$ " Max	30°-44°	1040	(4.62)	970	(4.31)	1150	(5.11)
	45°-59°	1490	(6.62)	1370	(6.09)	1660	(7.38)
	60°-74°	1800	(8.00)	2060	(9.16)	1990	(8.85)
	75°-90°	2010	(8.94)	2300	(10.23)	2220	(9.87)

When governed by NFPA13 2019 or later, multiply FM approved loads by 0.682.



Unless otherwise specified, all dimensions on drawings and in charts are in inches and dimensions shown in parentheses are in millimeters.

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PIPE GUIDES & SLIDES  
WALL BRACKETS  
PIPE SUPPORTS  
STRUCTURAL ATTACHMENTS  
SEISMIC BRACING



**PHD Manufacturing, Inc.**

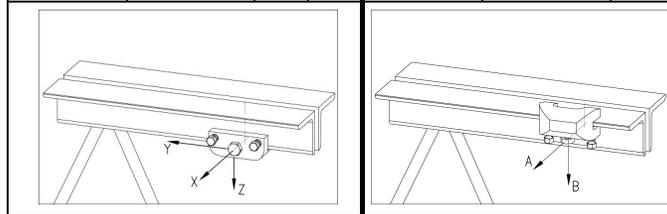
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**FIG. 035 SWAY BRACE BAR JOIST ADAPTER**

- Pipe Braced:** 8" Pipe MAX
- Function:** Sway brace adapter used to attach a PHD Manufacturing sway brace assembly to a steel bar joist or structural member of 3/8" maximum thickness. To provide a point of connection when drilling or welding is not allowed or not practical. 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  
 Factory Mutual approved  
 Listed for use with NFPA fastener tables and PHD sway brace components only
- Material:** Ductile Iron
- Installation:** Place on structural member with the flange contacting the back of the jaw. Tighten set screws finger tight, then evenly tighten until hex heads break off. Attach PHD structural attachment to Fig. 035 with the supplied attachment bolt, ensuring that the attachment bolt head bottoms out securely. Please note that the maximum load will be limited by the PHD Manufacturing structural attachment utilized with this adapter.

UL Maximum Design Load	
Pipe Size	lbs.
8" MAX	1370

FM Maximum Design Load						
Beam Flange Thickness	Brace Angle From Vertical (Degrees)	X-Z		Y-Z		A-B
		lbs.	lbs.	lbs.	lbs.	lbs.
3/8" Max	30°-44°	1040	970	3/8" Max	30°-44°	1150
	45°-59°	1490	1370		45°-59°	1660
	60°-74°	1800	2060		60°-74°	1990
	75°-90°	2010	2300		75°-90°	2220



When governed by NFPA13 2019 or later, multiply FM approved loads by 0.682.

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