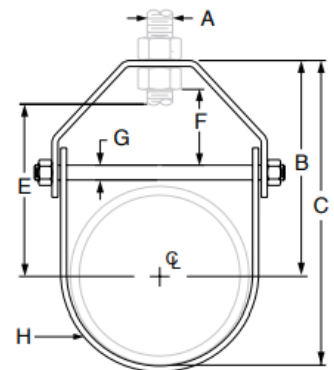
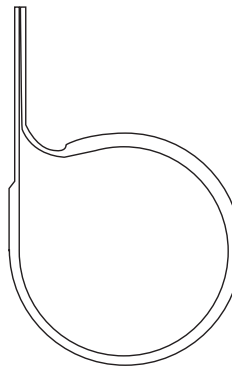
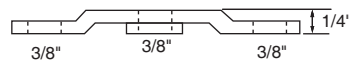
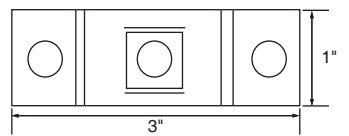
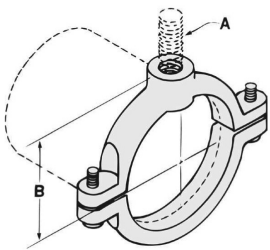
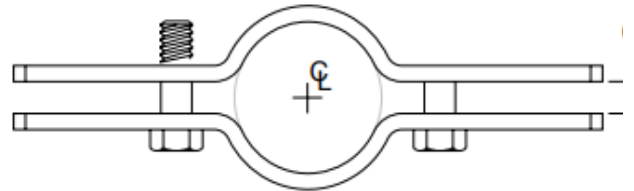
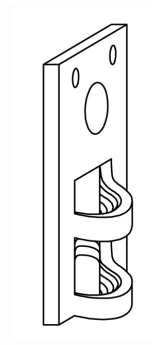
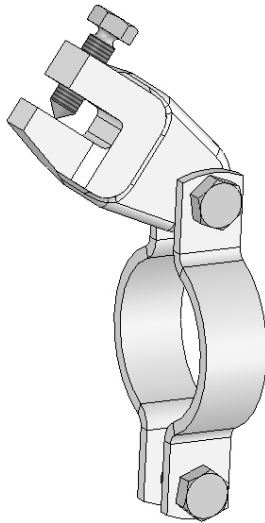
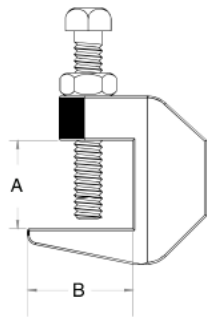
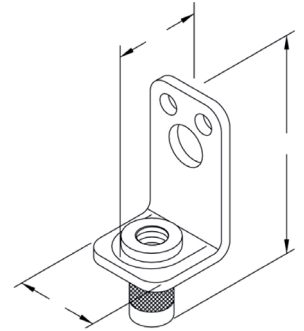
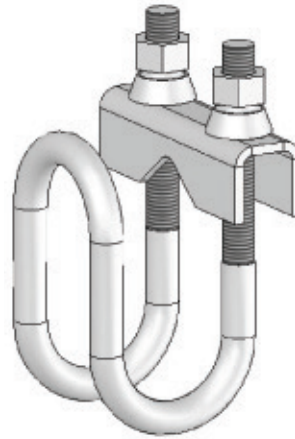
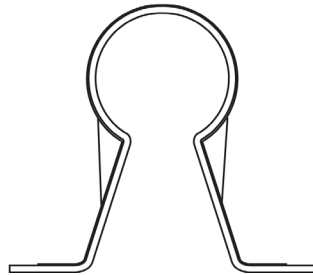
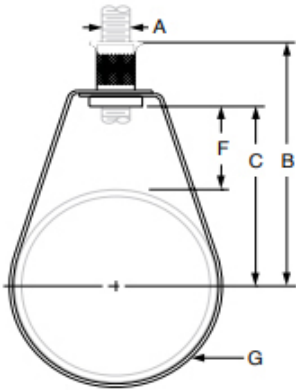




# SUBMITTAL PACKAGE HANGERS & FASTENERS



# ADJUSTABLE SWIVEL RING (LOOP/BAND) PIPE HANGERS

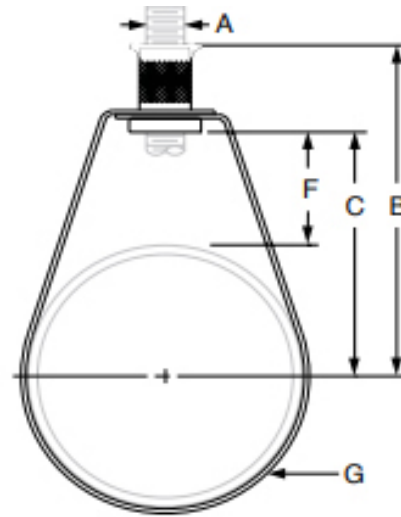


**FUNCTION:**

Recommended for the suspension of stationary non-insulated pipe lines

**FEATURES:**

- Complies with Federal Specification A-A-1192A (Type 10) and MSS SP-69 (Type 10)
- NFPA standards for reduced rod sizes for Electro Galvanized only



ITEM #	PIPE SIZE	A ROD SIZE	B	C	F	G WIDTH
2550008	1/2"	3/8"	2-7/16"	1-7/16"	1-1/16"	5/8"
2550009	3/4"	3/8"	2-11/16"	1-11/16"	1-1/8"	5/8"
2550010	1"	3/8"	2-13/16"	1-13/16"	1-1/8"	5/8"
2550011	1-1/4"	3/8"	2-7/8"	1-7/8"	1-1/16"	5/8"
2550012	1-1/2"	3/8"	3"	2"	1-1/16"	5/8"
2550013	2"	3/8"	3-3/16"	2-3/16"	1-1/16"	5/8"
2550014	2-1/2"	3/8"	4-9/16"	3-5/16"	1-7/8"	7/8"
2550015	3"	3/8"	5"	3-3/4"	2"	7/8"
2550016	4"	3/8"	6"	4-1/16"	2-3/8"	7/8"
2550017	5"	1/2"	6-1/2"	5-1/4"	2-7/16"	3/4"
2550018	6"	1/2"	7-3/4"	6-3/16"	2-7/8"	3/4"
2550019	8"	1/2"	9-5/16"	7-11/16"	3-3/8"	7/8"

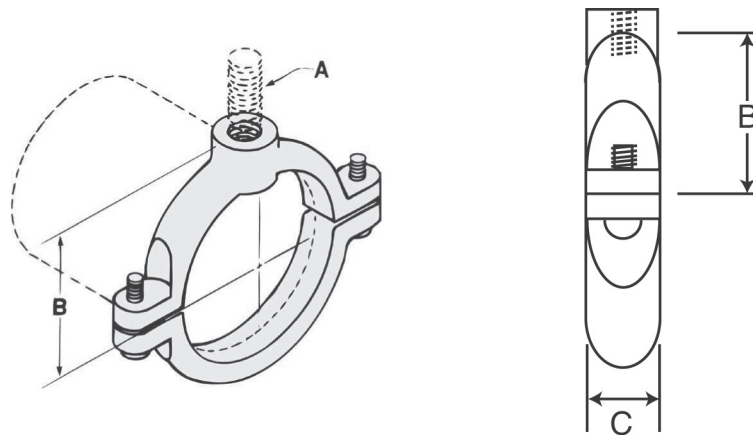
System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

**SPLIT RING HANGERS - TWO SCREW**  
**MALLEABLE IRON**



Malleable Iron Split Ring Stand-Off Hanger - 2 Screw

- Size Range: 3/8" through 4"
- Surface Finish: Electro Galvanized
- Recommended for the suspension of stationary non-insulated pipe lines
- Allows for piping runs close to ceiling or walls
- Conforms with Federal Specification WW-H-171 (Type 25),  
Manufacturers Standardization Society (MSS) SP-58 and SP-69 (Type 12)
- Bolt and rivet are carbon steel



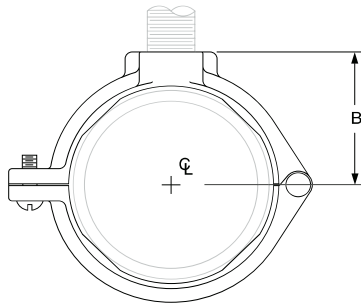
ITEM #	size	ROD SIZE	B	C	REC.MAX. LOAD CAP. (LBS)
2530245-3/8	3/8"	3/8"	13/16"	9/16"	180
2530245-1/2	1/2"	3/8"	7/8"	9/16"	180
2530245-3/4	3/4"	3/8"	1"	9/16"	180
2530245-1	1"	3/8"	1-1/8"	9/16"	180
2530245-1-1/4	1-1/4"	3/8"	1-5/16"	9/16"	180
2530245-1-1/2	1-1/2"	3/8"	1-7/8"	9/16"	180
2530245-2	2"	3/8"	1-11/16"	9/16"	180
2530245-2-1/2	2-1/2"	1/2"	2-1/8"	5/8"	300
2530245-3	3"	1/2"	2-7/16"	5/8"	300
2530245-4	4"	1/2"	3-11/32"	11/16"	300

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# SPLIT RING HANGERS - HINGED MALLEABLE IRON



- Malleable Iron Split Ring Stand-Off Hanger- Hinged with one screw
- Size Range: 3/8" through 4"
  - Surface Finish: Electro-Galvanized
  - Recommended for the suspension of stationary non-insulated pipe lines
  - Allows for piping runs close to ceiling or walls
  - Conforms with Federal Specification WW-H-171 (Type 25),  
Manufacturers Standardization Society (MSS) SP-58 and  
SP-69 (Type 12)
  - Bolt and rivet are carbon steel



Item #	Pipe Size	Rod Size	B	Maximum Load Capacity (LBS)	Weight (LBS)	CROSS REF	
						ERICO®	TOLCO®
2530246-1/2	1/2"	3/8"-16	7/8"	300#	0.13	4550050EG	021717
2530246-3/4	3/4"	3/8"-16	1-1/16"	300#	0.15	4550075EG	021731
2530246-1	1"	3/8"-16	1-1/8"	300#	0.17	4550100EG	021755
2530246-1-1/4	1-1/4"	3/8"-16	1-1/4"	300#	0.28	4550125EG	021779
2530246-1-1/2	1-1/2"	3/8"-16	1-7/16"	300#	0.29	4550150EG	021793
2530246-2	2"	3/8"-16	1-5/8"	300#	0.32	4550200EG	021816
2530246-2-1/2	2-1/2"	1/2"-13	2-1/8"	300#	0.39	4550250EG	
2530246-3	3"	1/2"-13	2-7/16"	300#	0.48	4550300EG	
2530246-4	4"	1/2"-13	2-7/8"	300#	1.06	4550400EG	

*Two Screw Version also available*

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# CLEVIS HANGERS



## Standard Clevis

For suspension of non-insulated stationary pipe lines

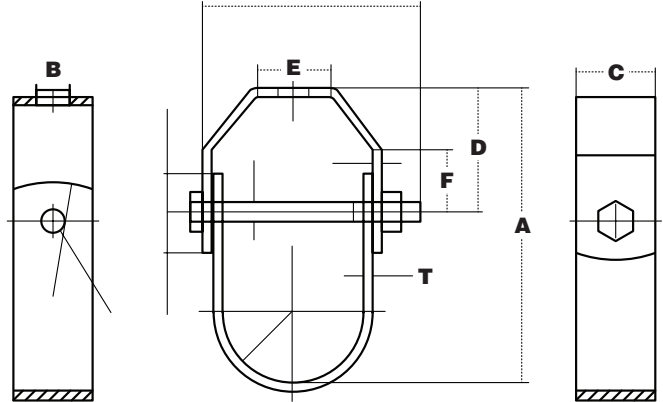
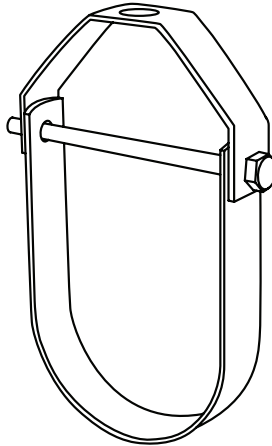
- Low carbon steel
- Finishes: Plain, Electro-Galvanized plated -- sound insulation available
- Conforms with Federal Specification WW-H-171 (Type 1),  
Manufacturers Standardization Society (MSS) SP-58 and SP-69 (Type 1)



UL Listed for Plain Clevis



UL Listed and FM Approved for Galvanized Clevis



NOMINAL PIPE SIZE	PLAIN ITEM #	GALVANIZED ITEM #	ROD SIZE	A	B	C	D	E	F	T	CROSS BOLT	MAX. REC. LOAD LBS.
1/2"	2550201-1/2	2550200-1/2	3/8"		.43"	0.89"					1/4"	610
3/4"	2550201-3/4	2550200-3/4	3/8"	3.25"	.43"	0.89"	1.81"	0.94"	0.79"	0.098"	1/4"	610
1"	2550201-1	2550200-1	3/8"	3.89"	.43"	0.89"	2.22"	0.94"	0.79"	0.098"	1/4"	610
1-1/4"	2550201-1-1/4	2550200-1-1/4	3/8"	4.17"	.43"	0.89"	2.22"	0.94"	0.91"	0.098"	1/4"	610
1-1/2"	2550201-1-1/2	2550200-1-1/2	3/8"	4.21"	.43"	0.89"	1.58"	0.94"	0.91"	0.098"	1/4"	610
2"	2550201-2	2550200-2	3/8"	4.96"	.43"	0.89"	2.20"	0.98"	0.83"	0.118"	1/4"	610
2-1/2"	2550201-2-1/2	2550200-2-1/2	1/2"	6.14"	.55"	1.02"	2.71"	1.25"	0.59"	0.118"	3/8"	1130
3"	2550201-3	2550200-3	1/2"	6.65"	.55"	1.02"	2.08"	1.25"	0.59"	0.118"	3/8"	1130
4"	2550201-4	2550200-4	5/8"	7.87"	.67"	1.18"	2.85"	1.75"	0.79"	0.157"	3/8"	1130
5"		2550200-5		9.09"	.67"	1.26"	2.99"	1.97"	0.94"	0.177"	1/2"	1350
6"		2550200-6		10.24"	.79"	1.44"	3.03"	1.97"	0.83"	0.177"	1/2"	1350
8"		2550200-8		12.95"	.79"	1.65"	3.54"	2.75"	1.10"	0.177"	5/8"	1350

### CROSS REFERENCE

NIBCO TOLCO®: 010-series

ERICO®: 4010-series

COOPER B-LINE®: B3100-series

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

**Riser Clamp Plain**



For support of  
steel pipe, cast iron  
pipe and conduit risers

Carbon steel  
Finish: PLAIN

Nominal Pipe Size	ITEM #	MAX REC LOAD (LBS.)	CROSS REFERENCE TOLCO®
1"	25-50-070		001487
1-1/4"	25-50-075	255	001510
1-1/2"	25-50-080	255	001534
2"	25-50-085	255	001558
2-1/2"	25-50-090	255	001572
3"	25-50-095	390	001596
4"	25-50-100	530	001633
6"	25-50-105	810	001657
8"	25-50-107	1570	001695

**Riser Clamp - Zinc Plated**



For support of  
steel pipe, cast iron  
pipe and conduit risers

Carbon steel  
Finishes: electro zinc-plated  
carbon steel

Nominal Pipe Size	ITEM #	MAX REC LOAD (LBS.)	CROSS REFERENCE TOLCO®
1"	25-50-070Z	255	001487EG
1-1/4"	25-50-075Z	255	001510EG
1-1/2"	25-50-080Z	255	001534EG
2"	25-50-085Z	255	001558EG
2-1/2"	25-50-090Z	390	001572EG
3"	25-50-095Z	530	001596EG
4"	25-50-100Z	810	001633EG
6"	25-50-105Z	1570	001657EG
8"	25-50-107Z	2500	001695EG

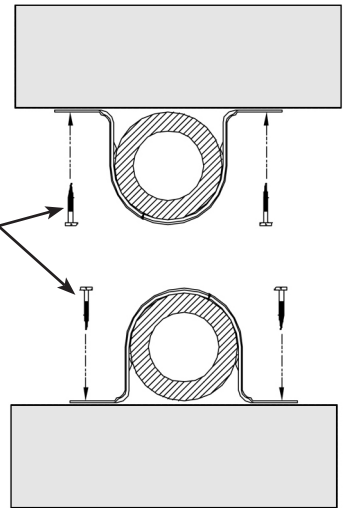
System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# CPVC TWO HOLE STRAP



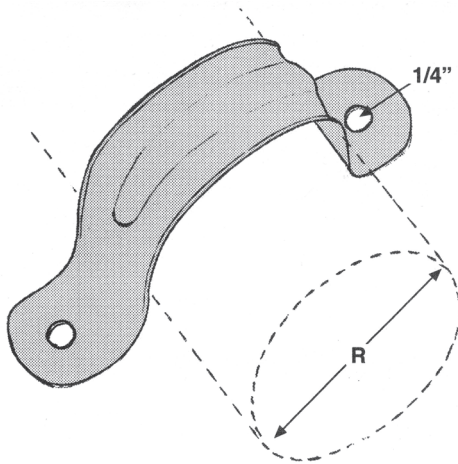
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HEX HEAD SCREWS



Designed for support or restraint for piping in either a vertical or horizontal position. It can be used on top or bottom of a beam. The edges are flared to prevent any damage to the CPVC pipe. It is easily attached using 2 hex head self-threading screws (supplied)

Galvanized steel construction



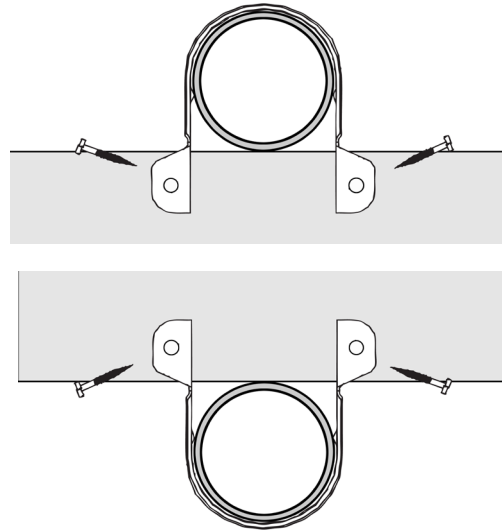
1. SNAP CPVC PIPE INTO HANGER.
2. MOUNT HANGER TO UNDERSIDE OF BEAM WITH SCREWS PROVIDED.
3. MAY ALSO BE USED ON TOP SIDE OF BEAM.

ITEM #	CPVC PIPE SIZE
2530283	3/4"
2530284	1"
2530285	1-1/4"
2530286	1-1/2"
2530287	2"

Galvanized carbon steel construction, supplied with hex slotted screws

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# CPVC STRAP TWO HOLE 90° WRAP AROUND



- Top or bottom beam installation
- Galvanized steel, supplied with 1" hex screws

1. Snap CPVC pipe hanger into hanger. Dimples hold pipe in place.
2. Mount hanger onto wood beam with screws provided.
3. May also be used on the underside of beam.
4. Do anchor tightly to surface, be sure that pipe can slide freely through hanger.

ITEM #	CPVC PIPE SIZE
2530175-3/4	3/4"
2530175-1	1"
2530175-1-1/4	1-1/4"
2530175-1-1/2	1-1/2"
2530175-2	2"

Galvanized carbon steel construction, supplied with hex slotted screws

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	



# CPVC STRAP TWO HOLE 90° WRAP AROUND



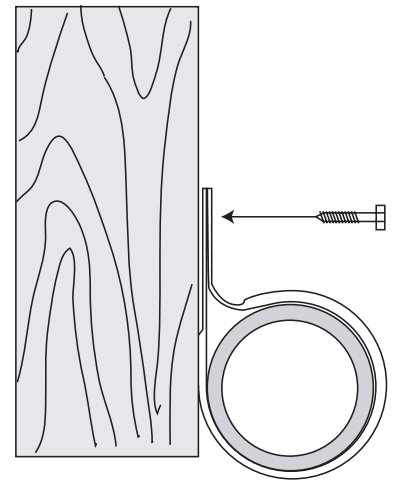
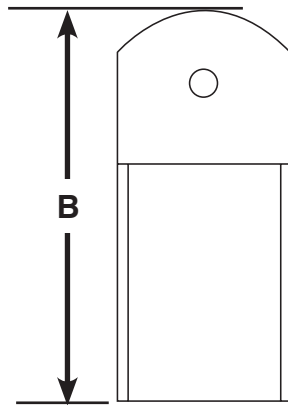
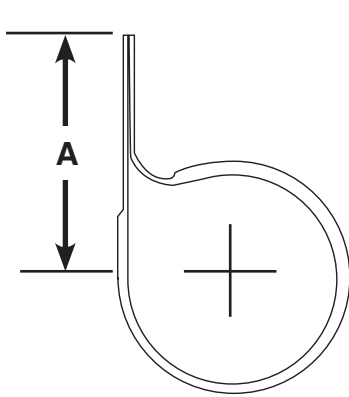
Provides support for CPVC or Polybutylene fire sprinkler piping in fire sprinkler systems installed per NFPA 13, 13R and 13D.

- Fastened with a Hardened Hex Head Screw, #10x1-1/2", supplied with the strap.
- Pre-galvanized finish.



### INSTALLATION:

1. Snap CPVC pipe hanger into hanger. Dimples hold pipe in place.
2. Mount hanger onto wood beam with screws provided.
3. May also be used on the underside of beam.
4. Do anchor tightly to surface, be sure that pipe can slide freely through hanger.



CPVC STRAP TWO HOLE 90° WRAP AROUND				MAX HANGER SPACING	CROSS REF	
ITEM #	CPVC PIPE SIZE	A	B		TOLCO®	ERICO®
2530160-3/4	3/4"	1"	2-7/16"	5-1/2"	12722	1070075
2530160-1	1"	1-7/16"	2-11/16"	6"	12746	1070100
2530160-1-1/4	1-1/4"	1-5/8"	3-1/16"	6-1/2"	12753	1070125
2530160-1-1/2	1-1/2"	1-3/4"	3-5/16"	7"	12760	1070150
2530160-2	2"	1-11/16"	3-3/4"	8"	12777	1070200

Galvanized carbon steel construction, supplied with hex slotted screws

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# STAND-OFF TWO HOLE STRAP NO BLOCK FOR CPVC



- For mounting CPVC pipe to wood
- Flared edges help protect CPVC
- Galvanized steel construction
- Supplied with #10 x 1" hex head cap screws
- Complies with the static load requirements of NFPA® 13
- Suitable for fire protection installations
- Eliminates spacers or backup blocks
- Easy installation
- Backing Nuts available

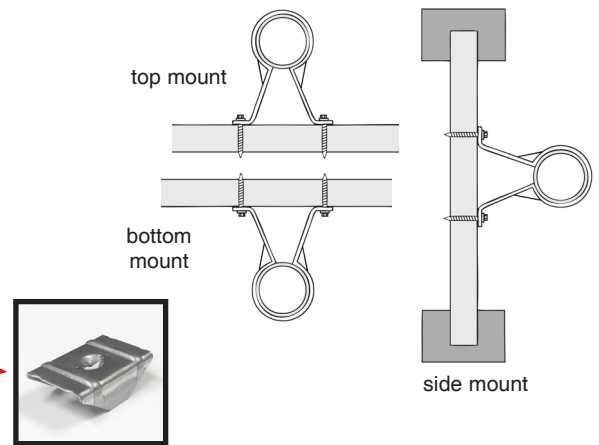
Designed to mount CPVC pipe horizontally or vertically to wood or composite wood joists with a minimum 3/8" thickness.

Can only be used as a guide on top of beam or on vertical piping. May be installed to wood using supplied fastener or into (minimum 18 gauge) steel using two 1/4" x 1" TEK type screws.

Provides vertical/lateral restraint and prevents upward movement of the pipe that supplies pendant fire sprinkler below ceiling.

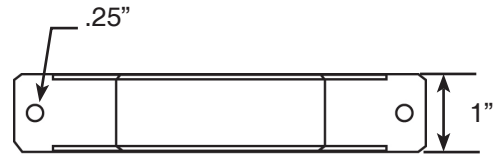
All sizes can be used as a restrainer in the bottom position. The 3/4" size only can be used as a restrainer in the top position.

Can be used with **2530158** Backing Nuts when used as a hanger or restrainer. (sold separately)



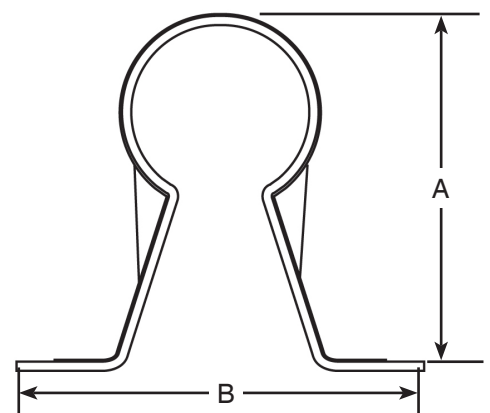
Installation: Per NFPA 13, 13R and 13D. (see page two)

Fasteners:	
Wood -	3/4" to 3" CPVC Pipe - wood screw - no pre-drill
Steel -	3/4" to 3" CPVC Pipe - 1/4" TEK screw



ARGCO MODEL #	NPS	A	B	MAX. HANGER SPACING
2530180	3/4"	2.69"	3.25"	5.5 ft / 1.68 m
	1"	2.94"	3.25"	6 ft / 1.83 m
	1-1/4"	3.31"	3.25"	6.5 ft / 1.98 m
	1-1/2"	3.56"	4.5"	7 ft / 2.13 m
	2"	4.06"	5"	8 ft / 2.44 m

For use as a restrainer in all sizes when attached to the bottom of structural wood members.  
For use as a restrainer in the 3/4 inch size when attached to the top of structural wood members



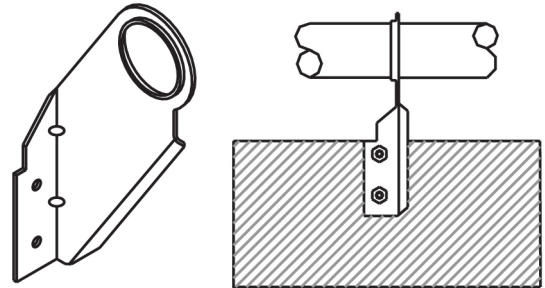
System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# CPVC PIPE HANGER SUPPORT DOUBLE OFFSET DESIGN



Hanger & surge restraint for horizontal CPVC piping when installed on supporting structure

- For mounting CPVC pipe to wood
- Flared edges help protect CPVC
- Galvanized steel construction
- Supplied with #10 hex head cap screws
- Complies with the static load requirements of NFPA® 13
- Suitable for fire protection installations
- Size Range: 3/4" through 1"

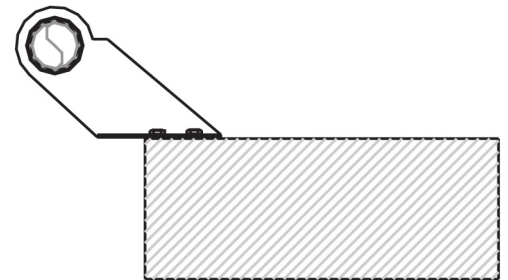


Designed to mount CPVC pipe horizontally or vertically to wood or composite wood joists with a minimum 3/8" thickness.

Offset edge eliminates abrasion.

Installation: Per NFPA 13, 13R and 13D.  
Install into wood or steel.  
Slides onto CPVC pipe.

3/4" pipe size | Item #2530181-3/4  
1" pipe size | Item #2530181-1



System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

**TOP BEAM CLAMP  
MALLEABLE IRON**



Top Beam Clamp 3/8" rod size  
 Malleable iron with hardened steel cup point set screw & lock nut.  
 Designed for attaching hanger rod to the top flange of a beam or bar joist, where the flange thickness does not exceed 3/4 inch.  
 The open U design permits rod adjustment.  
 May be used in an inverted position on the bottom flange of a beam as well.  
 Approvals: UL/FM  
 Cross Reference: Tolco Fig 68S, Erico #300



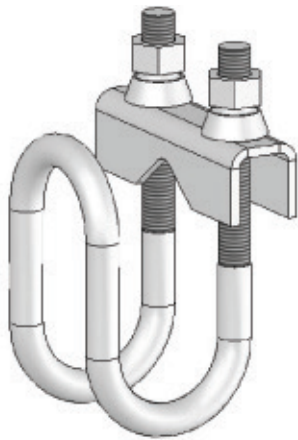
Item Number: 2550050: Beam Clamp Plain UL, FM  
 Item Number: 2550050Z: Beam Clamp Galvanized UL, FM

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# SEISMIC SWAY BRACING

## "FAST CLAMP" SEISMIC SWAY BRACE PIPE ATTACHMENT

### Model 010



#### FUNCTION:

Designed for bracing pipe against sway and seismic disturbance. The pipe attachment component of a sway brace system used in conjunction with a structural attachment fitting and joined together with a bracing pipe element forming a complete sway brace assembly.

Sway brace assemblies are intended to be installed in accordance with NFPA 13 and the manufacturer's installation instructions.

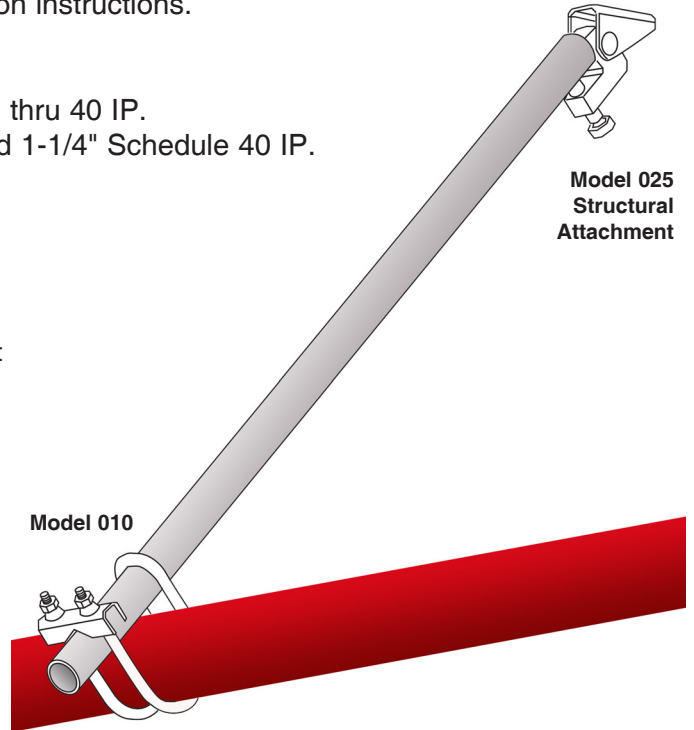
#### SIZE:

Pipe size 1" thru 6" Schedule 10 thru 40 IP.

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

FINISH: Electro-galvanized

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.

Tighten nuts down evenly until hex head breaks off.

APPROVALS: Underwriters Laboratories listed for US and Canada

Listed for use with NFPA and PHD sway brace components only

item #	pipe size	brace size	Max Design	Max Design
			Load Sch 10 Pipe	Load Sch 40 Pipe
2550600	1"	1"	655#	655#
2550601	1-1/4"	1"	655#	655#
2550602	1-1/2"	1"	655#	655#
2550603	2"	1"	655#	655#
2550604	2-1/2"	1"	655#	655#
2550605	3"	1"	655#	655#
2550606	4"	1"	655#	655#
2550613	4"	1-1/4"	N/A	655#
2550614	6"	1-1/4"	1265#	1265#

#### CROSS REFERENCE:

Erico: CSBQIK  
Afcon: Model E  
Tolco: 1000

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# LARGE SEISMIC SWAY BRACE PIPE ATTACHMENT

## FIGURE 015



**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.



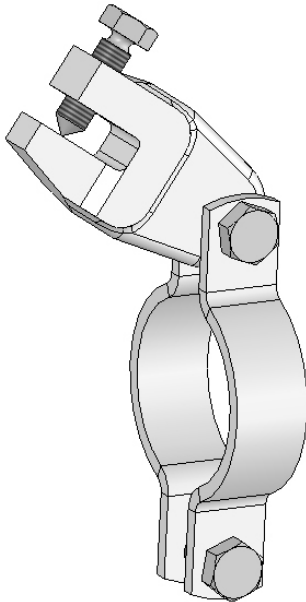
FM Maximum Design Load							
Brace: 1" Thru 2" SCH40 Pipe							
Pipe Size SCH 10, 40 & Flow Pipe	Brace Angle From Vertical (Degrees)	lbs.	kN	Wt. Each			
				1" Brace Pipe		1 1/4" Brace Pipe	
				lbs.	kg	lbs.	kg
2 1/2	30°-44°	1020	(4.53)	1.31	(0.59)	1.49	(0.68)
	45°-59°	1440	(6.40)	1.31	(0.59)	1.49	(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)
4	75°-90°	2090	(9.29)	1.40	(0.64)	1.57	(0.71)
	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)
6	75°-90°	1980	(8.80)	1.53	(0.69)	1.70	(0.77)
	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)
8	75°-90°	1240	(5.51)	1.81	(0.82)	1.98	(0.90)
	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	680	(3.02)
3	680	(3.02)
4	680	(3.02)
6	1090	(4.85)

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

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# SEISMIC SWAY BRACING CLAMPING PIPE ATTACHMENT Model 031



**FUNCTION:**

Designed for bracing pipe against sway and seismic disturbance. Universal swivel design allows for attachment at any angle and the ability to be used in a lateral or longitudinal bracing configuration.

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 forming 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" Schedule 10 thru 40 IP.

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

**FINISH:** Electro-galvanized

**MATERIAL:** Low Carbon Steel



**INSTALLATION:**

Place attachment around pipe to be braced, positioning as needed, then tighten clamping bolts and nuts. Insert bracing pipe into fitting against the pivot bolt and tighten each fitting set screw finger tight.

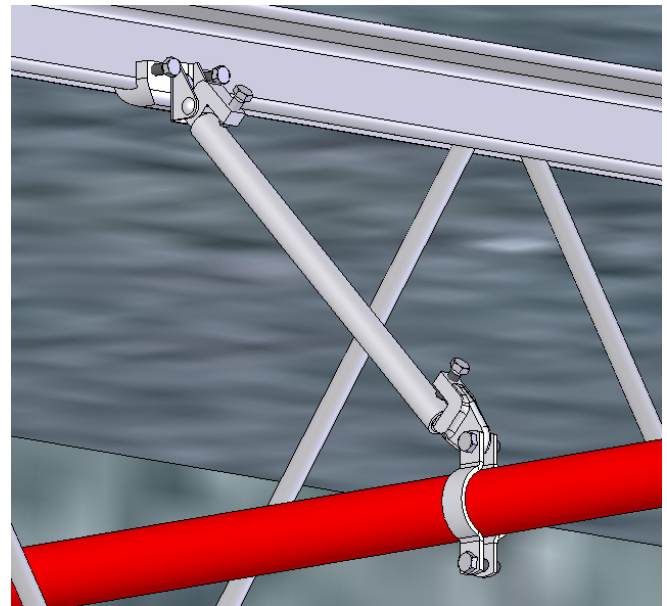
Then tighten each set screw evenly until hex head breaks off.

**APPROVALS:**

Underwriters Laboratories listed for US and Canada

Factory Mutual Approved

Listed for use with NFPA and PHD sway brace components only.



Model 031 (Clamp Included)			
Item Number	Pipe Size	Brace Size	Weight Each (lbs)
2550643	2"	1" - 2" sch 40	2.60
2550644	2-1/2"	1" - 2" sch 40	2.77
2550645	3"	1" - 2" sch 40	3.00
2550647	4"	1" - 2" sch 40	3.30
2550648	5"	1" - 2" sch 40	4.57
2550649	6"	1" - 2" sch 40	5.42
2550650	8"	1" - 2" sch 40	8.52

See page two for UL and FM  
Maximum Design Loads

CROSS REF:  
Erico: CSBSTU  
Tolco: 4L

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# ROD SWIVEL ATTACHMENT

## FIG. 020



**FUNCTION:** May be used as a branchline restraint for structural attachment.

May be used in a pitched or sloped roof application, to meet requirements of NFPA 13, or may be used as an upper attachment with short hanger rod to omit seismic bracing.

**SIZE:** 3/8"

**MATERIAL:** Electro-galvanized Low Carbon Steel



**INSTALLATION:** Insert a #2 screwdriver through the tapped hole to access the head of attachment fastener. Tighten attachment fastener to desired attachment point, then remove screwdriver and thread 3/8-16 threaded rod into Swivel Attachment

**APPROVALS:** Underwriters' Laboratories Listed in the U.S. (UL) and Canada (CUL)

**ARGCO Item Number:** [2550622](#)

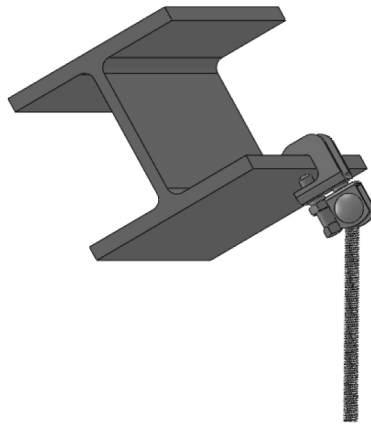
**Cross Reference:** PHD Model 622, Tolco Fig 75

Recommended Items: Steel Beam Clamp [2550050STL](#)

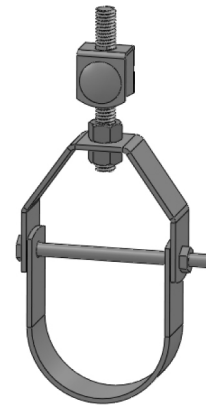
Rod Size	Max Pipe Size	Max Load Size	Weight each
3/8"	4"	730 lbs	.10 lbs



BRANCH LINE RESTRAINT  
NFPA13 2010  
Section A.9.3.6.1(5)



PITCHED ROOF APPLICATION  
NFPA13 2010  
Section 9.1.2.6



Upper attachment with a short hanger rod to omit seismic bracing

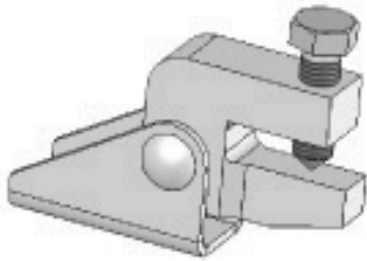
System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	



# SEISMIC SWAY BRACING

## C-CLAMP STRUCTURAL ATTACHMENT

### Model 030



**FUNCTION:**

Designed for bracing pipe against sway and seismic disturbances. Universal swivel design allows for attachment at any surface angle combined with concentric loading. Structure attachment fitting designed to use 1” through 2” bracing pipe and structural steel as sway bracing element. No bracing member thicker than 3/8” or thinner than 9/64” material can be used in conjunction with this product.

CROSS REF:  
Erico: CSBUNIV  
Afcon: 076  
Tolco: 980

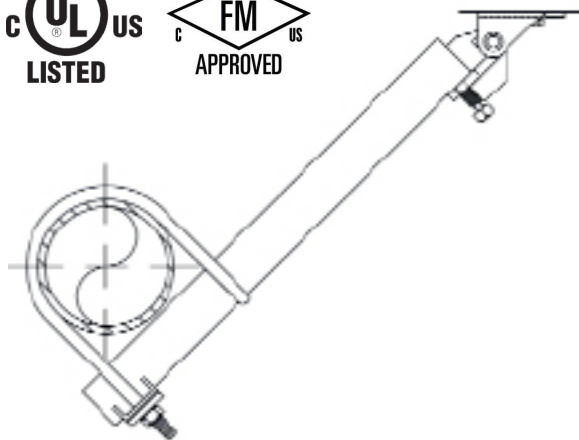
Utilize the Model 030 with a PHD Manufacturing pipe attachment fitting and a bracing element to form a complete sway brace assembly. Sway brace assemblies are intended to be installed in accordance with NFPA13 and the manufacturer’s installation instructions.

**SIZE:**

1/2” mounting bolt hole and UL Listed for 8” Pipe MAX

**FINISH:** Electro-galvanized

**MATERIAL:** Ductile Iron and Low Carbon Steel



Brace Member	Member Thickness	Maximum Design Load
1” Pipe	SCH 40	2015 lbs
1-1/4” Pipe	SCH 40	2015 lbs
1-1/2” Pipe	SCH 40	2015 lbs
2” Pipe	SCH 40	2015 lbs
Structural Steel	9/64 thru 3/8” thick	Refer to NPFA 13

\*Note: Structural Steel as classified in NFPA 13 such as Schedule 40 Pipe, Angles and Flats

**INSTALLATION:**

Insert brace pipe into fitting against back of jaw. Tighten set screw fingertight, then tighten until hexhead breaks off. Adjust attachment to proper brace angle and mount to structure.

Listed for use with NFPA fastener tables and PHD pipe attachments only.

**APPROVALS:**

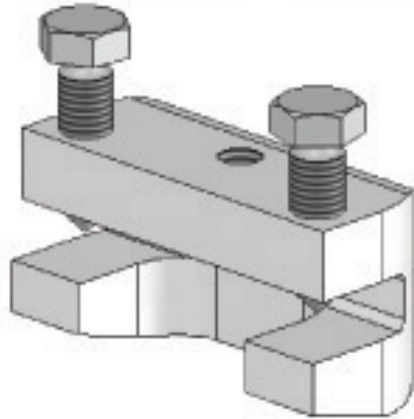
Underwriters Laboratories listed for US and Canada  
Listed for us ewith NFPA and PHD sway brace components only.

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# SEISMIC SWAY BRACING

## SWAY BRACE BAR JOIST ADAPTER

### Model 035



**FUNCTION:**

Sway brace adapter used to attach a PHD Manufacturing sway brace assembly to a steel bar joist structural member of 3/8" maximum thickness.

To provide a point of connection when drilling or welding is not allowed or impractical.

Sway brace assemblies are intended to be installed in accordance with NFPA 13 and the manufacturer's installation instructions.

**SIZE:** 1/2" mounting bolt hole and UL Listed for 8" Pipe MAX

**FINISH:** Electro-galvanized

**MATERIAL:** Ductile Iron



**INSTALLATION:**

Steel bar joist manufacturer's warranty requires attachment within 6" of chord panel point.

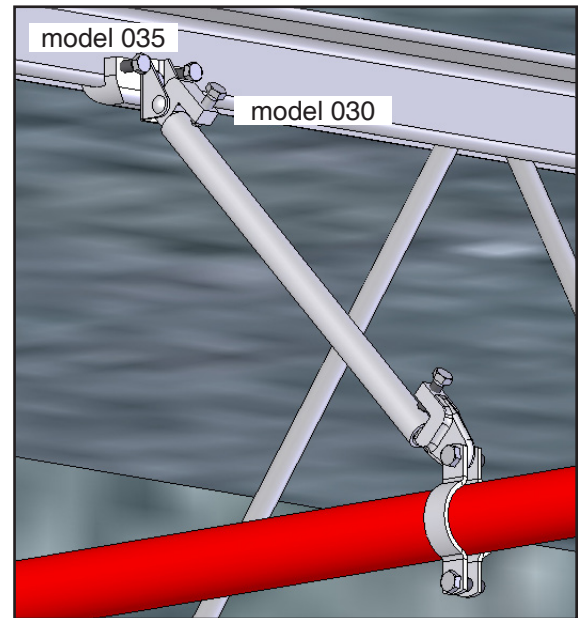
Place on structural member with the flange contacting the back of the jaw.

Tighten set screws finger tight, then evenly tighten until hex head breaks off.

**APPROVALS:**

Underwriters Laboratories listed for US and Canada

Listed for use with NFPA and PHD sway brace components only



Max. Pipe Size	Max. Rec. Load
8"	2015 lbs.

**CROSS REFERENCE:**

Erico: CSBBAR

Afcon: 087

Tolco: 825, 825A

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# STEEL EYE SOCKET STANDARD

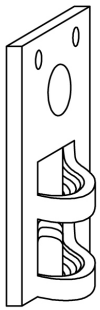


- Size Range: 3/8" and 1/2" rod sizes
- Low Carbon Steel with Electro-Galvanized finish
- Structural attachment used to join hanger rod to a structure

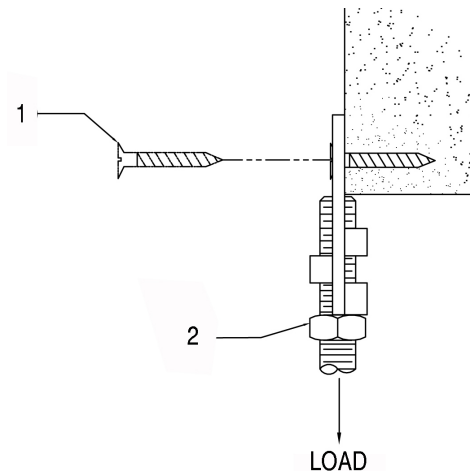
Fastener sizes for 3/8" rod size"

- Thru 2" pipe, two Wood Drive Screws
- Thru 4" pipe, one 1/2 x 3" Lag Screw

Fastener size for 1/2" rod size: thru 8" pipe,  
one 5/8 x 3" Lag Screw



Item #	ROD SIZE	PIPE SIZE	MAX. LOAD CAP.	CROSS REF: ERICO
2530150A	3/8"	3/4"-4"	250#	0370037EG



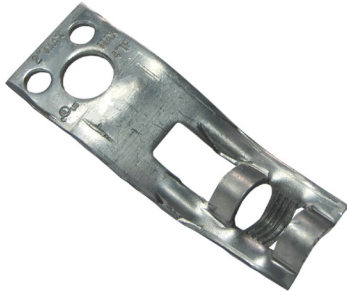
1. Screw hanger directly into structure.
2. Thread rod completely into hanger.  
Then secure with lock nut

All pipe supports and hangers are designed only for stationary piping.

Fire Protection:  
Follow requirements of NFPA 11-17.

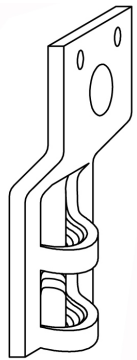
System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# STEEL EYE SOCKET OFFSET

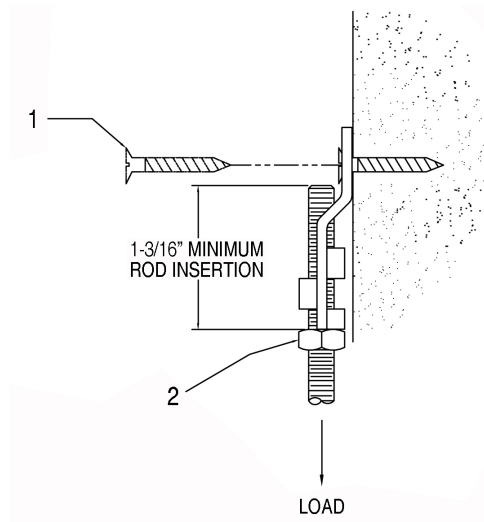


- Designed for attaching hanger rod to a wood structure
- Allows installation to be flush with stable support
- Low Carbon Steel with Electro-Galvanized finish

1. Fastener sizes for 3/8" rod size
  - a. Thru 2" pipe, two Wood Drive Screws
  - b. Thru 4" pipe, one 1/2 x 3" Lag Screw



Item #	ROD SIZE	PIPE SIZE	MAX. LOAD CAP.	CROSS REF: ERICO
2530153A	3/8"	3/4"-4"	250#	0380037EG



1. Screw hanger directly into structure.
2. Thread rod into hanger to minimum rod insertion. Adjust to desired height, then secure with lock nut

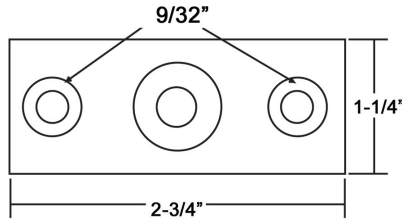
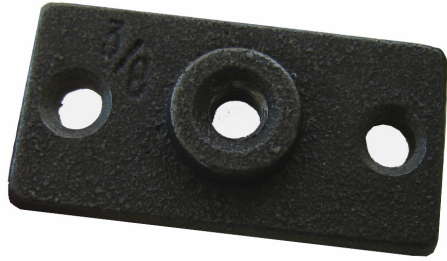
All pipe supports and hangers are designed only for stationary piping.

Fire Protection:  
Follow requirements of NFPA 11-17.

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

# CEILING FLANGE

## Malleable Iron



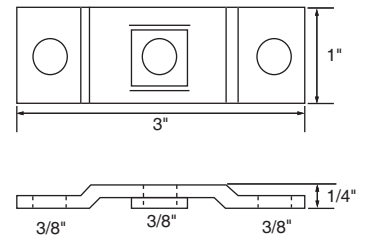
Designed to provide a means for attaching hanger rod to wood beams or ceilings

- Size Range: 3/8" rod size
- Surface Finish: Plain Black, Zinc Plated
- Structural attachment to support hanger rod from a ceiling or a wall

Item #	Description	ROD SIZE	MAX. PIPE SIZE	MAX. LOAD CAPACITY	BOX QTY	ERICO®	FASTENAL®	COOPER®
2530260	Ceiling Flange Malleable Iron (Plain)	3/8"-16	2"	180#	180#	365M0037PL	47959	BB3199RPLTDD
2530260A	Ceiling Flange Malleable Iron (Zinc Plated)	3/8"-16	2"	180#	180#			

# CEILING FLANGE

## Steel



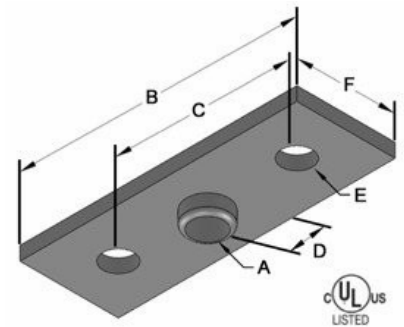
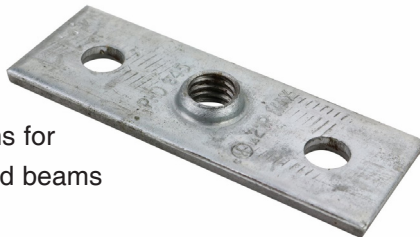
Designed to provide a means for attaching hanger rod to wood beams or ceilings

- Structural attachment to support hanger rod from a ceiling or a wall
- Size Range: 3/8" rod size
- Surface Finish: Electro-zinc plated

Item #	ROD SIZE	MAX. PIPE SIZE	MAX. LOAD CAP.	ERICO®
2530260A	3/8"	2"	100#	3650037EG

# CEILING FLANGE

## Steel (PHD 945)



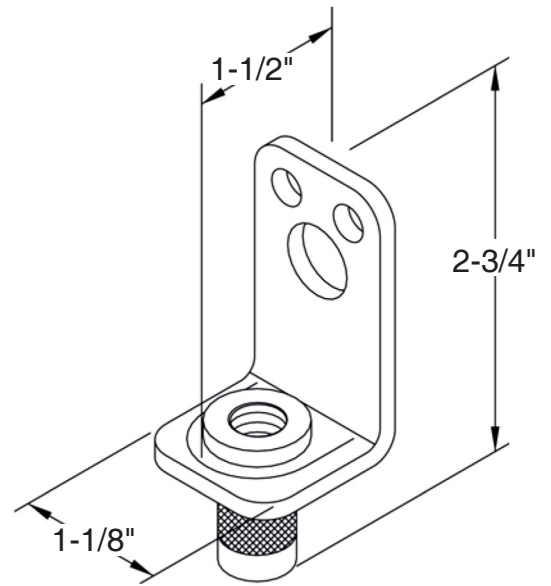
Designed to provide a means for attaching hanger rod to wood beams or ceilings.

APPROVALS: Underwriters Laboratories Listed in the U.S. (UL) and Canada (CUL) for supporting up to 2"(50) pipe max. (945 only).

Item #	A	B	C	D	E	F	MAX. LOAD CAP.	TOLCO®
2530262	3/8"	2-13/16"	1-3/16"	5/16"	5/16"	1"	180#	78

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

**TAPPED ANGLE BRACKET**  
**Steel with Knurled Nut**



Function: Practical and economical bracket used to support piping from wood, concrete or steel beams.

Features: Unique design allows rod to be easily threaded into bracket.

Offset design permits unlimited rod adjustment.

Center mounting hole will accept 3/8" and 1/2" fastener bolts.

Per NFPA 13: 1/2" thru 2" pipe requires 3/8" fastener,  
 2-1/2" thru 4" pipe requires 1/2" fastener.

Item #	Description	ROD SIZE	MAX. LOAD CAPACITY	BOX QTY	TOLCO®
2530259	Side Beam Connector Malleable Iron (Plain)	3/8"-16	300#	200	TYPE 58
2530259Z	Side Beam Connector Malleable Iron (Zinc Plated)	3/8"-16	250#	100	2370037Z

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	