

B3199R - Ceiling Flange

B3199RCT - Ceiling Flange Dura-Copper Coated

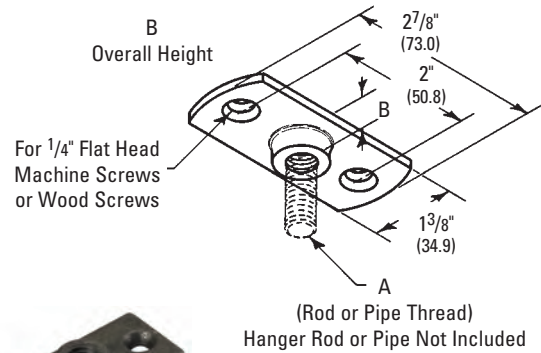
Size Range: 3/8"-16 & 1/2"-13 rod

Material: Malleable Iron (Stainless Steel Type 304 available)

Standard Finish: Plain or Electro-Galvanized
B3199RCT is DURA-COPPER™ coated

Function: Designed for attaching a hanger or support rod to beams, ceilings, or walls.

Order By: Part number and finish.



Part No.	Thread Size	A	B	Design Load	Approx. Wt./100
		in.	in. (mm)	Lbs. (kN)	Lbs. (kg)
B3199R-3/8	B3199RCT-3/8	3/8"-16	7/16" (11.1)	180 (.80)	13 (5.9)
B3199R-1/2	B3199RCT-1/2	1/2"-13	1/2" (12.7)	180 (.80)	17 (7.7)

TOLCO™ Fig. 78 - All Steel Ceiling Plate

Size Range: 3/8"-16 rod

Material: Pre-Galvanized Steel

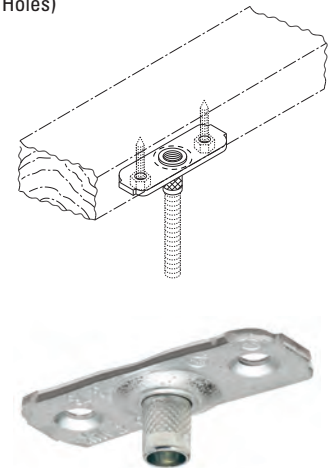
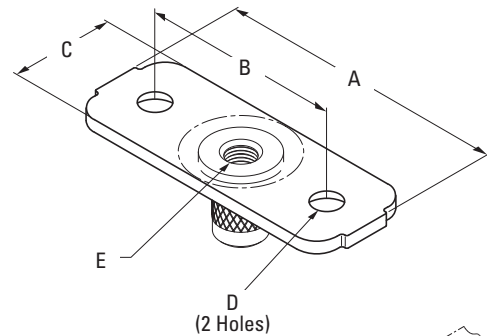
Function: Attachment to wood beams, ceilings, metal decks or walls. Can also be welded to steel beams.

Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL). Additionally, UL has listed the Fig. 78 with fasteners as shown in the table below.

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Part number, rod size and finish

US Patent #5,702,077



Pipe Size	Qty	UL Listed Fastener Table	Material
		Fastener Type	
1/2" - 2"	2	#14 x 1 1/4" A-point hex-washer-head sheet metal screw	Wood
2 1/2" - 4"	2	1/4" x 1 1/2" wood screws*	Wood
1/2" - 2"	2	1/4" x 1" tek screws	Metal (18 gauge)
1/2" - 2"	2	#14 x 1 1/4" A-point hex-washer-head sheet metal screw	Wood
1/2" - 2"	2	#14 x 2" A-point-hex-washer-head sheet metal screw	Wood thru 5/8" gyp board

* No pre-drilling

Part No.	Pipe Size	A	B	C	Hole Dia. D	Thread Size	Design Load	Approx. Wt./100
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	E	Lbs. (kN)	Lbs. (kg)
78-3/8	1/2" - 2" (15 - 60)	3" (76.2)	2 1/8" (54.0)	1 1/8" (28.6)	5/16" (7.9)	3/8"-16	150 (0.67)	15 (6.8)
--	Consult Factory For Data							

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

Upper Attachments

B3060L - Light Duty Angle Clip

Size Range: 3/8"-16 rod

Material: Steel (Stainless steel available)

Function: Designed for attaching 3/8"-16 hanger rod to the side of beams or walls.

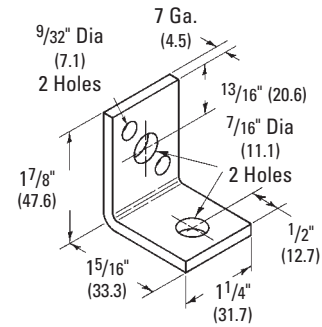
Approvals: Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 35 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 34.

Finish: Plain or Electro-Galvanized

Order By: number and finish.

Design Load: 300 Lbs. (1.33kN)

Weight: Approx. Wt./100 - 15 Lbs. (6.8 kg)



B3070 - Reversible Angle Clip

Size Range: 3/8"-16 and 1/2"-13 rod, 1/2" (15mm) thru 3 1/2" (90mm) pipe

Material: Steel

Function: Designed for attaching hanger rod to the side of beams or walls.

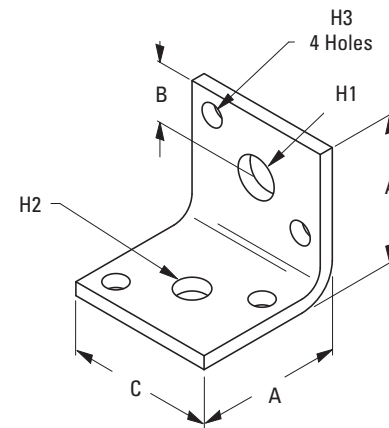
Approvals: Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 35 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 34.

Finish: Plain or Electro-Galvanized

Order By: number and finish.

Design Load: 500 Lbs. (2.22 kN) when installed in either direction.

Weight: Approx. Wt./100 - 49 Lbs. (22.2 kg)



Upper Attachments

Part No.	Rod Size	A in. (mm)	B in. (mm)	C in. (mm)	Hole 1 in. (mm)	Hole 2 in. (mm)	Hole 3 in. (mm)	Max. Rec. Load Lbs. (kN)	Approx. Wt./100 Lbs. (kg)
B3070-3/8x1/2	3/8"-16 x 1/2"-13	2" (50.8)	1 3/16" (20.6)	2" (50.8)	9/16" (14.3)	7/16" (11.1)	5/16" (7.9)	700 (3.11)	35 (15.9)
B3070-1/2x1/2	1/2"-13 x 1/2"-13	2" (50.8)	3/4" (19.0)	2" (50.8)	9/16" (14.3)	9/16" (14.3)	5/16" (7.9)	700 (3.11)	34 (15.4)

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

B3060 - Side Beam Angle Clip

Size Range: 3/8"-16 and 7/8"-9 rod

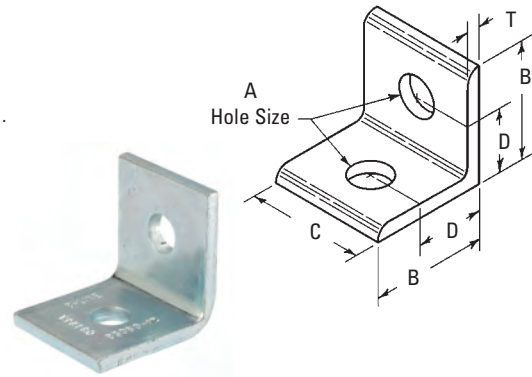
Material: Steel (Stainless steel available)

Function: Designed for attaching a hanger rod to the side of beams or walls.

Approvals: Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 35 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 34.

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

Order By: Part number and finish.



Part No.	Hole Size in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	T in. (mm)	Design Load Lbs. (kN)	Approx. Wt./100 Lbs. (kg)
B3060-3/8	7/16" (11.1)	2 3/16" (55.6)	2" (50.8)	1 1/4" (31.7)	1/4" (6.3)	305 (1.35)	53 (24.0)	
B3060-1/2	9/16" (14.3)	2 3/16" (55.6)	2" (50.8)	1 1/4" (31.7)	1/4" (6.3)	565 (2.51)	51 (23.1)	
B3060-5/8	1 1/16" (17.5)	2 3/16" (55.6)	2" (50.8)	1 1/4" (31.7)	1/4" (6.3)	909 (4.02)	48 (21.8)	
B3060-3/4	1 3/16" (20.6)	3" (76.2)	3" (76.2)	1 3/4" (44.4)	3/8" (9.5)	1355 (6.03)	169 (74.8)	
B3060-7/8	1 5/16" (23.8)	4" (101.6)	4" (101.6)	2 1/2" (63.5)	3/8" (9.5)	1870 (8.32)	312 (141.5)	

TOLCO™ Fig. 51NFPA - Side Beam Bracket for NFPA Rod & Fastener Sizing

Size Range: 3/8"-16 thru 1/2"-13 rod, 1/2" (15mm) thru 8" pipe (200mm)

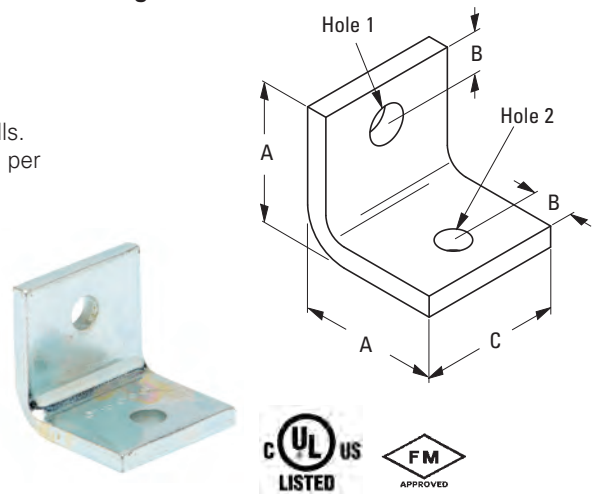
Material: Steel

Function: Recommended for attaching hanger rod to side of beams or walls. Designed to accommodate current rod schedule and fastener requirements per National Fire Protection Association (NFPA) Pamphlet 13.

Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL), and Factory Mutual Engineering approved.

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Part number, rod size and finish



Part No.	Pipe Size in. (mm)	Rod Size	A in. (mm)	B in. (mm)	C in. (mm)	Hole 1 in. (mm)	Hole 2 in. (mm)
51NFPA-3/8x3/8	1/2" - 2" (15 - 60)	3/8"-16	2" (50.8)	3/4" (19.0)	2" (50.8)	7/16" (11.1)	7/16" (11.1)
51NFPA-3/8x1/2	2 1/2" - 4" (65 - 100)	3/8"-16	2" (50.8)	3/4" (19.0)	2" (50.8)	9/16" (14.3)	7/16" (11.1)
51NFPA-1/2x1/2	5" - 6" (125 - 150)	1/2"-13	2 1/2" (63.5)	3/4" (19.0)	2 1/2" (63.5)	9/16" (14.3)	9/16" (14.3)
51NFPA-1/2x5/8	8" (200)	1/2"-13	2 1/2" (63.5)	3/4" (19.0)	2 1/2" (63.5)	1 1/16" (17.5)	9/16" (14.3)

Part No.	Design Load Lbs. (kN)	Approx. Wt./100 Lbs. (kg)
51NFPA-3/8x3/8	700 (3.11)	35 (15.9)
51NFPA-3/8x1/2	700 (3.11)	34 (15.4)
51NFPA-1/2x1/2	1250 (5.56)	71 (32.2)
51NFPA-1/2x5/8	1250 (5.56)	70 (31.7)

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

Upper Attachments

TOLCO™ Fig. 50 - Side Beam Bracket for NFPA Rod & Fastener Sizing

Size Range: 3/8"-16 thru 7/8"-9 rod

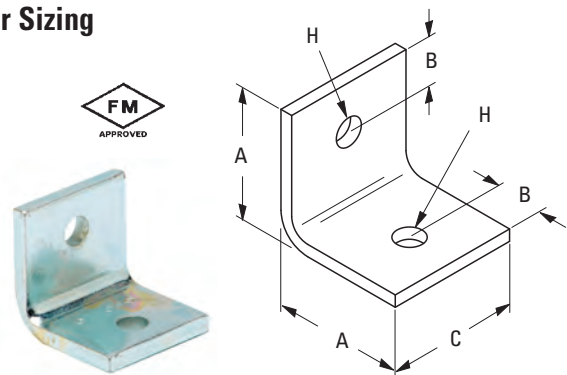
Material: Steel

Function: Recommended for attaching hanger rod to side of beams or walls.

Approvals: Factory Mutual Engineering approved (FM).

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Part number, rod size and finish



Part No.	Rod Size	A		B		C		Hole Size H		Max. Rec. Load		Approx. Wt./100	
		in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	Lbs.	(kN)	Lbs.	(kg)
50-3/8	3/8"-16	2"	(50.8)	3/4"	(19.0)	2"	(50.8)	7/16"	(11.1)	700	(3.22)	35	(15.9)
50-1/2	1/2"-13	2"	(50.8)	3/4"	(19.0)	2"	(50.8)	9/16"	(14.3)	700	(3.22)	35	(15.9)
50-5/8	5/8"-11	2"	(50.8)	3/4"	(19.0)	2"	(50.8)	11/16"	(17.5)	700	(3.22)	32	(14.5)
50-3/4	3/4"-10	2 1/2"	(63.5)	3/4"	(19.0)	2 1/2"	(63.5)	13/16"	(20.6)	1250	(5.56)	110	(49.9)
50-7/8	7/8"-9	2 1/2"	(63.5)	3/4"	(19.0)	2 1/2"	(63.5)	15/16"	(23.8)	1250	(5.56)	100	(45.3)

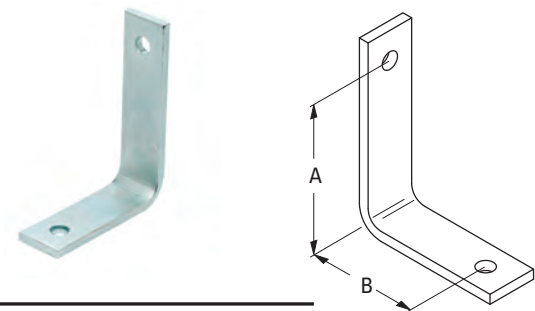
B3061 - Angle Bracket

Material: Steel

Function: — Recommended for supporting pipe at various distances from wall or column.

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Part number and finish



Part No.	Size	A		B		Hole Size	Max. Rec. Load	Approx. Wt./100			
		in.	(mm)	in.	(mm)			Lbs.	(kg)		
B3061-1	1	3"	(76.2)	2"	(50.8)	7/16"	(11.1)	180	(0.80)	46	(20.8)
B3061-2	2	4"	(101.6)	3"	(76.1)	7/16"	(11.1)	180	(0.80)	65	(29.5)
B3061-3	3	3"	(76.2)	2"	(50.8)	9/16"	(14.3)	390	(1.73)	85	(38.5)
B3061-4	4	4"	(101.6)	3"	(76.1)	9/16"	(14.3)	390	(1.73)	115	(52.1)

TOLCO™ Fig. 56 - Tapped Side Beam Connector (Stainless Steel)

Size Range: 1/2" (15mm) thru 4" (100mm) pipe (3/8"-16 rod)

Material: Stainless Steel

Function: Recommended for attaching hanger rod to steel or wood beams. Tapped hole allows easy adjustment of hanger rod.

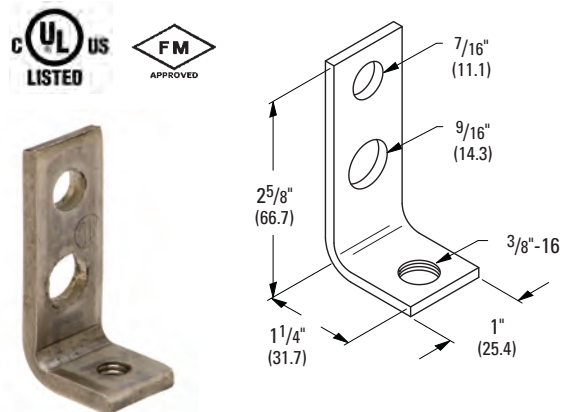
Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL), and Factory Mutual Engineering approved for 1/2" (15mm) thru 4" (100mm) pipe.

Weight: Approx. Wt./100 - 20.0 Lbs. (9.1kg)

Order By: Part number

Note: Available only in Stainless Steel materials.

Per NFPA 13: 1/2" (15mm) thru 2" (50mm) pipe use 3/8"-16 fastener;
2 1/2" (65mm) thru 4" (100mm) pipe, use 1/2"-13 fastener.



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

TOLCO™ Fig. 58 - Threaded Side Beam Bracket

Size Range: 3/8"-16 rod, pipe sizes 1/2" (15mm) thru 4" (100mm)

Material: Pre-Galvanized Steel

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

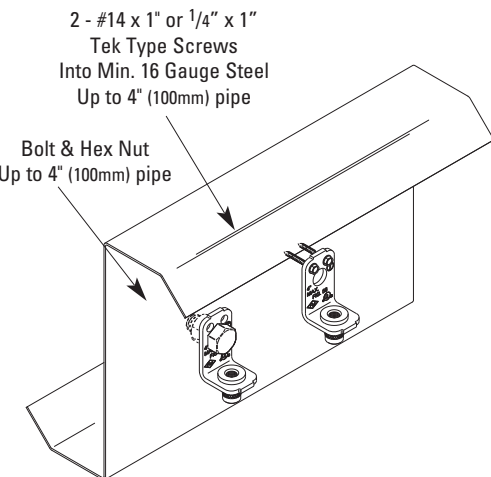
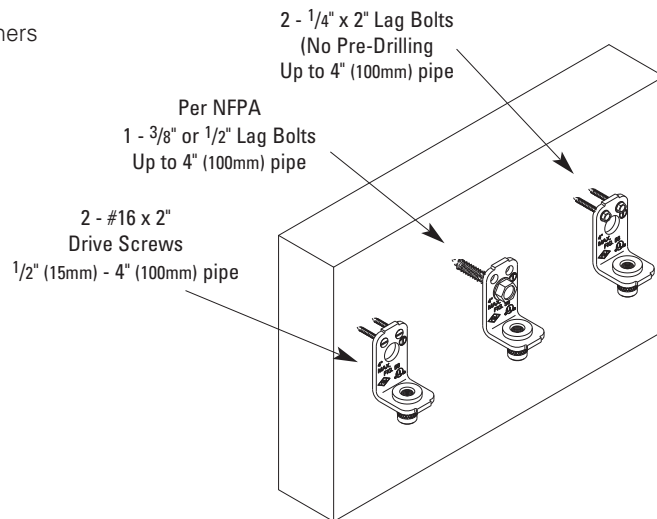
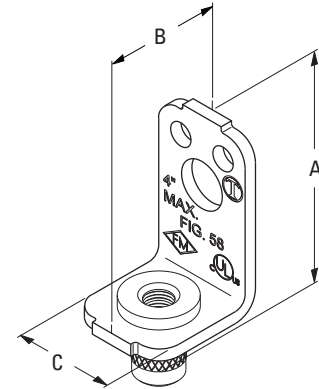
Features: Unique design allows rod to be easily threaded into bracket. Offset design permits unlimited rod adjustment. Center mounting hole will accept 3/8" and 1/2" fastener bolts. Per NFPA 13: 1/2" (15mm) thru 2" (50mm) pipe requires 3/8" fastener, 2 1/2" (65mm) thru 4" (100mm) pipe requires 1/2" fastener.*

Approvals: Underwriters Laboratories Listed in the USA (**UL**) and Canada (**cUL**), and Factory Mutual Engineering approved thru 4" (100mm) pipe.

Finish: Pre-Galvanized

Order By: Part number and finish

***Note:** Additionally UL has listed the Fig. 58 with fasteners as shown in table below.



UL Listed Fastener Table			
Pipe Size	Qty	Fastener Type	Material
2"	2	#16 x 2" Drive screws	Wood
2"	1	3/8" Lag bolt	Wood
2 1/2" - 4"	1	1/2" Lag bolt	Wood
3 1/2"	2	1/4" x 1 1/2" Lag bolts	Wood
4"	2	1/4" x 2" Lag bolts **	Wood
4"	2	#14 x 1" or 1/4" x 1" Tek type screws	Metal (15 gauge)
4"	2	#14 x 1" or 1/4" x 1" Tek type screws	Metal (16 gauge)

** No pre-drilling

Part No.	Pipe Size		Rod Size	A		B		C		Max. Rec. Load		Approx. Wt./100	
	in.	(mm)		in.	(mm)	in.	(mm)	in.	(mm)	Lbs.	(kN)	Lbs.	(kg)
58	1/2" - 4"	(15 - 100)	3/8"-16	2 3/4"	(69.8)	1 1/2"	(38.1)	1 1/8"	(28.6)	300***	(1.33)	14	(6.3)

*** With Safety Factor of 5.

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

Upper Attachments

TOLCO™ Fig. 75 - Swivel Attachment



Size Range: — 3/8"-16 Rod Attachment

Material: Steel

Function: Three recommended applications for this product:

- May be used as a Branch Line Restraint for structural attachment to anchor bolt, beam clamp, etc.
- May be used as an upper attachment with short hanger rod to omit seismic bracing.
- May be used in a pitched or sloped roof application, to meet requirements of NFPA 13 (2010) 9.1.2.6.

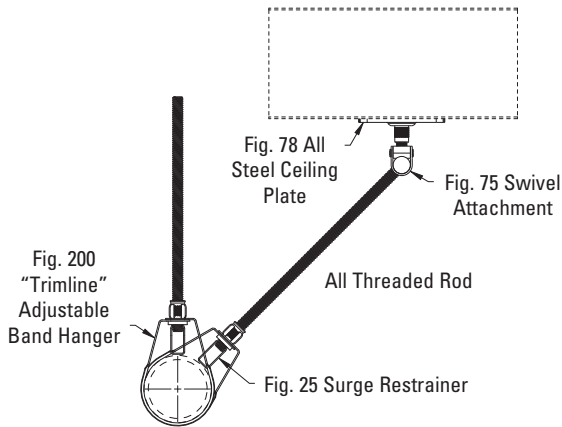
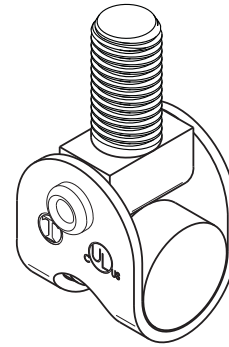
Approvals: Underwriters Laboratories Listed in the USA (**UL**) and Canada (**cUL**) to support up to 4" (100mm) pipe.

Finish: Electro-Galvanized

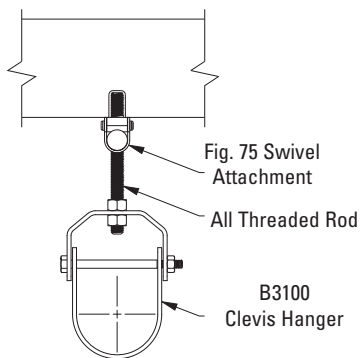
Weight: Approx. Wt./100 - 13.3 Lbs. (6.0kg)

Order By: Part number

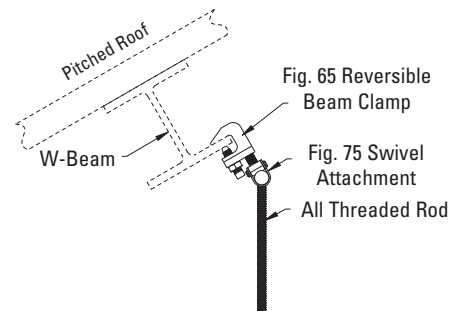
Patent: #7,887,248



May be used as a structural attachment component of a branch line restraint



May be used as an upper attachment with short hanger rod to omit seismic bracing



May be used with a pitched roof application, to meet requirements of NFPA 13 (2010) Sec. 9.1.2.5.

B3058 - Side Beam Connector

Size Range: 3/8"-16 & 1/2"-13 rods

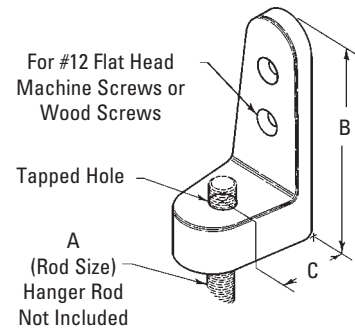
Material: Malleable Iron

Function: Designed for attaching hanger rod to the side of beams or walls.

Approvals: Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 35 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 34.

Finish: Plain or Electro-Galvanized

Order By: Part number and finish.



Part No.	Rod Size	B		C		Design Load		Approx. Wt./100	
	A	in.	(mm)	in.	(mm)	Lbs.	(kN)	Lbs.	(kg)
B3058-3/8	3/8"-16	2 3/8"	(60.3)	9/16"	(14.3)	250	(1.11)	13	(5.9)
B3058-1/2	1/2"-13	2 3/4"	(69.8)	3/4"	(19.0)	480	(2.13)	25	(11.3)

B3062 - Side Beam Bracket

Size Range: 3/8"-16 thru 5/8"-11 rods

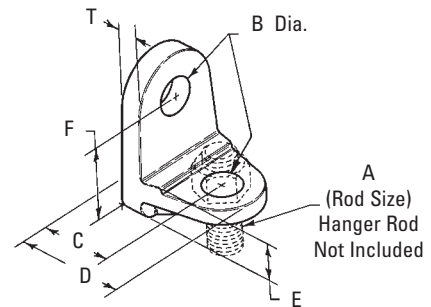
Material: Malleable Iron

Function: Designed for attaching hanger rod to the side of beams or walls.

Approvals: Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 35 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 34.

Finish: Plain or Electro-Galvanized

Order By: Part number and finish.



Part No.	Rod Size A	For Nominal Pipe Sizes in. (mm)	Design Load		Approx. Wt./100	
			With Lag Screw Lbs. (kN)	With Bolt To Steel Lbs. (kN)	Lbs. (kg)	(kg)
B3062-3/8	3/8"-16	3/4"-2" (20-50)	390 (1.73)	730 (3.25)	21	(9.5)
B3062-1/2	1/2"-13	2 1/2"-3 1/2" (65-95)	640 (2.84)	1350 (6.00)	44	(19.9)
B3062-5/8	5/8"-11	4"-5" (100-125)	760 (3.38)	2160 (9.71)	81	(36.7)

Part No.	B		C		D		E		F		T	
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)
B3062-3/8	7/16"	(11.1)	7/8"	(22.2)	1 3/8"	(34.9)	5/8"	(15.9)	1 7/16"	(36.5)	1/4"	(6.3)
B3062-1/2	9/16"	(14.3)	1 3/16"	(30.2)	1 13/16"	(46.0)	3/4"	(19.0)	1 7/8"	(47.6)	1 1/32"	(8.7)
B3062-5/8	3/4"	(19.0)	1 7/16"	(36.5)	2 3/16"	(55.6)	7/8"	(22.2)	2 1/4"	(54.0)	7/16"	(11.1)

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