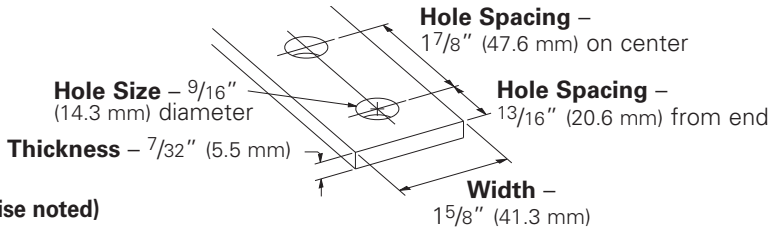
Fittings

This section offers a full selection of fittings and accessories to complete our strut system. Fittings are made from hot rolled, pickled and oiled plate or strip steel in accordance with ASTM A1018 33,000 PSI min. yield, unless noted.

Dimensions

The following dimensions apply to all fittings except as noted:



Materials & Finishes (Unless otherwise noted)

Finish Code	Finish	Specification
PLN	Plain	ASTM A1018 33,000 PSI min. yield
ZN	Electro-Plated Zinc	ASTM B633 SC3 Type III or ASTM A653
GRN	DURA GREEN™	
HDG	Hot-Dipped Galvanized	ASTM A123
SS4	Stainless Steel Type 304	ASTM A240
SS6	Stainless Steel Type 316	ASTM A240
AL	Aluminum	ASTM B209

Note: A minimum order may apply on special material and finishes.

Load Data

The load data published includes safety factor of 2.5 when used with 12 ga. (2.6) channel safety factor = ratio of ultimate load to the design load).
Use 1/2"-13 x 7/8" hex head cap screws and 1/2"-13 (N225 or TN225) channel nuts for the rated results.

Note: See page 277 Design Load Data for typical channel - fitting connections.

Hardware

Nuts and bolts are not included with the fittings and must be ordered separately, unless noted.

Recommended Bolt Torque

Bolt Size	1/4"-20	5/16"-18	3/8"-16	1/2"-13
Foot/Lbs.	6	11	19	50
Nm	8	15	26	68

See chart on page 154 for setscrew torque.

Pre-Assembled Fittings

Some fittings are available with hex head cap screws and channel nuts pre-assembled. These fittings and finishes will be flagged using the following symbol.

PA ZN GRN

4Dimension™ Strut System Compatible

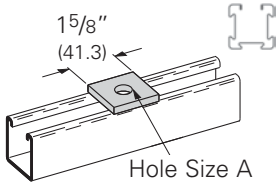
These fittings and finishes will be flagged using the following symbol.

Metric

Metric dimensions are shown in parentheses. Unless noted, all metric dimensions are in millimeters.

B200-B202-2

• Standard finishes: ZN, GRN, HDG, SS4, SS6, AL

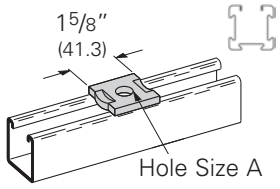


Square Washer

Part No.	A In.	A mm	Bolt Size In.	Bolt Size mm	Wt./C Lbs.	Wt./C kg
B200	3/8″	(9.5)	5/16″	(7.9)	18	(8.1)
B201	7/16″	(11.1)	3/8″	(9.5)	18	(8.1)
B202	9/16″	(14.2)	1/2″	(12.7)	17	(7.7)
B202-1	11/16″	(17.4)	5/8″	(15.9)	16	(7.2)
B202-2	13/16″	(20.6)	3/4″	(19.0)	15	(6.8)
B202-3	15/16″	(23.8)	7/8″	(22.2)	14	(6.3)

B200D-B202-2D

• Standard finishes: ZN, GRN, HDG, SS4, SS6, AL



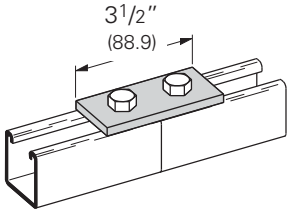
No Twisr Square Washer

Part No.	A In.	A mm	Bolt Size In.	Bolt Size mm	Wt./C Lbs.	Wt./C kg
B200D	3/8″	(9.5)	5/16″	(7.9)	18	(8.1)
B201D	7/16″	(11.1)	3/8″	(9.5)	18	(8.1)
B202D	9/16″	(14.2)	1/2″	(12.7)	17	(7.7)
B202-1D	11/16″	(17.4)	5/8″	(15.9)	16	(7.2)
B202-2D	13/16″	(20.6)	3/4″	(19.0)	15	(6.8)

B129
Two Hole Splice Plate

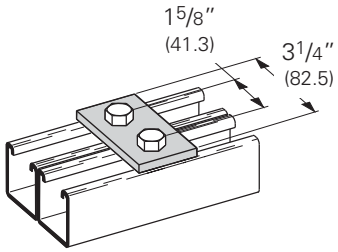
• Standard finishes: ZN, GRN
• Wt./C 37 Lbs. (16.8 kg)

PA ZN GRN



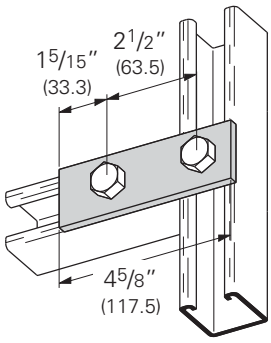
B340
Two Hole Splice Plate

• Standard finishes: ZN, GRN
• Wt./C 34 Lbs. (15.4 kg)



B528
Two Hole Splice Plate

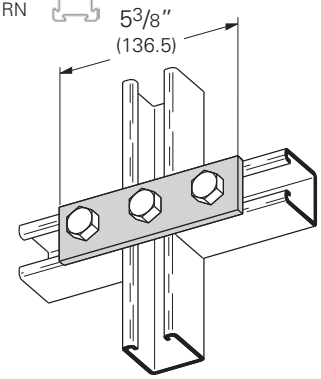
• Standard finishes: ZN, GRN
• Wt./C 50 Lbs. (22.7 kg)



B141
Three Hole Splice Plate

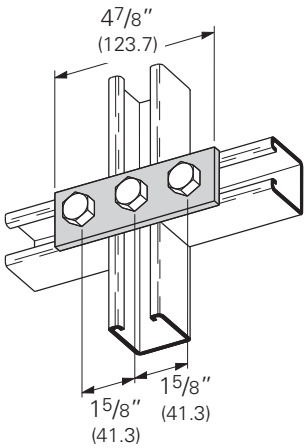
• Standard finishes: ZN, GRN
• Wt./C 55 Lbs. (24.9 kg)

PA ZN GRN



B557
Three Hole Splice Plate

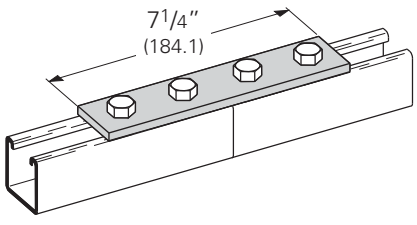
• Standard finishes: ZN, GRN
• Wt./C 50 Lbs. (22.7 kg)



B341
Four Hole Splice Plate

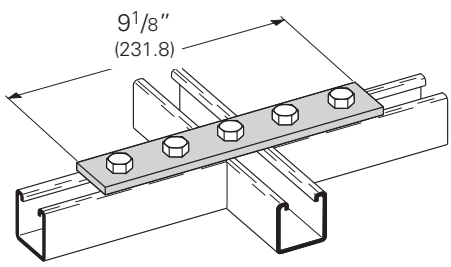
• Standard finishes: ZN, GRN, HDG
• Wt./C 76 Lbs. (34.5 kg)

PA ZN GRN



B342
Five Hole Splice Plate

• Standard finishes: ZN, GRN
• Wt./C 96 Lbs. (43.5 kg)



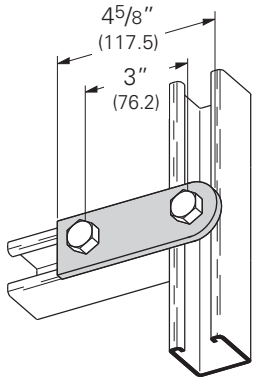
PA Pre-assembled fitting

4Dimension compatible fitting

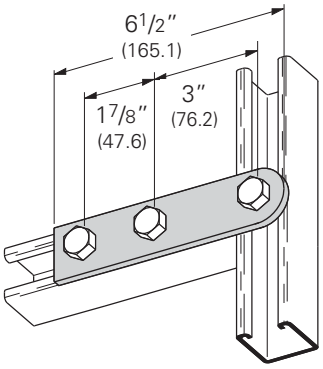
Reference page 106 for general fitting and standard finish specifications.

Flat Plate Fittings

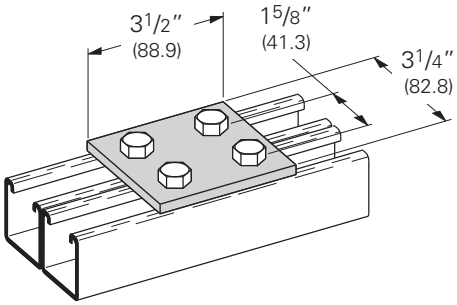
B138
Two Hole Swivel Plate
- Standard finishes: ZN, GRN
- Wt./C 48 Lbs. (21.8 kg)



B139
Three Hole Swivel Plate
- Standard finishes: ZN, GRN
- Wt./C 69 Lbs. (31.3 kg)

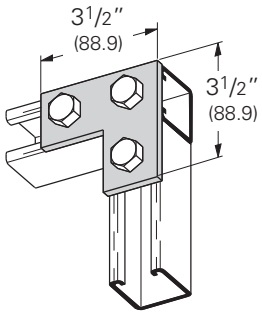


B504
Four Hole Splice Plate
- Standard finishes: ZN, GRN
- Wt./C 73 Lbs. (33.1 kg)



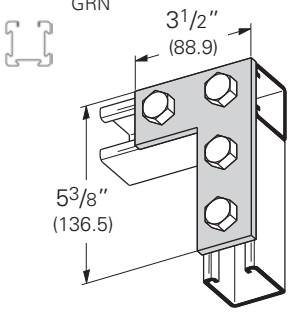
B140
Three Hole Corner Plate
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)

PA ZN GRN



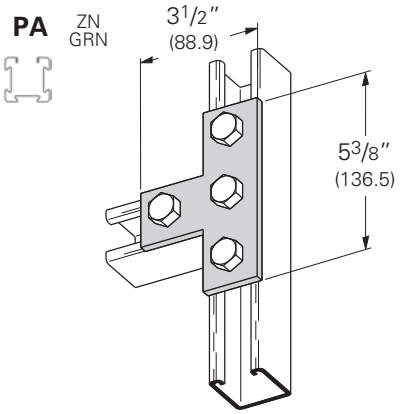
B143
Four Hole Corner Plate
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 75 Lbs. (34.0 kg)

PA ZN GRN



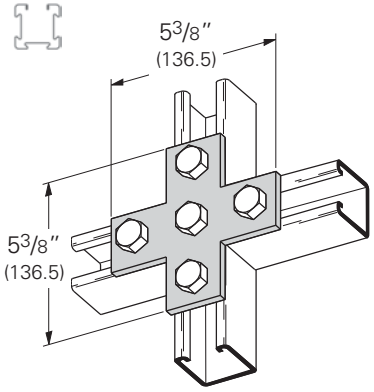
B133
Four Hole Tee Plate
- Standard finishes: ZN, GRN, HDG, SS4, AL
- Wt./C 75 Lbs. (34.0 kg)

PA ZN GRN

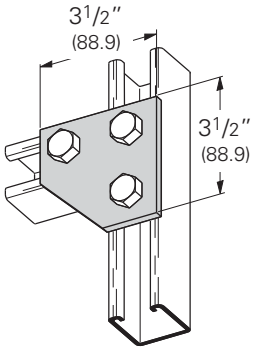


B132
Five Hole Cross Plate
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)

PA ZN GRN

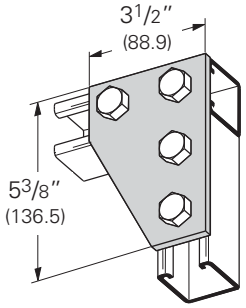


B135
Three Hole Corner Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



B142
Four Hole Corner Gusset Plate
- Standard finishes: ZN, GRN, HDG
- Wt./C 102 Lbs. (46.2 kg)

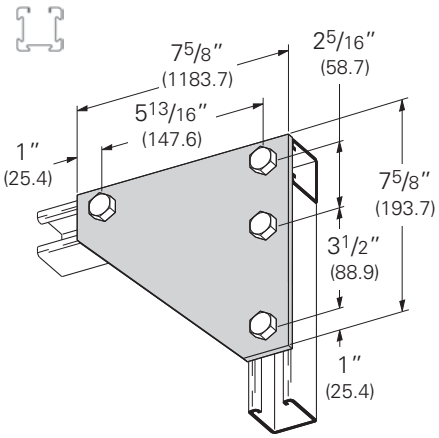
PA ZN GRN



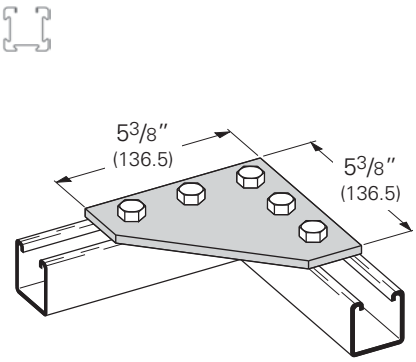
PA Pre-assembled fitting 4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

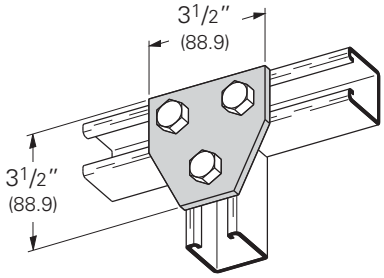
B137
Four Hole Corner Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 273 Lbs. (123.8 kg)



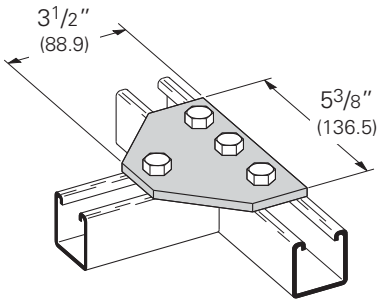
B556
Five Hole Corner Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 145 Lbs. (65.8 kg)



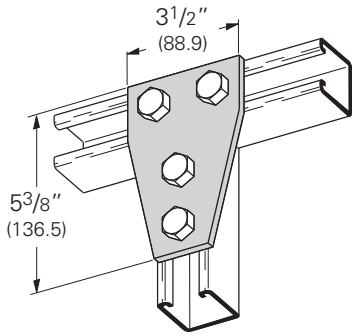
B337
Three Hole Tee Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



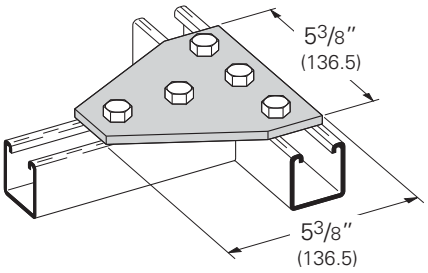
B432
Four Hole Tee Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 100 Lbs. (45.3 kg)



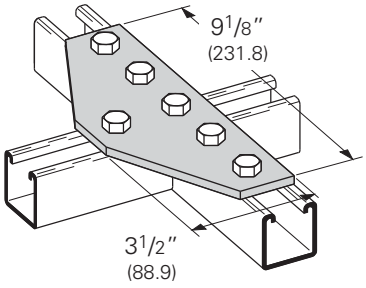
B136
Four Hole Tee Gusset Plate
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



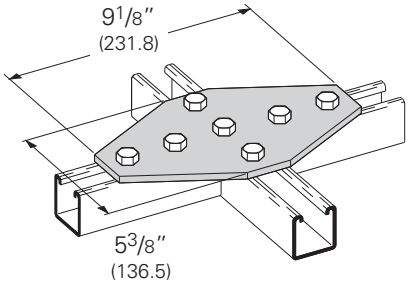
B532
Five Hole Tee Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 143 Lbs. (64.8 kg)



B339
Six Hole Tee Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 149 Lbs. (67.6 kg)



B334
Seven Hole Cross Gusset Plate
- Standard finishes: ZN, GRN
- Wt./C 232 Lbs. (105.2 kg)

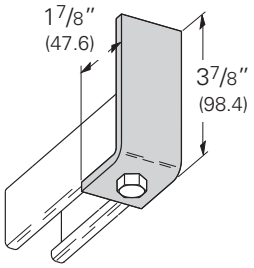


PA Pre-assembled fitting 4Dimension compatible fitting

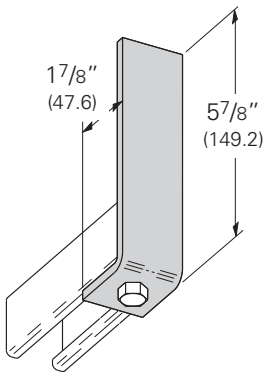
Reference page 106 for general fitting and standard finish specifications.

90° Angle Fittings

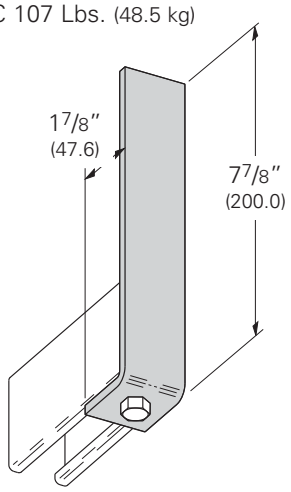
B420-378
One Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 60 Lbs. (27.2 kg)



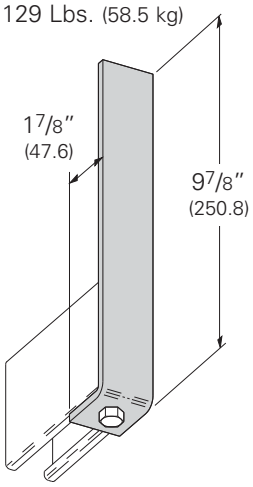
B420-578
One Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 85 Lbs. (38.5 kg)



B420-778
One Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 107 Lbs. (48.5 kg)

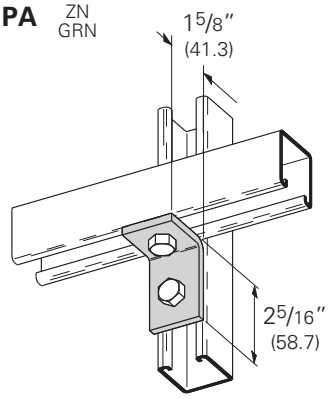


B420-978
One Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 129 Lbs. (58.5 kg)



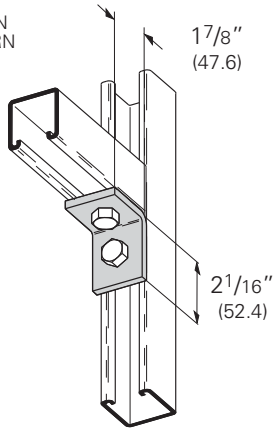
B101
Two Hole Corner Angle
- Standard finishes: ZN, GRN, HDG, SS4, AL
- Wt./C 37 Lbs. (16.8 kg)

PA ZN GRN



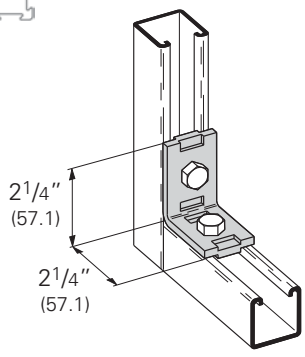
B230
Two Hole Corner Angle
- Standard finishes: ZN, GRN, HDG, SS4, AL
- Wt./C 37 Lbs. (16.8 kg)

PA ZN GRN

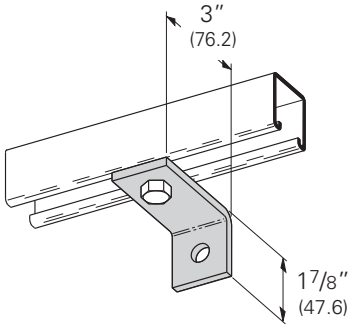


B231
Two Hole "No-Twist" Corner Angle
- Standard finishes: ZN, GRN, HDG
- Wt./C 41 Lbs. (18.6 kg)

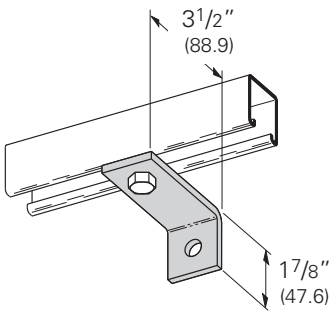
PA ZN GRN



B359
Two Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 48 Lbs. (21.8 kg)



B360
Two Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)

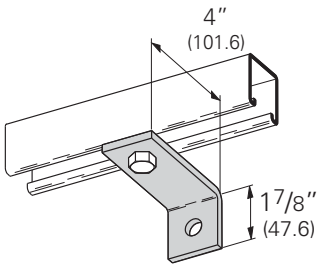


PA Pre-assembled fitting

4Dimension compatible fitting

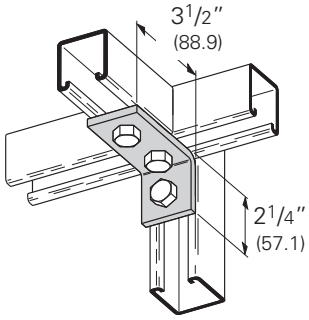
Reference page 106 for general fitting and standard finish specifications.

B361
Two Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 60 Lbs. (27.2 kg)



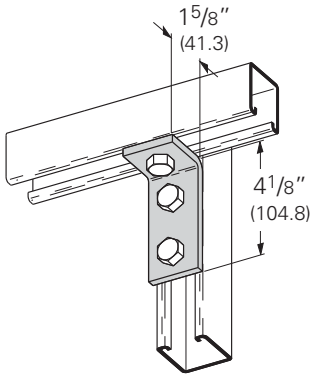
B102
Three Hole Corner Angle
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)

PA ZN GRN



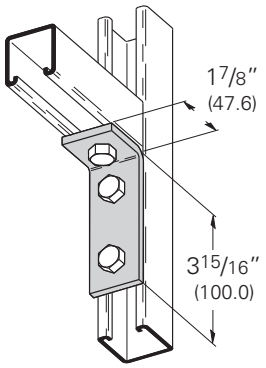
B103
Three Hole Corner Angle
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)

PA ZN GRN



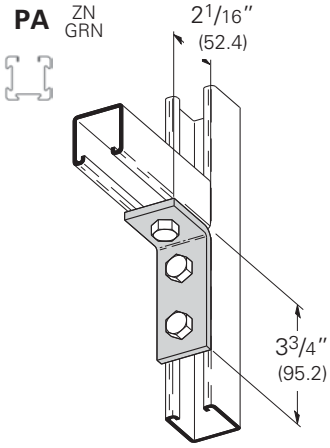
B232
Three Hole Corner Angle
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 56 Lbs. (25.4 kg)

PA ZN GRN

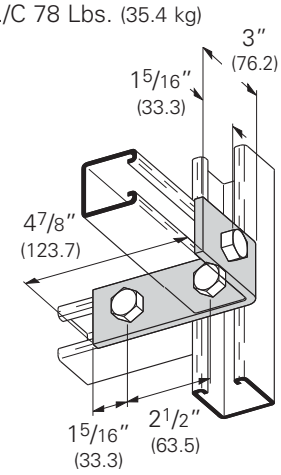


B374
Three Hole Corner Angle
- Standard finishes: ZN, GRN, HDG
- Wt./C 56 Lbs. (25.4 kg)

PA ZN GRN

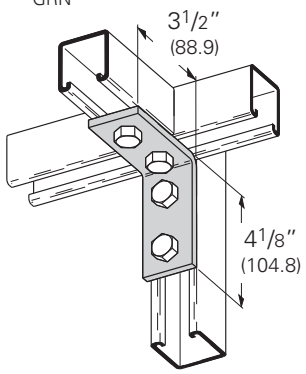


B529
Three Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 78 Lbs. (35.4 kg)



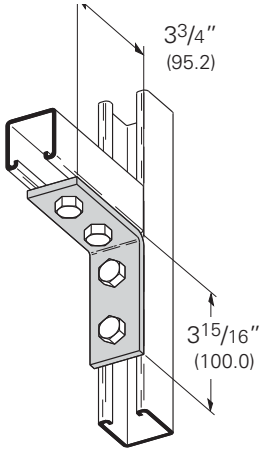
B104
Four Hole Corner Angle
- Standard finishes: ZN, GRN, HDG, SS4, SS6, AL
- Wt./C 78 Lbs. (35.4 kg)

PA ZN GRN

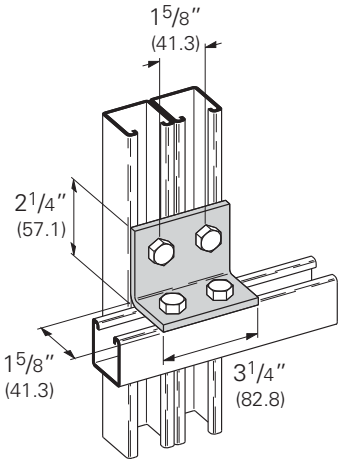


B115
Four Hole Corner Angle
- Standard finishes: ZN, GRN, HDG, SS4, AL
- Wt./C 76 Lbs. (34.5 kg)

PA ZN GRN



B558
Four Hole Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 73 Lbs. (33.1 kg)

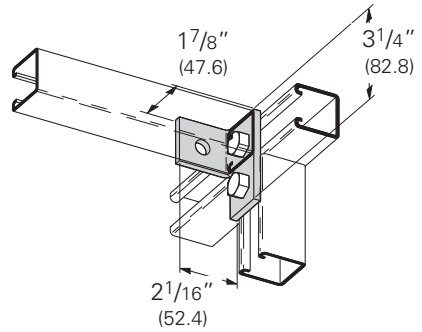


PA Pre-assembled fitting 4Dimension compatible fitting

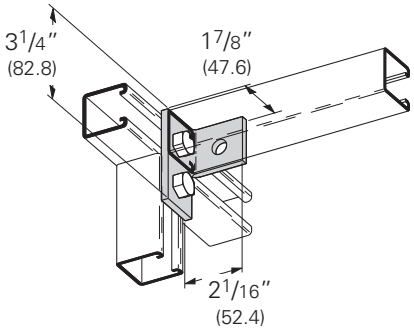
Reference page 106 for general fitting and standard finish specifications.

90° Angle Fittings

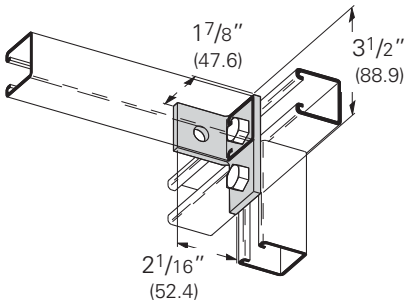
B235R
Three Hole (Right Hand) Offset Bent Angle
- 1 5/8" (41.3) from center to center of the holes that are shown with bolt heads
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



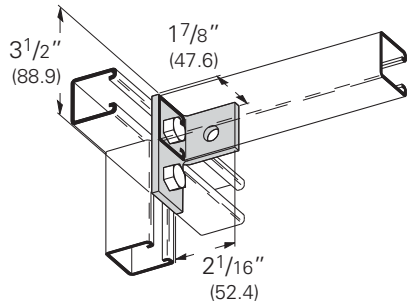
B235L
Three Hole (Left Hand) Offset Bent Angle
- 1 5/8" (41.3) from center to center of the holes that are shown with bolt heads
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



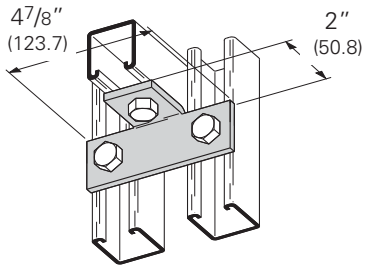
B236R
Three Hole (Right Hand) Offset Bent Angle
- Standard finishes: ZN, GRN
- Wt./C 65 Lbs. (29.5 kg)



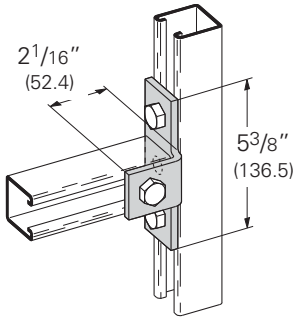
B236L
Three Hole (Left Hand) Offset Bent Angle
- Standard finishes: ZN, GRN
- Wt./C 65 Lbs. (29.5 kg)



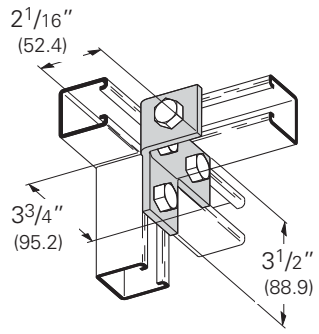
B237
Three Hole Offset Bent Tee
- Standard finishes: ZN, GRN
- Wt./C 71 Lbs. (32.2 kg)



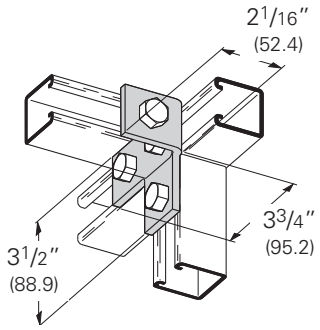
B357
Four Hole Offset Bent Tee
- Standard finishes: ZN, GRN
- Wt./C 77 Lbs. (34.9 kg)



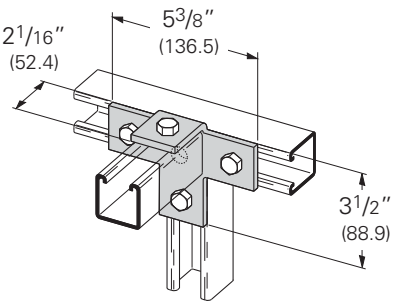
B238R
Four Hole (Right Hand) Offset Bent Tee
- Standard finishes: ZN, GRN
- Wt./C 76 Lbs. (34.5 kg)



B238L
Four Hole (Left Hand) Offset Bent Tee
- Standard finishes: ZN, GRN
- Wt./C 76 Lbs. (34.5 kg)

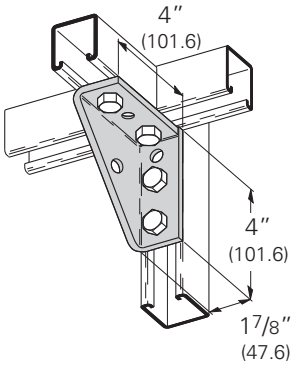


B239
Five Hole Offset Bent Tee
- Standard finishes: ZN, GRN
- Wt./C 96 Lbs. (43.5 kg)

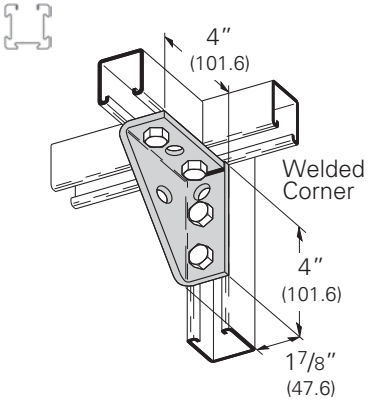


Reference page 106 for general fitting and standard finish specifications.

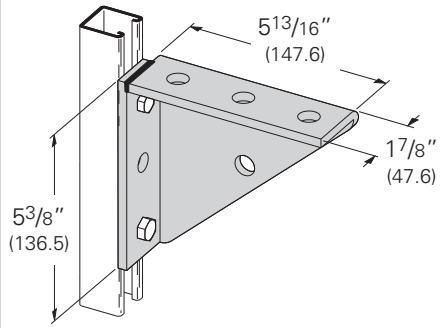
B844
Universal Shelf Bracket
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 132 Lbs. (59.9 kg)



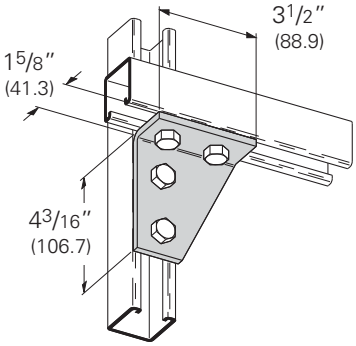
B844W
Universal Shelf Bracket - Welded
- Standard finishes: ZN, GRN
- Wt./C 134 Lbs. (60.8 kg)



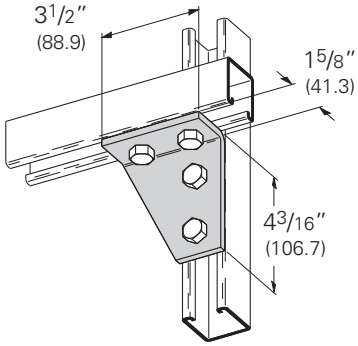
B888W
Universal Shelf Bracket - Welded
- Standard finishes: ZN, GRN
- Wt./C 197 Lbs. (89.4 kg)



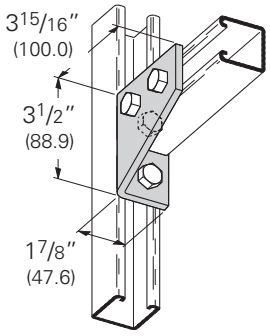
B234R
Four Hole (Right Hand) Corner Gusset
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



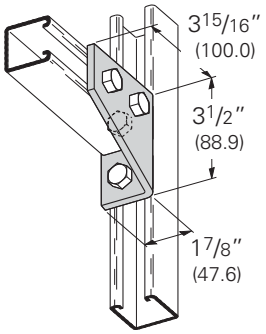
B234L
Four Hole (Left Hand) Corner Gusset
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



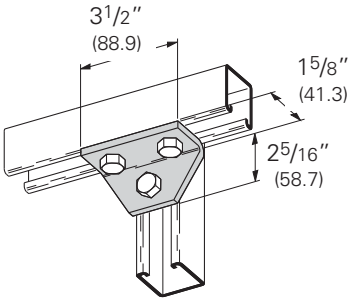
B134R
Four Hole (Right Hand) Corner Gusset
- Standard finishes: ZN, GRN
- Wt./C 100 Lbs. (45.3 kg)



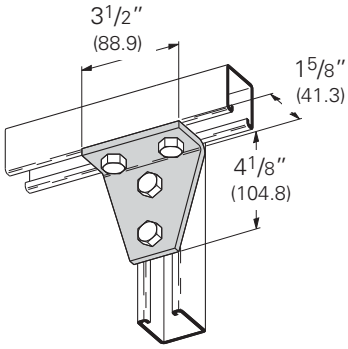
B134L
Four Hole (Left Hand) Corner Gusset
- Standard finishes: ZN, GRN
- Wt./C 100 Lbs. (45.3 kg)



B125
Three Hole Gussetted Shelf Angle
- Standard finishes: ZN, GRN
- Wt./C 67 Lbs. (30.4 kg)



B118
Four Hole Gussetted Shelf Angle
- Standard finishes: ZN, GRN, HDG
- Wt./C 102 Lbs. (46.2 kg)

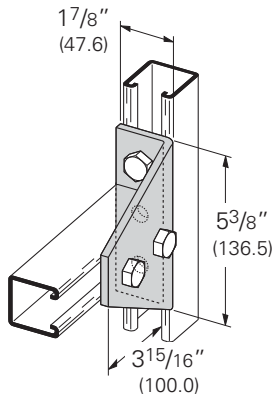


4Dimension compatible fitting

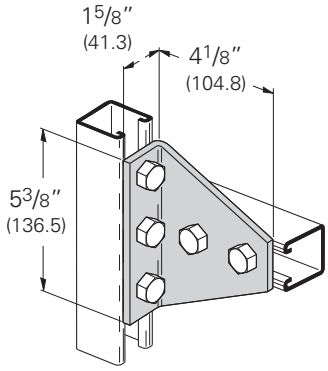
Reference page 106 for general fitting and standard finish specifications.

90° Angle Fittings

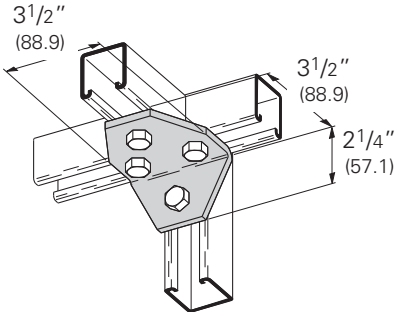
B485
Four Hole Gussetted Shelf Angle
- Standard finishes: ZN, GRN
- Wt./C 148 Lbs. (67.1 kg)



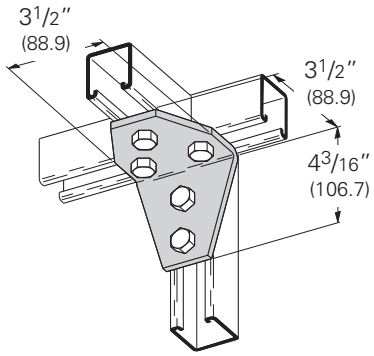
B533
Five Hole Gussetted Shelf Angle
- Standard finishes: ZN, GRN
- Wt./C 141 Lbs. (63.9 kg)



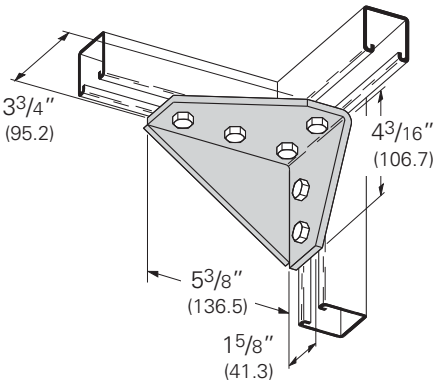
B126
Four Hole Gussetted Three Way Shelf Angle
- Standard finishes: ZN, GRN
- Wt./C 101 Lbs. (45.8 kg)



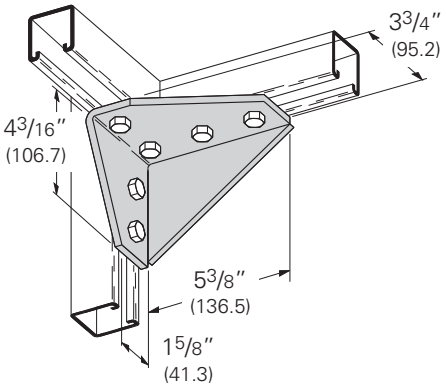
B127
Five Hole Gussetted Three Way Shelf Angle
- Standard finishes: ZN, GRN
- Wt./C 135 Lbs. (61.2 kg)



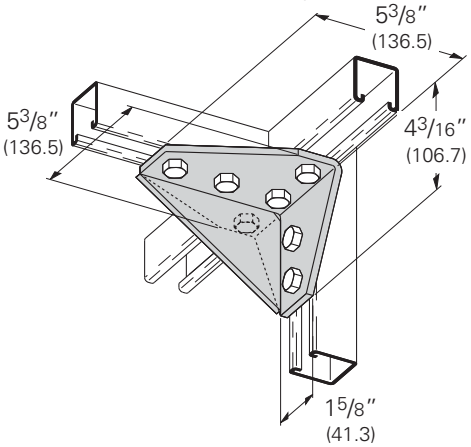
B503R
Six Hole (Right Hand) Gussetted Corner Connection
- Standard finishes: ZN, GRN
- Wt./C 229 Lbs. (103.9 kg)



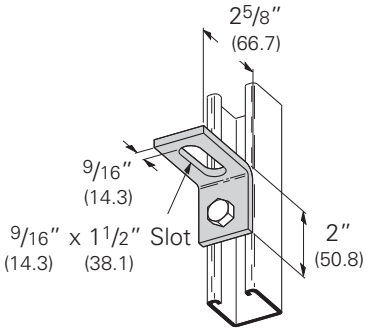
B503L
Six Hole (Left Hand) Gussetted Corner Connection
- Standard finishes: ZN, GRN
- Wt./C 229 Lbs. (103.9 kg)



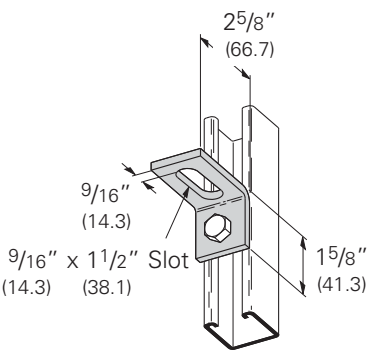
B663
Seven Hole Gussetted Corner Connection
- Standard finishes: ZN, GRN
- Wt./C 289 Lbs. (131.1 kg)



B371
Two Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 41 Lbs. (18.6 kg)



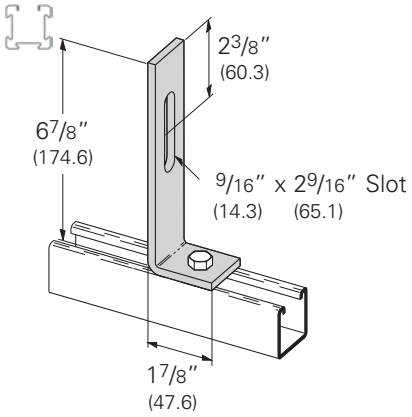
B372
Two Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 38 Lbs. (17.2 kg)



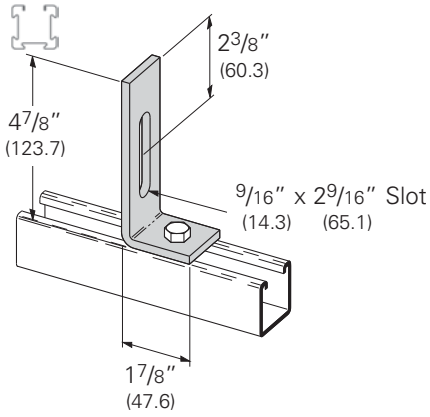
4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

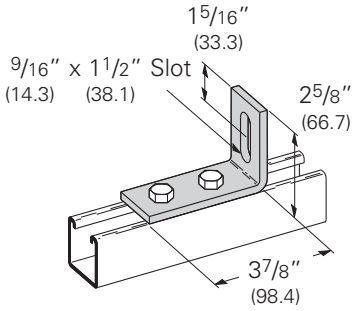
B496
Two Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 85 Lbs. (38.5 kg)



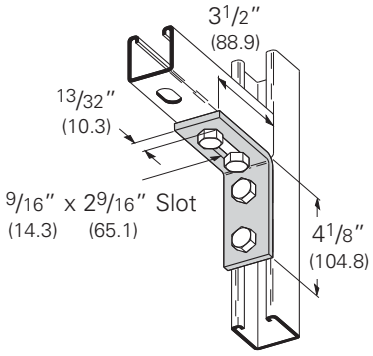
B496-1
Two Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN, HDG
- Wt./C 58 Lbs. (26.3 kg)



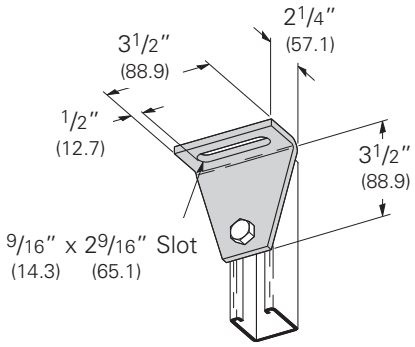
B371-2
Three Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 61 Lbs. (27.6 kg)



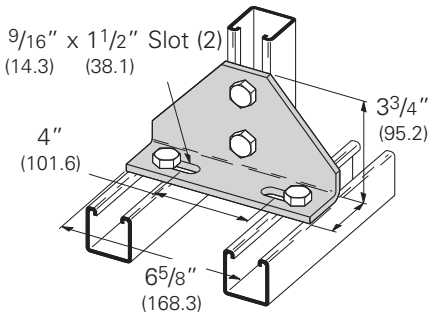
B104SH
Three Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 68 Lbs. (30.8 kg)



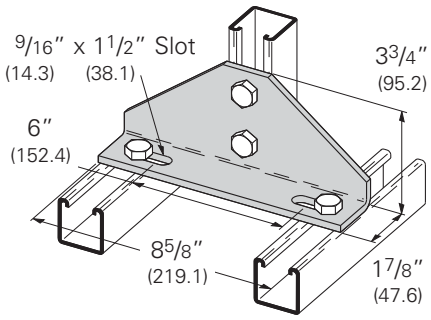
B461
Two Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 87 Lbs. (39.4 kg)



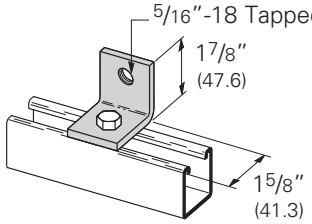
B112
Four Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 180 Lbs. (81.6 kg)



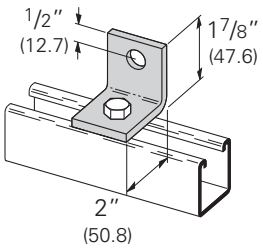
B113
Four Hole Adjustable Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 256 Lbs. (116.1 kg)



B109S
Two Hole Tapped Corner Angle
- Standard finishes: ZN, GRN
- Wt./C 33 Lbs. (14.9 kg)



B521
Two Hole Bus Duct Angle
- Standard finishes: ZN, GRN
- Wt./C 37 Lbs. (16.8 kg)

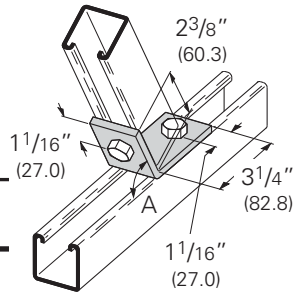


4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

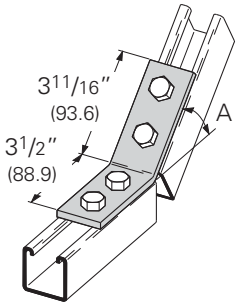
Angular Fittings

B147-B152
Two Hole Open Angle
- Standard finishes: ZN, GRN



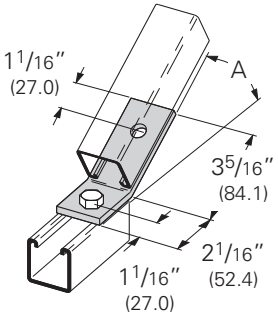
Part No.	A	Wt./C Lbs.	kg
B147	82 1/2°	63	(28.6)
B148	75°		
B149	67 1/2°		
B150	60°		
B151	52 1/2°		
B152	37 1/2°		

B243-B253
Four Hole Open Angle
- Standard finishes: ZN, GRN



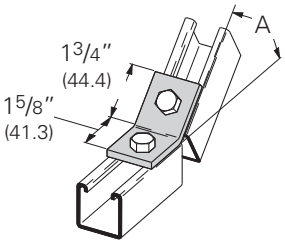
Part No.	A	Wt./C Lbs.	kg
B243	7 1/2°	77	(34.9)
B244	15°		
B245	22 1/2°		
B246	30°		
B247	37 1/2°		
B248	45°		
B249	52 1/2°		
B250	60°		
B251	67 1/2°		
B252	75°		
B253	82 1/2°		

B162-B165
Two Hole Open Angle
- Standard finishes: ZN, GRN



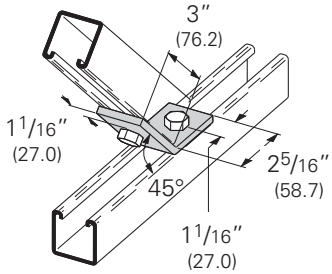
Part No.	A	Wt./C Lbs.	kg
B162	30°	59	(26.7)
B163	22 1/2°		
B164	15°		
B165	7 1/2°		

B322-B332
Two Hole Open Short Angle
- Standard finishes: ZN, GRN

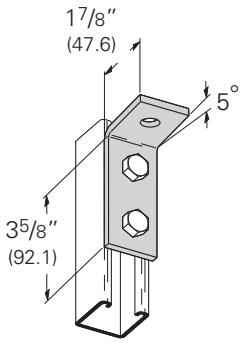


Part No.	A	Wt./C Lbs.	kg
B322	7 1/2°	35	(15.9)
B323	15°		
B324	22 1/2°		
B325	30°		
B326	37 1/2°		
B327	45°		
B328	52 1/2°		
B329	60°		
B330	67 1/2°		
B331	75°		
B332	82 1/2°		

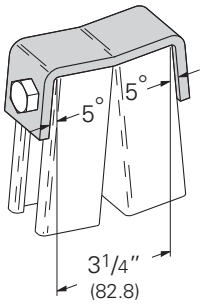
B154
Two Hole Open Angle
- Standard finishes: ZN, GRN, SS4
- Wt./C 58 Lbs. (26.3 kg)



B522
Three Hole 95° Open Angle Fitting
- Standard finishes: ZN, GRN
- Wt./C 54 Lbs. (24.5 kg)



B488
Two Hole Leg Connection
- Standard finishes: ZN, GRN
- Wt./C 100 Lbs. (45.3 kg)

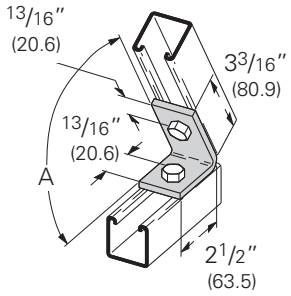


4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

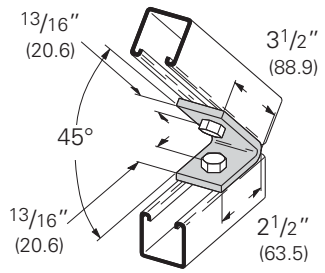
B156 - B161
Two Hole Closed Angle
• Standard finishes: ZN, GRN

Part No.	A	Wt./C Lbs.	kg
B156	82 1/2°	56	(25.4)
B157	75°		
B158	67 1/2°		
B159	60°		
B160	52 1/2°		
B161	37 1/2°		



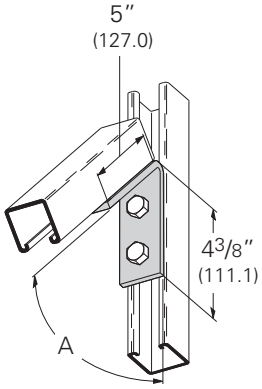
B155
Two Hole Closed Angle
• Standard finishes: ZN, GRN, HDG, SS4
• Wt./C 63 Lbs. (28.6 kg)

PA ZN GRN

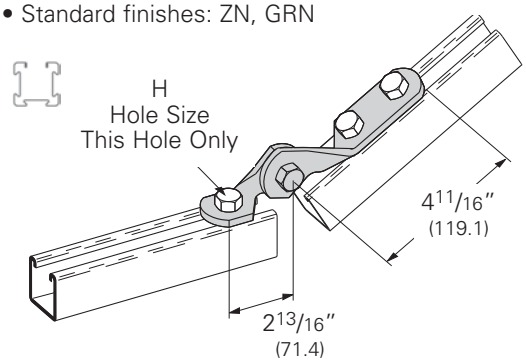


B363 - B369
Four Hole Closed Angle
• Standard finishes: ZN, GRN

Part No.	A	Wt./C Lbs.	kg
B363	82 1/2°	95	(43.1)
B364	75°		
B365	67 1/2°		
B366	60°		
B367	52 1/2°		
B368	45°		
B369	37 1/2°		

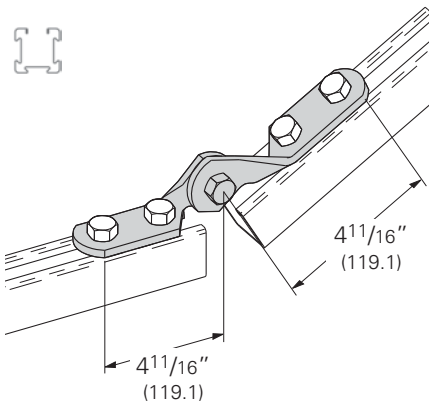


B335-2 SERIES
Three Hole Adjustable Hinge
• Standard finishes: ZN, GRN



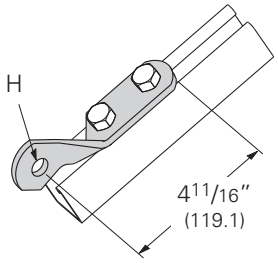
Part No. & Size	Hole Size H In.	mm	Wt./C Lbs.	kg
B335-2-3/8	7/16"	(11.1)	96	(43.2)
B335-2-1/2	9/16"	(14.3)	94	(42.3)
B335-2-5/8	11/16"	(17.4)	92	(41.4)
B335-2-3/4	13/16"	(20.6)	90	(40.5)

B335
Four Hole Adjustable Hinge
• Standard finishes: ZN, GRN
• Wt./C 110 Lbs. (49.9 kg)

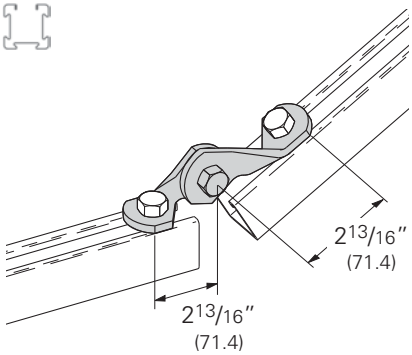


B335V
Three Hole Half Hinge
• Standard finishes: ZN, GRN

Part No. & Size	Hole Size H In.	mm	Wt./C Lbs.	kg
B335V-1/2	9/16"	(14.3)	53	(24.1)
B335V-5/8	11/16"	(17.4)	54	(24.5)
B335V-3/4	13/16"	(20.6)	55	(24.9)



B335-1
Two Hole Adjustable Hinge
• Standard finishes: ZN, GRN
• Wt./C 78 Lbs. (35.4 kg)



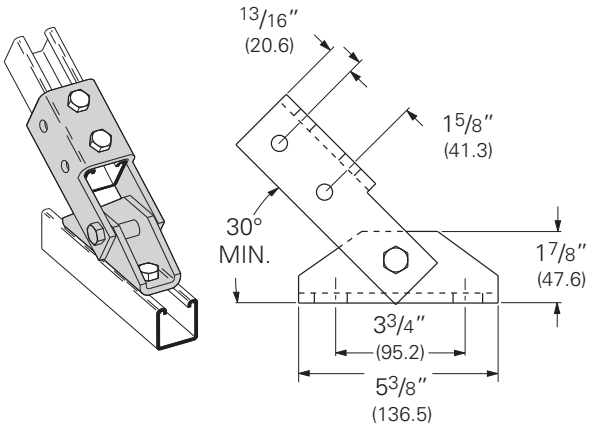
PA Pre-assembled fitting 4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

Angular Fittings

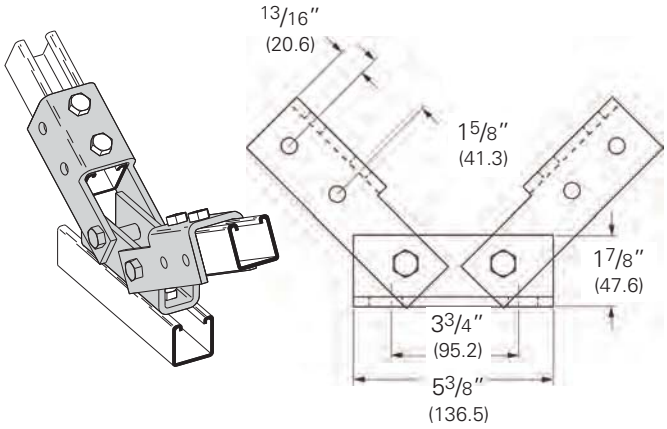
B634
Single Channel Adjustable Brace

- Standard finishes: ZN, GRN
- Wt./C 306 Lbs. (138.8 kg)



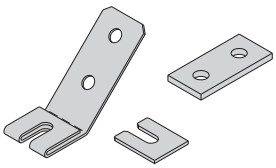
B635
Double Channel Adjustable Brace

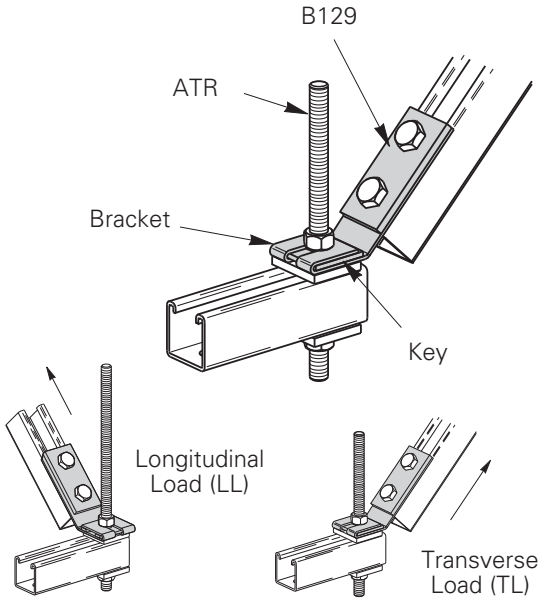
- Standard finishes: ZN, GRN
- Wt./C 518 Lbs. (234.9 kg)



B650 SERIES
Seismic Retrofit Bracket

- Available for 3/8", 1/2", 5/8", and 3/4" threaded rods.
- Allows installer to easily brace existing trapeze supports.
- Includes: Bracket, B129 plate, & key. Hardware sold separately.
- Standard finish: ZN, GRN

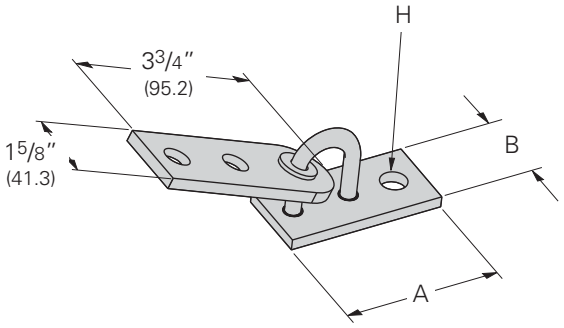




Part No. & Size	For Rod Size	TL Lbs.	TL kN	LL Lbs.	LL kN	Wt./C Lbs.	Wt./C kg
B650-3/8	3/8"	1100	(4.89)	1100	(4.89)	92	(41.4)
B650-1/2	1/2"	1500	(6.67)	1500	(6.67)	97	(43.6)
B650-5/8	5/8"	1500	(6.67)	1500	(6.67)	95	(42.7)
B650-3/4	3/4"	1500	(6.67)	1500	(6.67)	107	(48.5)

B633
Adjustable Seismic Hinge Fitting

- Use 1/2" Bolt & Channel Nut on two hole side of Connector Fitting (Torque to 50 ft.-lbs.)
- Allows for swivel in two planes.
- Standard finish: ZN



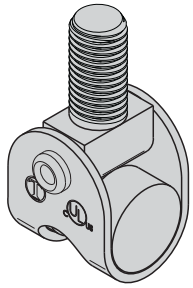
Part No. & Size	A In.	A mm	B In.	B mm	Hole Size H In.	Hole Size H mm	Wt./C Lbs.	Wt./C kg
B633-1/2	31/2"	(82.5)	15/8"	(41.3)	9/16"	(14.3)	92	(41.4)
B633-5/8	31/2"	(82.5)	15/8"	(41.3)	11/16"	(17.4)	97	(43.6)
B633-3/4	31/2"	(82.5)	15/8"	(41.3)	13/16"	(20.6)	95	(42.7)
B633-7/8	39/16"	(90.5)	2"	(50.8)	15/16"	(23.8)	107	(48.5)
B633-1	39/16"	(90.5)	2"	(50.8)	11/16"	(27.0)	120	(54.0)
B633-1 1/8	39/16"	(90.5)	2"	(50.8)	13/16"	(30.2)	104	(47.2)
B633-1 1/4	37/8"	(98.4)	21/4"	(57.1)	15/16"	(33.3)	114	(51.7)

4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

Fig. 75
Swivel Attachment

See page 89 for product information



SC228
Hanger Rod Stiffener

See page 91 for product information

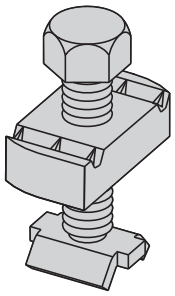


Fig. 98
Rod Stiffener

See page 91 for product information

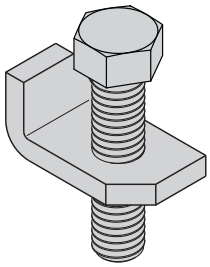


Fig. 98B
Rod Stiffener with Break-Off Bolt Head

See page 91 for product information

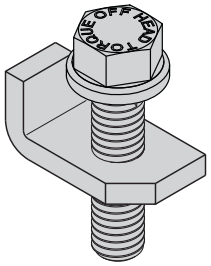


Fig. 69
Retaining Strap

See page 156 for product information

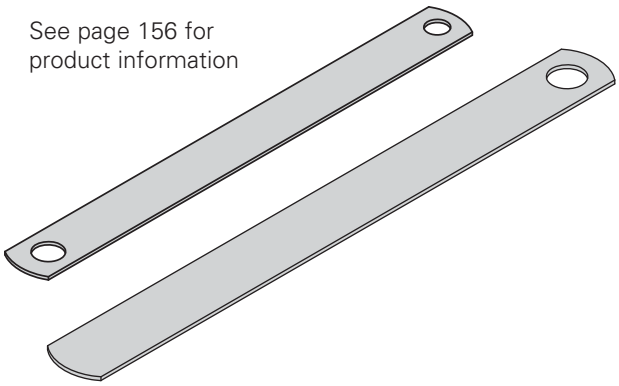


Fig. 69R
Retrofit Retaining Strap

See page 156 for product information

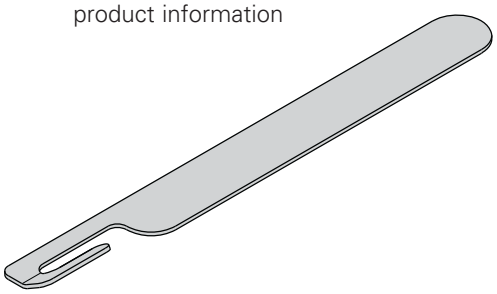


Fig. 65
Reversible Steel C-Type Beam Clamp - 3/4" (19.0mm) Throat Opening

See page 157 for product information

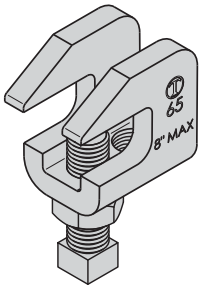


Fig. 65XT
Reversible C-Type Beam Clamp

See page 157 for product information

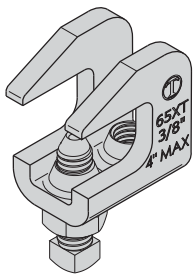
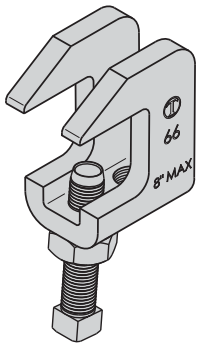


Fig. 66
Reversible Steel C-Type Beam Clamp - 1 1/4" (31.7mm) Throat Opening

See page 157 for product information



Reference page 106 for general fitting and standard finish specifications.

Miscellaneous Seismic Fittings

TOLCO™ Fig. 825 - Bar Joist Sway Brace Attachment

Size Range: One size accommodates all Fig. 900 Series sway brace attachments. Maximum Horizontal Design Load 2015 lbs (8.96kN).

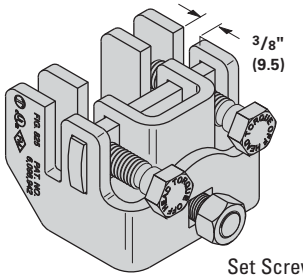
Material: Steel

Function: To attach sway bracing and hanger assemblies to steel open web structural members.

Features: This product's design incorporates a concentric attachment point which is critical to the performance of structural seismic connections. NFPA 13 indicates the importance of concentric loading of connections and fasteners. Permits secure non-friction connection without drilling or welding. Unique design reinforces point of connection to joist. Break off head set screw design assures verification of proper installation torque (min. 31 ft.-lbs.).

c UL us LISTED

FM APPROVED

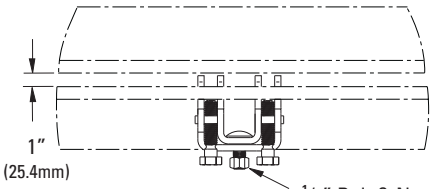


Set Screws & Hardware Included

Approvals: Underwriters Laboratories Listed in the USA **(UL)** and Canada **(cUL)**. Approved by Factory Mutual Engineering **(FM)**.

Installation Instructions: Fig. 825 is the structural attachment component of a longitudinal or lateral sway brace assembly. It is intended to be combined with a TOLCO transitional attachment, "bracing pipe" and a TOLCO "braced pipe" attachment, to form a complete bracing assembly. NFPA 13 and/or OSHPD guidelines should be followed.

To Install: Place the Fig. 825 on the steel beam, tighten the cone point set screws until heads break off. Attach other TOLCO transitional attachment fitting, Fig. 909, 910, 980 or 986. Transitional fitting attachment can pivot for adjustment to proper brace angle.

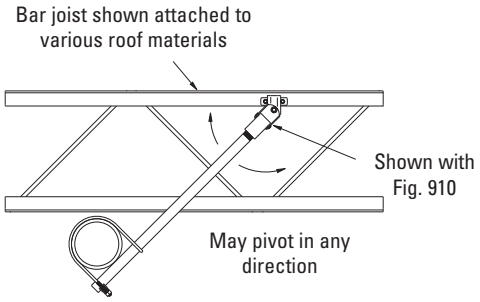


Top View

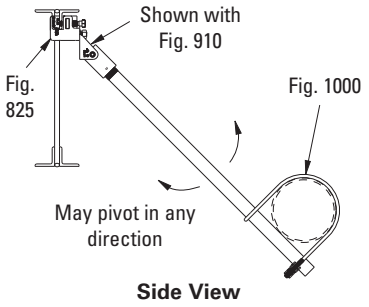
Finish: Plain, Electro-Galvanized and HDG

Approx. Wt./100: 247.5 Lbs. (112.2kg)

Order By: Figure number and finish
US Patent #6,098,942,
Canada Patent #2,286,659



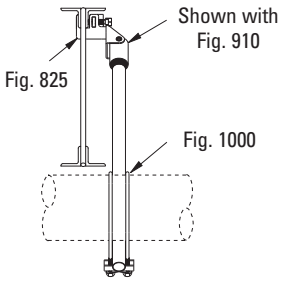
Front View



Side View

Max. Horizontal Design Load (UL) 2015 lbs. (8.96kN)
UL Listed as Hanger Attachment for 6" (150mm) Pipe at Maximum Spacing

		Max. Horizontal Design Loads (FM)			
		30°-44° lbs. / (kN)	45°-59° lbs. / (kN)	60°-74° lbs. / (kN)	75°-90° lbs. / (kN)
Maximum 3/8" Thick Flange	Perpendicular to Structural Member	990 (4.40)	1360 (6.05)	1670 (7.43)	1860 (8.27)
Maximum 3/8" Thick Flange	Parallel to Structural Member	460 (2.04)	630 (2.80)	770 (3.42)	860 (3.82)



Eaton's B-Line series seismic bracing components are designed to be compatible only with other B-Line series bracing components, resulting in a listed seismic bracing assembly. Eaton B-Line Division warranty for seismic bracing components will be the warranty provided in Eaton B-Line Division standard terms and conditions of sale made available by Eaton, except that, in addition to the other exclusions from Eaton B-Line Division warranty, Eaton makes no warranty relating to B-Line series seismic bracing components that are combined with products not provided by Eaton.

Reference page 106 for general fitting and standard finish specifications.

TOLCO™ Fig. 825A - Bar Joist Sway Brace Attachment

Size Range: One size accommodates all Fig. 900 Series sway brace attachments. Maximum Horizontal Design Load 1600 lbs (7.11kN).

Material: Steel

Function: To attach sway bracing to steel open web structural members.

Features: This product's design incorporates a concentric attachment point which is critical to the performance of structural seismic connections. NFPA 13 indicates the importance of concentric loading of connections and fasteners. Permits secure non-friction connection without drilling or welding. Unique design reinforces point of connection to joist. Break off head bolt design assures verification of proper installation.

Approvals: Underwriters Laboratories Listed in the USA **(UL)** and Canada **(cUL)**. For additional load, spacing and placement information relating to OSHPD projects, please refer to the TOLCO Seismic Restraint Systems Guidelines.

Installation Instructions: Fig. 825A is the structural attachment component of a longitudinal or lateral sway brace assembly. It is intended to be combined with a TOLCO transitional attachment, "bracing pipe" and a TOLCO "braced pipe" attachment to form a complete bracing assembly. NFPA 13 and/or OSHPD guidelines should be followed.

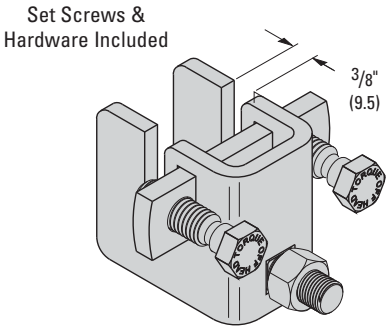
To Install: Place the Fig. 825A on the steel beam, tighten the cone point set screws until heads break off. Attach other TOLCO transitional attachment fitting, Fig. 909, 910, 980 or 986. Transitional fitting attachment can pivot for adjustment to proper brace angle.

Finish: Plain or Electro-Galvanized

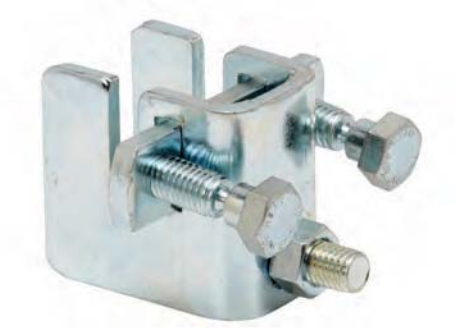
Approx. Wt./100: 154.5 Lbs. (70.1kg)

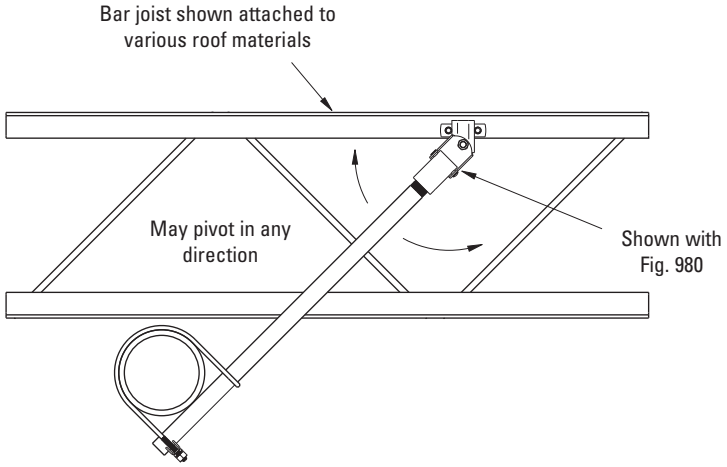
Order By: Figure number and finish

Patent #6,098,942



Maximum Design Load
1600 lbs.





Eaton's B-Line series seismic bracing components are designed to be compatible only with other B-Line series bracing components, resulting in a listed seismic bracing assembly. Eaton B-Line Division warranty for seismic bracing components will be the warranty provided in Eaton B-Line Division standard terms and conditions of sale made available by Eaton, except that, in addition to the other exclusions from Eaton B-Line Division warranty, Eaton makes no warranty relating to B-Line series seismic bracing components that are combined with products not provided by Eaton.

Reference page 106 for general fitting and standard finish specifications.

Miscellaneous Seismic Fittings

TOLCO™ Fig. 828 - Universal Sway Brace Attachment

Size Range: One size accommodates all Fig. 900 Series sway brace attachments. Fits from 3/8" (9.4mm) to 7/8" (22.2mm) thick steel structure. For thicknesses less than 3/8" (9.4mm) refer to Fig. 825 and Fig. 825A.

Material: Steel

Function: To attach sway bracing to various types of steel structural members.

Features: Permits secure non-friction connection without drilling or welding. Unique design allows offset placement on wide flange beam, I-beam, C-channel, open web, welded steel trusses, etc.. Secures brace to structure either across or along the beam. Break-off set screws allow for visual verification of proper installation torque.

Approvals: Underwriters Laboratories Listed in the USA **(UL)** and Canada **(cUL)**. Factory Mutual Approved **(FM)**.

Installation Instructions: The Fig. 828 is the structural attachment component of a longitudinal or lateral sway brace assembly. It is intended to be combined with a TOLCO transitional attachment, "bracing pipe" and a TOLCO "braced pipe" attachment to form a complete bracing assembly. NFPA 13 and/or OSHPD guidelines should be followed.

To Install: Place the Fig. 828 on the flange of the beam, truss, or girder. Be sure the attachment is fully engaged to the rear of the opening. Tighten the cone point set screws (A) until the heads break off. Tighten the cone point set screw (B) until the head breaks off. Remove the flange nut from set screw (B). Install a TOLCO swivel fitting (Fig, 909, 910, 980, 986). Use flange nut to secure the swivel fitting.

Finish: Plain or Electro-Galvanized

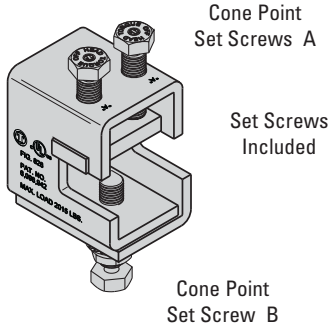
Approx. Weight/100: 275 Lbs. (124.7kg)

Order By: Figure number and finish

Patent #6,098,942, #8,534,625

Canada Patent #2,286,659

Patent Pending

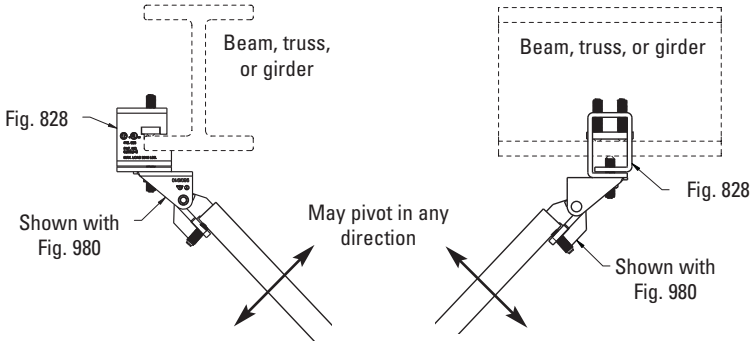


UL Horizontal Design Load
Maximum Design Load Across Beam 2015 lbs. (8.96kN)
Maximum Design Load Along Beam 2015 lbs. (8.96kN)

Max. Horizontal Design Load (FM) With Brace Perpendicular To The Beam			
Brace Angle (degrees from vertical)			
30°-44°	45°-59°	60°-74°	75°-90°
1570 (6.98kN)	2220 (9.87kN)	1210 (5.38kN)	700 (3.11kN)

Max. Horizontal Design Load (FM) With Brace Parallel To The Beam			
Brace Angle (degrees from vertical)			
30°-44°	45°-59°	60°-74°	75°-90°
690 (3.07kN)	970 (4.31kN)	1210 (5.38kN)	1330 (5.91kN)

FM Approved design loads are based on ASD design method.



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Reference page 106 for general fitting and standard finish specifications.

TOLCO™ Fig. 980 - Universal Swivel Sway Brace Attachment - 3/8"-16 to 3/4"-10 rods
TOLCO™ Fig. 980H - Universal Swivel Sway Brace Attachment - 7/8"-9 to 1 1/4"-7 rods

Size Range: One size fits bracing pipe 1" (25mm) thru 2" (50mm), 12 gauge (2.6mm) channel, and all structural steel up to 1/4" (31.7mm) thick.

Material: Steel. Stainless Steel Type 316 (SS6) optional.

Function: Multi-functional attachment to structure or braced pipe fitting.

Features: This product's design incorporates a concentric attachment opening which is critical to the performance of structural seismic connections. NFPA 13 (2010) 9.3.5.8.4 indicates clearly that fastener table load values are based only on concentric loading. Mounts to any surface angle. Break off bolt head assures verification of proper installation.

Installation: Fig.980 is the structural or transitional attachment component of a longitudinal or lateral sway brace assembly. It is intended to be combined with the "bracing pipe" and TOLCO "braced pipe" attachment, Fig. 1000, 1001, 2002, 4L, 4A or 4B to form a complete bracing assembly. NFPA 13 and/or OSHPD guidelines should be followed.

To Install: Place the Fig. 980 onto the "bracing pipe". Tighten the set screw until the head breaks off. Attachment can pivot for adjustment to proper brace angle.

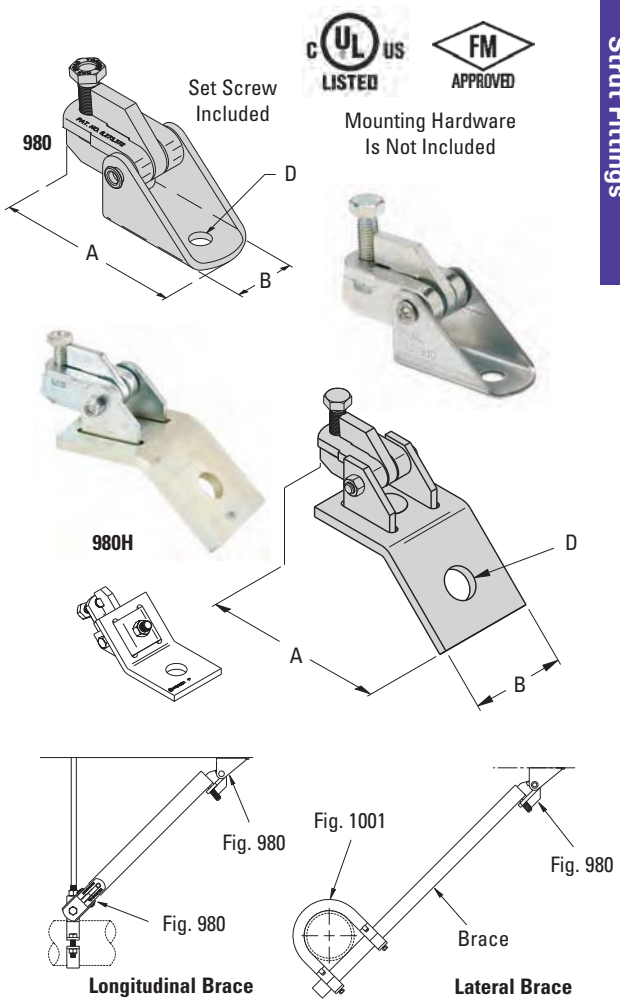
Approvals: —Underwriters Laboratories Listed in the USA **(UL)** and Canada **(cUL)**. Approved by Factory Mutual Engineering **(FM)**.

Note: Fig. 980 Swivel Attachment and Fig. 1001, Fig. 1000, Fig. 2002, Fig. 4A, Fig. 4B or Fig. 4L pipe clamps make up a sway brace system of UL Listed attachments and bracing materials which satisfies the requirements of Underwriters Laboratories and the National Fire Protection Association **(NFPA)**

Finish: Plain, Electro-Galvanized or Stainless Steel. Contact customer service for alternative finishes.

Order By: Figure number and finish.

US Patent Numbers
Pat. #6,273,372, Pat. #6,517,030, Pat. #6,953,174, Pat. #6,708,930, Pat. #7,191,987, Pat. #7,441,730, Pat. #7,669,806



Part Number	A in.	A (mm)	B in.	B (mm)	D* in.	D* (mm)	Max. Horizontal Design Load (cULus) lbs./(kN)	Max. Horizontal Design Load** (FM) 30°-44° lbs./(kN)	45°-59° lbs./(kN)	60°-74° lbs./(kN)	75°-90° lbs./(kN)	Approx. Wt./100 lbs.	(kg)
980-3/8	5 1/4"	(133.3)	1 7/8"	(47.6)	13/32"	(10.3)						149	(67.6)
980-1/2	5 1/4"	(133.3)	1 7/8"	(47.6)	17/32"	(13.5)						148	(67.1)
980-5/8	5 1/4"	(133.3)	1 7/8"	(47.6)	11/16"	(17.5)						147	(66.7)
980-3/4	5 1/4"	(133.3)	1 7/8"	(47.6)	13/16"	(20.5)	2015 (8.96)	1320 (5.87)	1970 (8.76)	2310 (10.27)	2550 (11.34)	146	(66.2)
980H-7/8	6 3/4"	(171.4)	3 1/2"	(88.9)	15/16"	(23.8)						402	(182.3)
980H-1	6 3/4"	(171.4)	3 1/2"	(88.9)	1 1/16"	(27.0)						400	(181.4)
980H-1 1/8	6 3/4"	(171.4)	3 1/2"	(88.9)	1 3/16"	(30.2)						397	(180.1)
980H-1 1/4	6 3/4"	(171.4)	3 1/2"	(88.9)	1 5/16"	(33.3)						390	(176.9)

* Mounting attachment hole size.
** Installed with 1" or 1 1/4" Schedule 40 brace pipe.

Important! - For load information when using Fig. 980 with pre-installed or post-installed concrete anchors in compliance with NFPA 13 (2016) or ASCE 7-10, including prying factors, see load tables on pages AL1 thru AL21.

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Reference page 106 for general fitting and standard finish specifications.

Miscellaneous Seismic Fittings

TOLCO™ Fig. 981 - Fast Attach – Universal Swivel Sway Brace Attachment

Size Range: Fits bracing pipe 1" (25mm) thru 2" (50mm), 12 gauge (2.6mm) channel and all structural steel up to 1/4" (6.3mm) thick.
Fig. 981-S fits rod sizes 3/8" thru 5/8".
Fig. 981-L fits rod sizes 3/4" thru 7/8".

Material: Steel

Function: Multi-functional attachment to hanger rod, trapeze rod, structure or braced pipe fitting.

Features: Fits multiple sizes of bracing pipe, strut or structural steel. Swivel allows adjustment to various surface angles. Breakaway bolt heads assure verification of proper installation torque. Unique "fast attach" yoke design fits multiple rod sizes; 3/8" thru 5/8" and 3/4" thru 7/8". "Stackable" design allows installation of both lateral and longitudinal braces to be easily installed on a single hanger rod, with no disassembly.

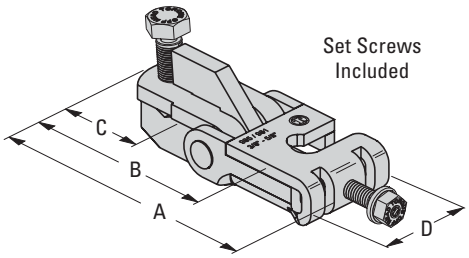
Installation: Fig. 981 is the "braced pipe" attachment component of a lateral or longitudinal brace assembly. It is intended to be combined with the pipe hanger, all-thread rod, "bracing pipe" and TOLCO transitional and structural attachment
component(s) to form a complete bracing assembly. NFPA 13 and or OSHPD guidelines should be followed.

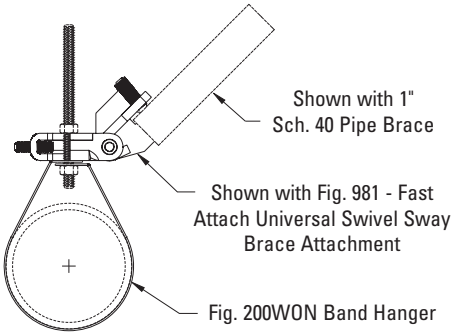
To Install: Spin nut on top of hanger counterclockwise to loosen the nut and raise it above the top of the hanger. Attach Fig. 981 by slipping the open side of the 981 yoke onto the all thread rod above the top of the hanger. Tighten 3/8" cone point set screw on yoke until head breaks-off to ensure proper installation torque. Spin the hex nut clockwise and tighten securely. Insert brace pipe into the jaw of the 981 and tighten the cone point set screw until the head breaks off ensuring proper installation torque. Pivot brace pipe to proper angle and attach to structure using a TOLCO swivel structural attachment.

Finish: Electro-Galvanized

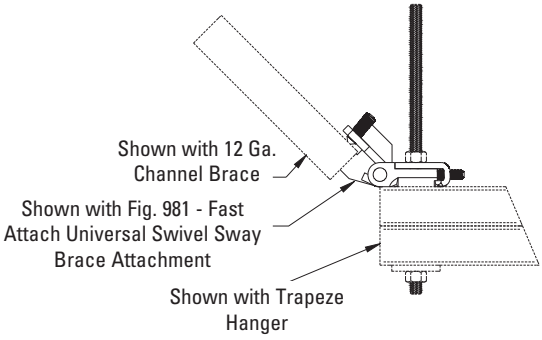
Order By: Figure number, rod size

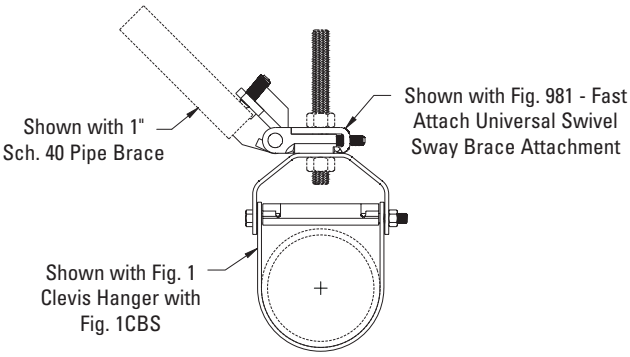
US Patent Numbers
Pat. #6,273,372, Pat. #7,097,141, Pat. #7,654,043, Pat. #7,654,043 B2





Part Number	Rod Size Range	A in.	A (mm)	B in.	B (mm)	C in.	C (mm)	D in.	D (mm)	Max. Horizontal Design Load lbs.	Max. Horizontal Design Load (kN)	Approx. Wt./100 lbs.	Approx. Wt./100 (kg)
981-S	3/8" thru 5/8"	5 1/8"	(130.2)	4 1/8"	(104.8)	1 1/4"	(31.7)	2 1/4"	(57.1)	2015	(8.96)	88	(39.9)
981-L	3/4" & 7/8"	5 1/8"	(130.2)	4 1/8"	(104.8)	1 1/4"	(31.7)	2 1/4"	(57.1)	2015	(8.96)	82	(37.2)





Reference page 106 for general fitting and standard finish specifications.

TOLCO™ Fig. 985 - Mechanical Fast Clamp

Size Range: Fig. 985-S fits rod sizes 3/8" thru 5/8"
Fig. 985-L fits rod sizes 3/4" thru 7/8" rod sizes

Material: Steel

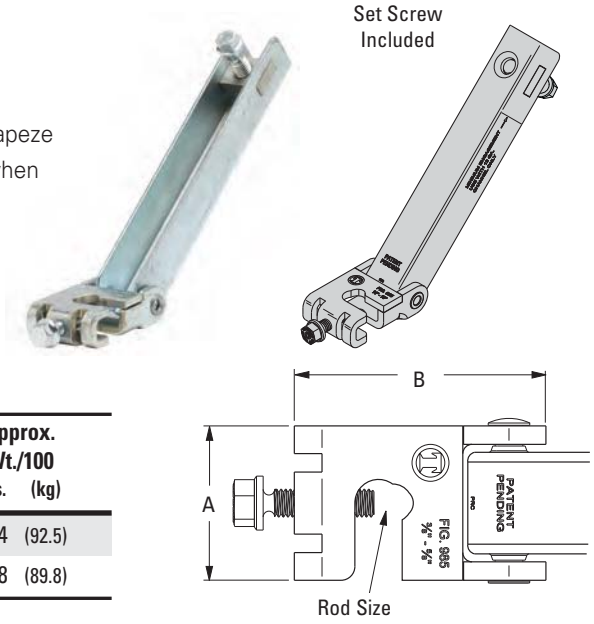
Function: Used for attachment of seismic bracing to pipe hanger or trapeze

Features: Allows up to 12" (304.8mm) of adjustability in brace length, when used with Fig. 986. Break-off set screw heads visually verify required installation torque. Unique "Fast Attach" yoke design allows Fig. 985 to be installed to hanger rods 3/8" thru 5/8" or 3/4" thru 7/8"

Finish: Electro-galvanized

Order By: Figure number, rod size & finish

Patent Pending



Part Number	Rod Size	A in.	A (mm)	B in.	B (mm)	Max. Horizontal Design Load lbs.	Max. Horizontal Design Load (kN)	Approx. Wt./100 lbs.	Approx. Wt./100 (kg)
985-S	3/8" thru 5/8"	2"	(50.8)	1 1/2"	(38.1)	2015	(8.96)	204	(92.5)
985-L	3/4" & 7/8"	2"	(50.8)	1 5/8"	(41.3)	2015	(8.96)	198	(89.8)

TOLCO™ Fig. 986 - Mechanical Fast Clamp

Size Range: Available with holes for 1/2"-13 thru 3/4"-10 fastener attachment.

Material: Steel

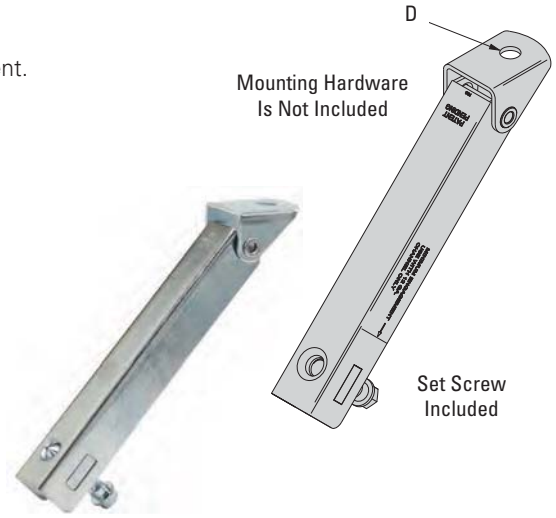
Function: Used for attachment of seismic bracing to structure or hanger.

Features: Allows up to 12" (304.8mm) of adjustability in brace length, when used with Fig. 985. Break-off set screw heads visually verify required installation torque. Swivel allows adjustment to various surface angles.

Finish: Electro-galvanized

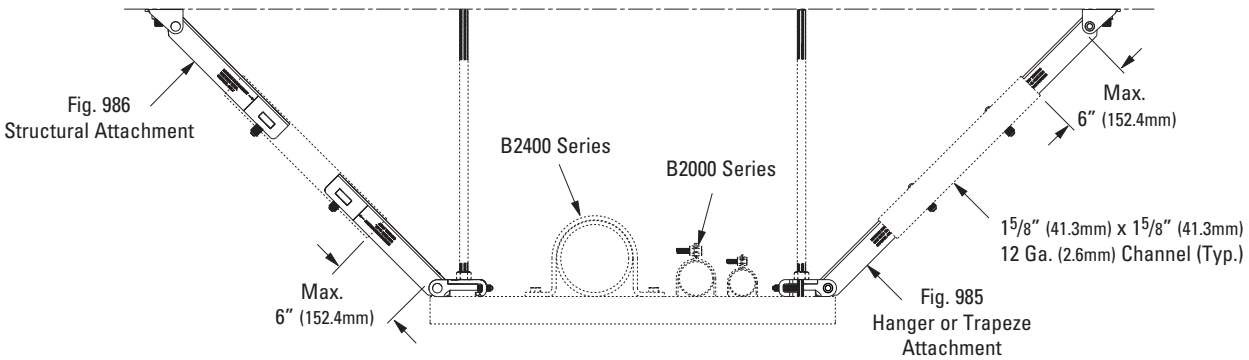
Order By: Figure number, rod size & finish

Patent Pending



Part Number	Rod Size	Hole Dia. D in.	Hole Dia. D (mm)	Max. Horizontal Design Load* lbs.	Max. Horizontal Design Load* (kN)	Approx. Wt./100 lbs.	Approx. Wt./100 (kg)
986-1/2	1/2"	9/16"	(14.3)	2015	(8.96)	204	(92.5)
986-5/8	5/8"	11/16"	(17.5)	2015	(8.96)	203	(92.1)
986-3/4	3/4"	13/16"	(20.6)	2015	(8.96)	202	(91.6)

* When used with 1 5/8" (41.3mm) x 1 5/8" (41.3mm) 12 Ga. (2.6mm) channel



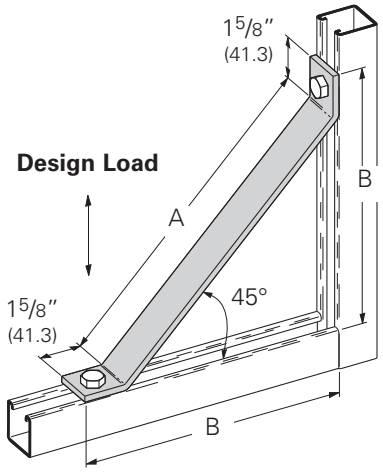
Reference page 106 for general fitting and standard finish specifications.

Braces

B261 - Two Hole 45° Knee Brace

- Standard finishes: ZN, GRN
- Design load determined by testing using a B335 hinged corner connection.
- Load ratings are for brace members only. Do not exceed allowable beam or column loads for strut channels.
- Safety Factor of 3

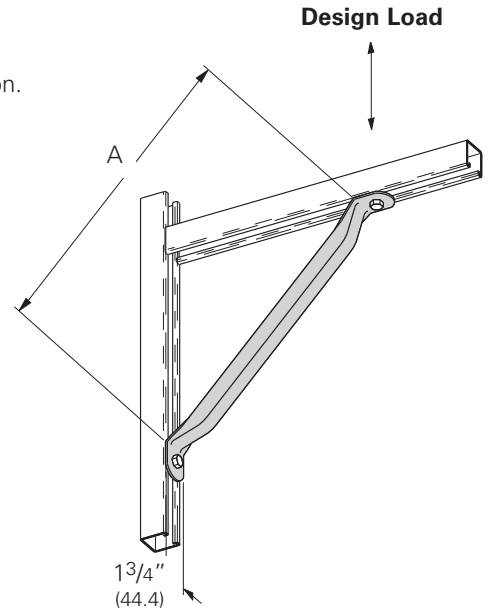
Part No.	A In.	A mm	B In.	B mm	Design Load Lbs.	Design Load kN	Wt./C Lbs.	Wt./C kg
B261-8	8″	(203.2)	7 3/8″	(187.3)	1500	(6.67)	119	(54.0)
B261-12	12″	(304.8)	10 1/8″	(257.2)	1020	(4.54)	165	(74.8)
B261-16	16 5/8″	(422.3)	13 3/8″	(339.7)	530	(2.36)	218	(98.9)
B261-18	18″	(457.2)	14 7/16″	(366.7)	450	(2.00)	234	(106.1)
B261-24	24″	(609.6)	18 11/16″	(474.7)	250	(1.11)	303	(137.4)
B261-36	36″	(914.4)	27 3/16″	(690.6)	110	(.49)	441	(200.0)



B631 - Two Hole 45° Tubing Knee Brace

- 1″ (25.4) Square steel tubing
- Material: ASTM A513
- Standard finishes: ZN, GRN
- Design load determined by testing using a B335 hinged corner connection.
- Load ratings are for brace members only. Do not exceed allowable beam or column loads for strut channels.
- Safety Factor of 3

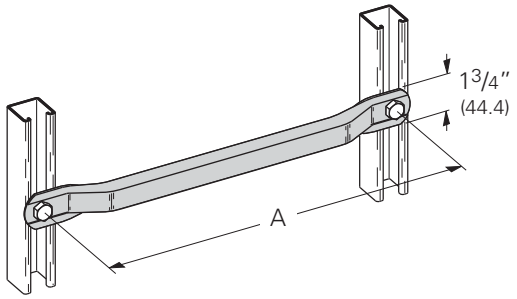
Part No.	A In.	A mm	Design Load Lbs.	Design Load kN	Wt./C Lbs.	Wt./C kg
B631-18	18″	(457.2)	1500	(6.67)	145	(65.8)
B631-24	24″	(609.6)	1500	(6.67)	186	(84.4)
B631-30	30″	(762.0)	1500	(6.67)	225	(102.0)
B631-36	36″	(914.4)	1500	(6.67)	266	(120.6)
B631-42	42″	(1066.8)	1230	(5.47)	307	(139.2)
B631-48	48″	(1219.2)	940	(4.18)	348	(157.8)
B631-54	54″	(1371.6)	740	(3.29)	389	(176.4)
B631-60	60″	(1524.0)	600	(2.67)	430	(195.0)
B631-72	72″	(1828.8)	420	(1.87)	508	(230.4)
B631-84	84″	(2133.6)	310	(1.38)	589	(267.2)
B631-96	96″	(2438.4)	240	(1.07)	669	(303.5)



B632 - Two Hole Straight Tubing Brace

- 1″ (25.4) Square steel tubing
- Material: ASTM A513
- Standard finishes: ZN, GRN

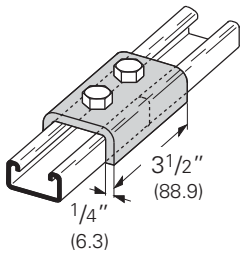
Part No.	A In.	A mm	Wt./C Lbs.	Wt./C kg
B632-18	18″	(457.2)	133	(60.3)
B632-24	24″	(609.6)	174	(78.9)
B632-30	30″	(762.0)	215	(97.5)
B632-36	36″	(914.4)	256	(116.1)
B632-42	42″	(1066.8)	295	(133.8)
B632-48	48″	(1219.2)	335	(151.9)
B632-54	54″	(1371.6)	380	(172.3)
B632-60	60″	(1524.0)	420	(190.5)
B632-72	72″	(1828.8)	500	(226.8)
B632-84	84″	(2133.6)	585	(265.3)
B632-96	96″	(2438.4)	670	(303.9)



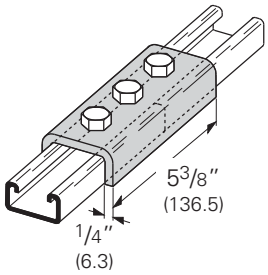
4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

B169
Two Hole Splice
Clevis For B52
- Standard finishes: ZN, GRN
- Wt./C 84 Lbs. (38.1 kg)

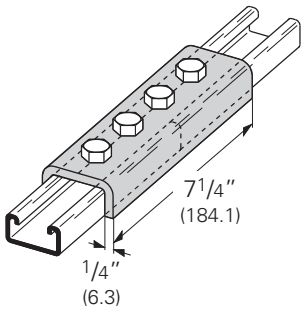


B168
Three Hole Splice
Clevis For B52
- Standard finishes: ZN, GRN
- Wt./C 126 Lbs. (57.1 kg)

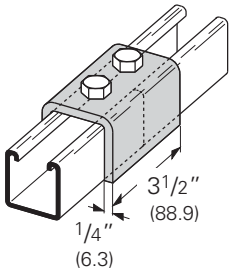


B167
Four Hole Splice
Clevis For B52
- Standard finishes: ZN, GRN
- Wt./C 178 Lbs. (80.7 kg)

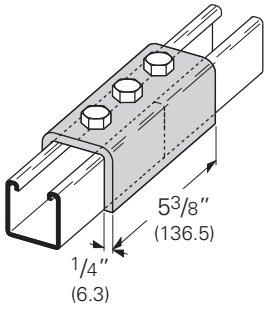
PA GRN



B170
Two Hole Splice
Clevis For B22 or B52A
- Standard finishes: ZN, GRN
- Wt./C 123 Lbs. (55.8 kg)

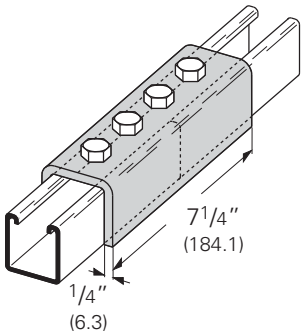


B171
Three Hole Splice
Clevis For B22 or B52A
- Standard finishes: ZN, GRN
- Wt./C 195 Lbs. (88.4 kg)

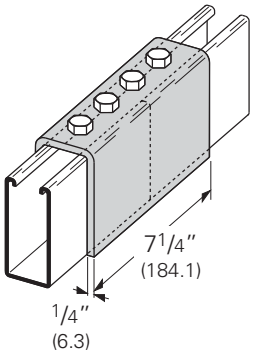


B172
Four Hole Splice
Clevis For B22 or B52A
- Standard finishes: ZN, GRN
- Wt./C 266 Lbs. (120.6 kg)

PA ZN GRN

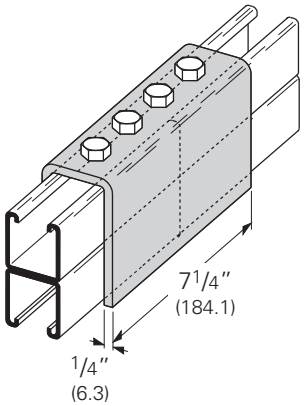


B172-12
Four Hole Splice Clevis For B12
- Standard finishes: ZN, GRN
- Wt./C 326 Lbs. (147.8 kg)

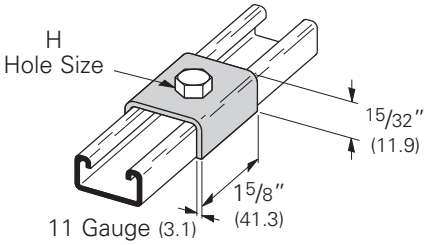


B172-22A
Four Hole Splice
Clevis For B11 or B22A
- Standard finishes: ZN, GRN
- Wt./C 406 Lbs. (184.1 kg)

PA GRN



B450
U-Washer
- Material: ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



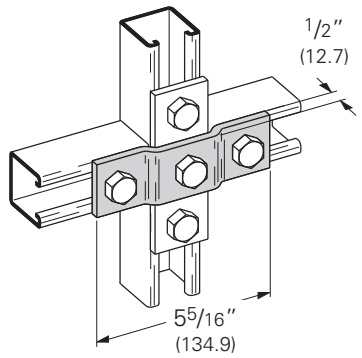
Part No. & Size	Hole Size H Lbs.	kg	Wt./C Lbs.	kg
B450-1/4	5/16"	(7.9)	14	(6.3)
B450-3/8	7/16"	(11.1)	14	(6.3)
B450-1/2	9/16"	(14.3)	13	(5.8)
B450-5/8	11/16"	(17.4)	13	(5.8)
B450-3/4	13/16"	(20.6)	13	(5.8)

PA Pre-assembled fitting.

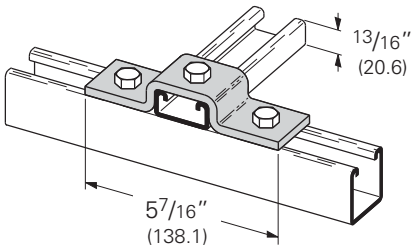
Reference page 106 for general fitting and standard finish specifications.

'U' Fittings

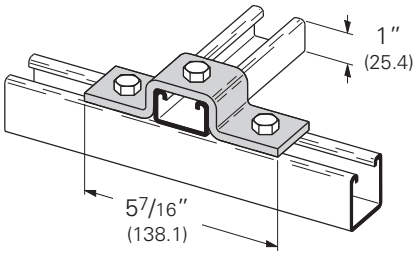
B527
Three Hole Offset Plate Connection
- Standard finishes: ZN, GRN
- Wt./C 54 Lbs. (24.5 kg)



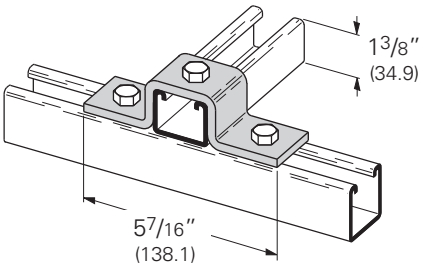
B116-52
Three Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



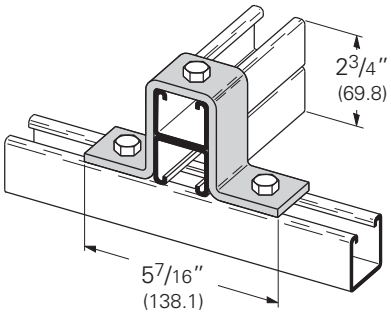
B116-42
Three Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 75 Lbs. (34.0 kg)



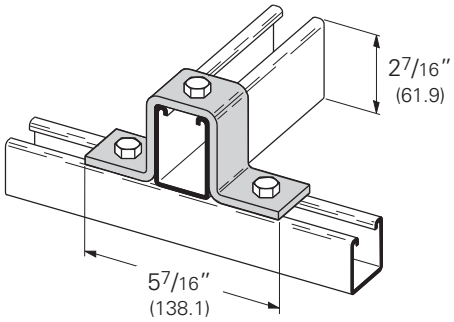
B116-32
Three Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 84 Lbs. (38.1 kg)



B116-32A
Three Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 116 Lbs. (52.6 kg)

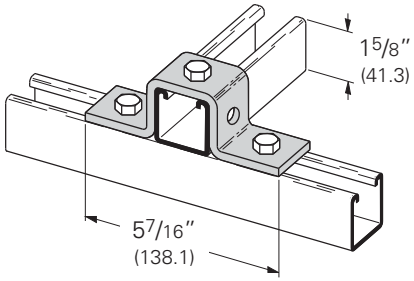


B116-12
Three Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 108 Lbs. (49.0 kg)

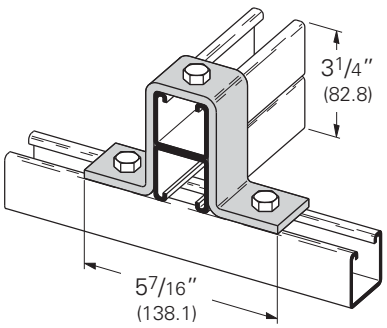


B107
Five Hole U-Support
- Standard finishes: ZN, GRN, HDG
- Wt./C 85 Lbs. (38.5 kg)

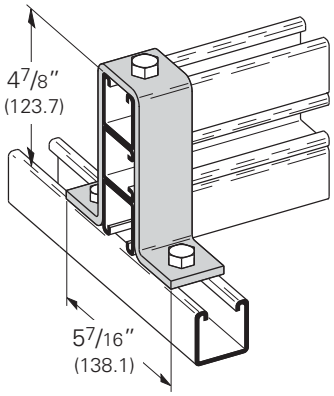
PA ZN GRN



B107-22A
Three Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 126 Lbs. (57.1 kg)



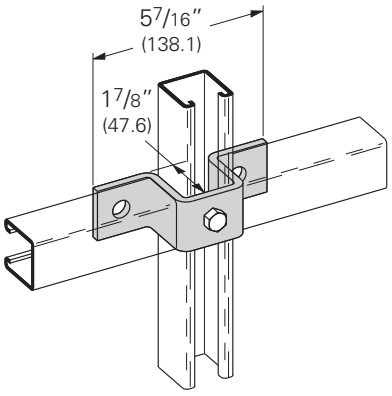
B588
Three Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 157 Lbs. (71.2 kg)



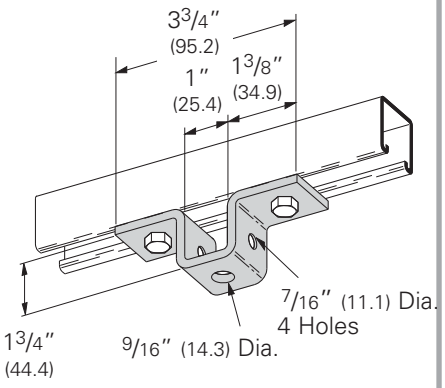
PA Pre-assembled fitting.

Reference page 106 for general fitting and standard finish specifications.

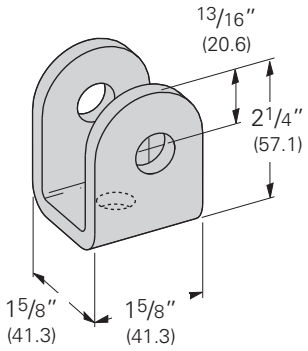
B412
Three Hole
Offset U-Support
- Standard finishes: ZN, GRN
- Wt./C 89 Lbs. (40.3 kg)



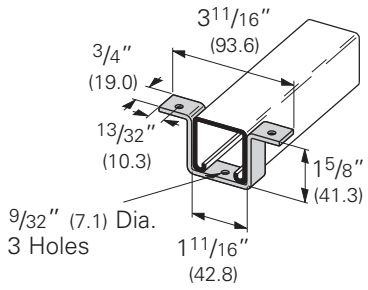
B107S
Five Hole U-Support
- Material: 7 Gauge (4.5) ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN
- Wt./C 51 Lbs. (23.1 kg)



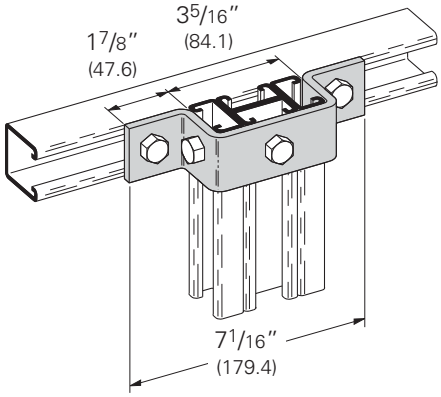
B596
Three Hole Swivel Clevis
- Material: 7 Gauge (4.5)
- Standard finishes: ZN, GRN
- Wt./C 53 Lbs. (24.0 kg)



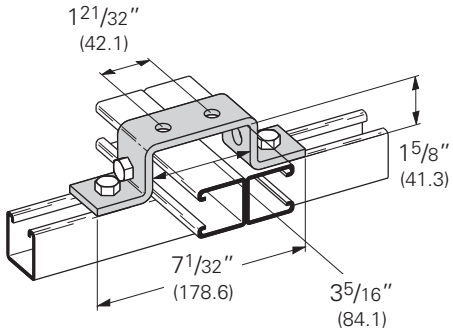
B578
Three Hole Light-Weight
U-Support
- Material: 10 Gauge (3.4) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 18 Lbs. (8.1 kg)



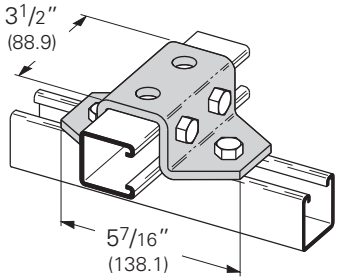
B594
Five Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 106 Lbs. (48.1 kg)



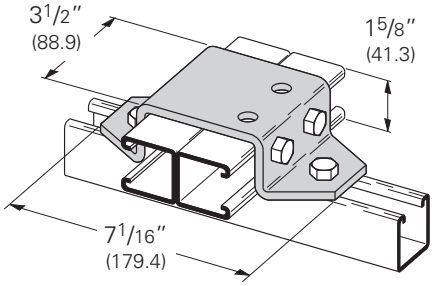
B266
Six Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 105 Lbs. (47.6 kg)



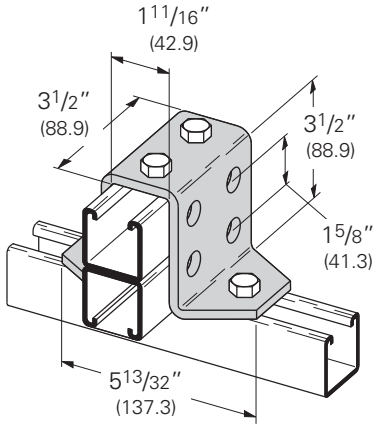
B425
Six Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 167 Lbs. (75.7 kg)



B581
Eight Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 201 Lbs. (91.2 kg)



B519
Eight Hole U-Support
- Standard finishes: ZN, GRN
- Wt./C 266 Lbs. (102.5 kg)

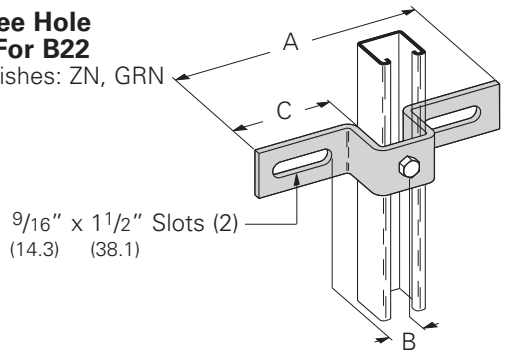


Reference page 106 for general fitting and standard finish specifications.

'U' Fittings

B333
Slotted Three Hole U-Support For B22

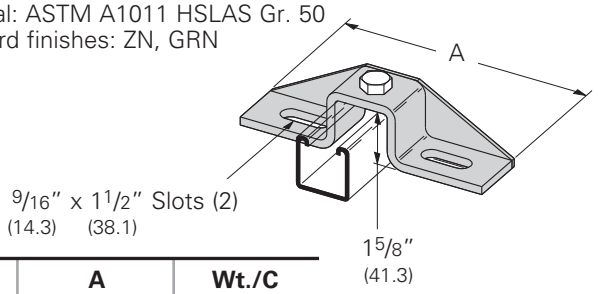
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	B In.	B mm	C In.	C mm	Wt./C Lbs.	Wt./C kg
B333-1	7 1/2"	(190.5)	15/16"	(33.3)	2 7/8"	(73.0)	103	(46.7)
B333-2	8 1/2"	(215.9)	1 15/16"	(49.2)	3 3/8"	(85.7)	115	(52.1)
B333-3	10 3/8"	(263.5)	2 7/8"	(73.0)	4 5/16"	(109.5)	135	(61.2)

B451
Slotted Three Hole U-Support With Gusset For B22

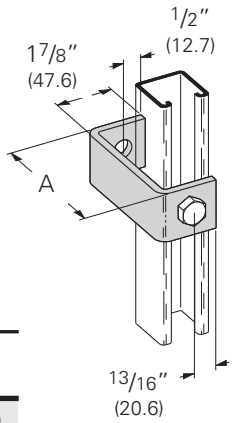
- Consists of B333-1, 2, or 3 with gusset plate welded on back.
- Material: ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Wt./C Lbs.	Wt./C kg
B451-1	7 1/2"	(190.5)	137	(62.1)
B451-2	8 1/2"	(215.9)	156	(70.7)
B451-3	10 3/8"	(263.5)	172	(78.0)

B408
Two Hole Bus Duct Clevis

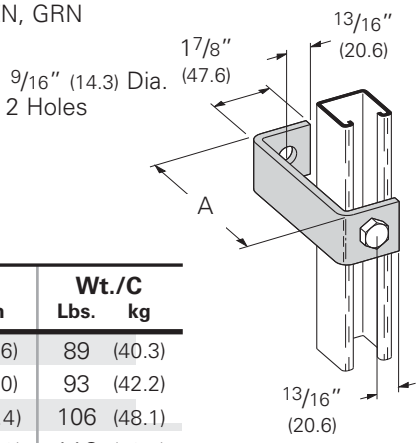
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Wt./C Lbs.	Wt./C kg
B408-1	2 13/32"	(61.1)	58	(26.3)
B408-2	3 25/32"	(96.0)	76	(34.5)
B408-3	4 3/4"	(762.0)	88	(39.9)

B358
Two Hole Clevis

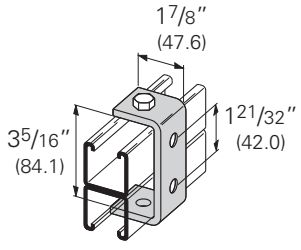
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Wt./C Lbs.	Wt./C kg
B358-4	4"	(101.6)	89	(40.3)
B358-5	5"	(127.0)	93	(42.2)
B358-6	6"	(152.4)	106	(48.1)
B358-7	7"	(177.8)	118	(53.5)
B358-8	8"	(203.2)	132	(59.9)

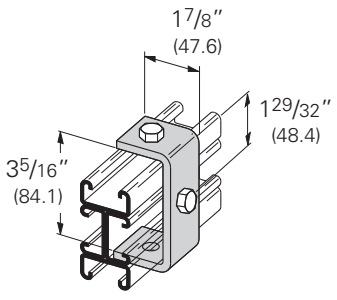
B173
Four Hole Clevis

- Standard finishes: ZN, GRN
- Wt./C 71 Lbs. (32.2 kg)



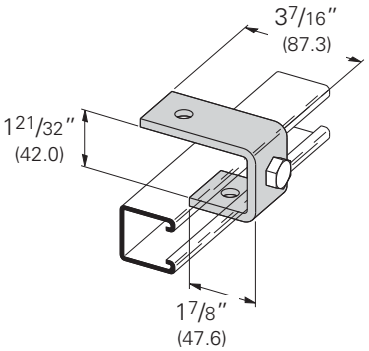
B595
Three Hole Clevis

- Standard finishes: ZN, GRN
- Wt./C 75 Lbs. (34.0 kg)



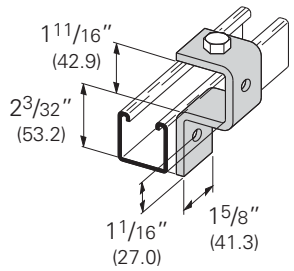
B405
Three Hole Suspension Clevis

- Standard finishes: ZN, GRN
- Wt./C 75 Lbs. (34.0 kg)

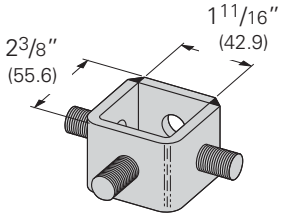


Reference page 106 for general fitting and standard finish specifications.

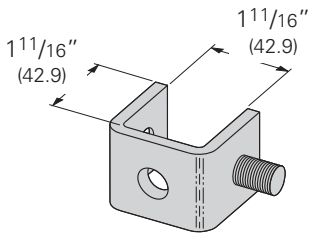
B398-1
Three Hole Cup Support
- Standard finishes: ZN, GRN
- Wt./C 73 Lbs. (33.1 kg)



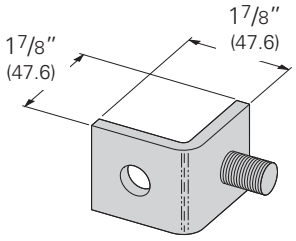
B400
Three Stud Ring Connection
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 85 Lbs. (38.5 kg)



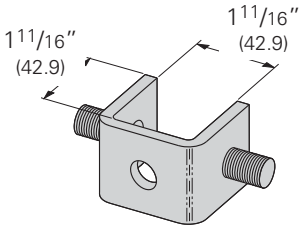
B400-1
One Stud Ring Connection
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 53 Lbs. (24.0 kg)



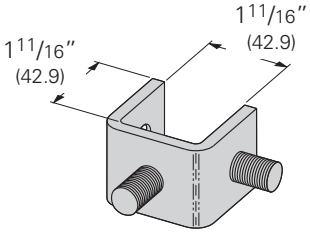
B400-2
One Stud Ring Connection
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 40 Lbs. (18.1 kg)



B400-3
Two Stud Ring Connection
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 59 Lbs. (26.7 kg)



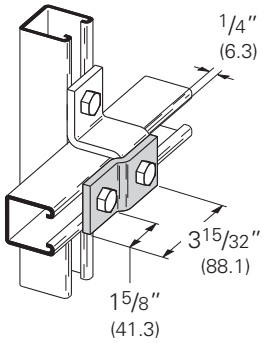
B400-4
Two Stud Ring Connection
- 1/2"-13 stud protrudes 1" (25.4mm)
- Standard finishes: ZN
- Wt./C 59 Lbs. (26.7 kg)



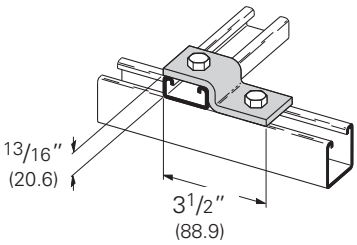
Reference page 106 for general fitting and standard finish specifications.

'Z' Fittings

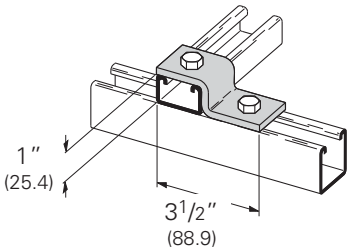
B526
Two Hole Offset Z-Support
- Standard finishes: ZN, GRN
- Wt./C 38 Lbs. (17.2 kg)



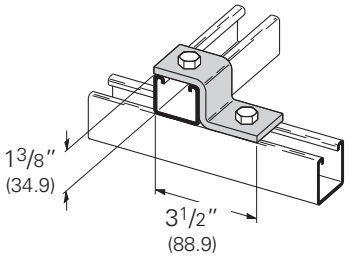
B106-52
Two Hole Offset Z-Support for B52
- Standard finishes: ZN, GRN
- Wt./C 40 Lbs. (18.1 kg)



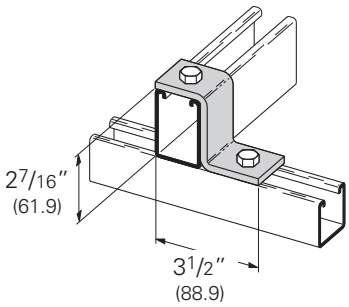
B106-42
Two Hole Offset Z-Support for B42
- Standard finishes: ZN, GRN
- Wt./C 44 Lbs. (20.0 kg)



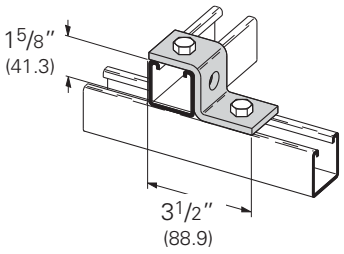
B106-32
Two Hole Offset Z-Support for B32
- Standard finishes: ZN, GRN
- Wt./C 51 Lbs. (23.1 kg)



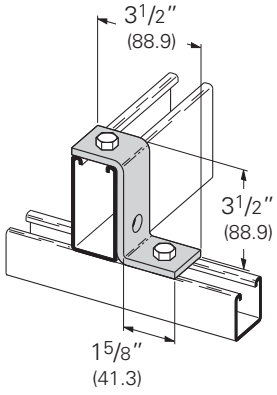
B106-12
Two Hole Offset Z-Support for B12
- Standard finishes: ZN, GRN
- Wt./C 63 Lbs. (28.6 kg)



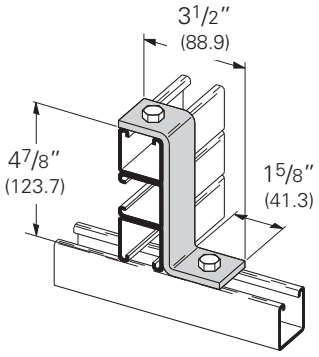
B105
Three Hole Offset Z-Support for B22
- Standard finishes: ZN, GRN, HDG
- Wt./C 51 Lbs. (23.1 kg)



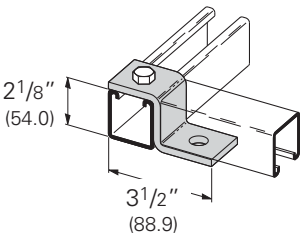
B110
Three Hole Offset Z-Support for B11
- Standard finishes: ZN, GRN
- Wt./C 70 Lbs. (31.7 kg)



B586
Two Hole Z-Support
- Standard finishes: ZN, GRN
- Wt./C 90 Lbs. (40.8 kg)



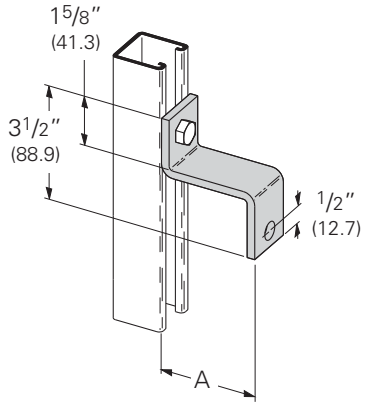
B108
Two Hole Offset Z-Support
- Standard finishes: ZN, GRN
- Wt./C 55 Lbs. (24.9 kg)



Reference page 106 for general fitting and standard finish specifications.

B387
Two Hole Z-Bus Duct Connection

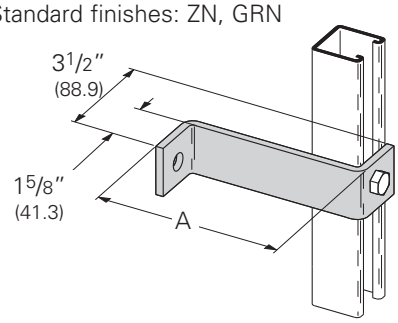
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Wt./C Lbs.	Wt./C kg
B387	4 3/4"	(120.6)	89	(40.3)
B387-1	3 25/32"	(96.0)	78	(35.4)
B387-2	2 13/32"	(61.1)	62	(28.1)

B407
Two Hole Z-Sopport

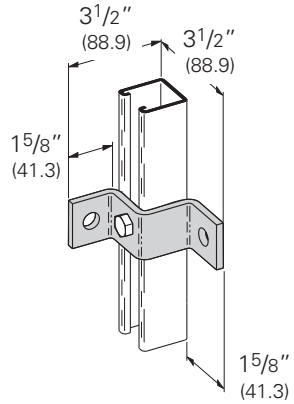
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Wt./C Lbs.	Wt./C kg
B407-4	4"	(101.6)	77	(34.9)
B407-5	5"	(127.0)	95	(43.1)
B407-6	6"	(152.4)	98	(44.4)
B407-7	7"	(177.8)	105	(47.6)
B407-8	8"	(203.2)	120	(54.4)
B407-9 5/8	9 5/8"	(244.5)	138	(62.6)

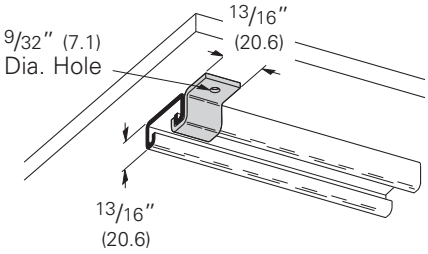
B111
Three Hole Sheath Corner Connection

- Standard finishes: ZN, GRN
- Wt./C 68 Lbs. (30.8 kg)



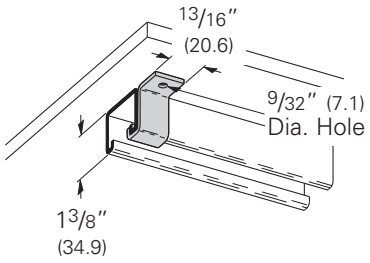
B410-52
Channel Hanger Bracket for B52

- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 6.7 Lbs. (3.0 kg)



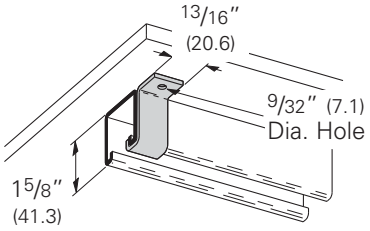
B410-32
Channel Hanger Bracket for B32

- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 8.3 Lbs. (3.7 kg)



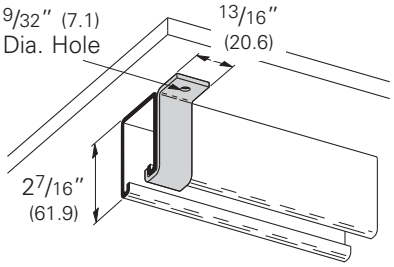
B410-22
Channel Hanger Bracket for B22

- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 9 Lbs. (4.1 kg)



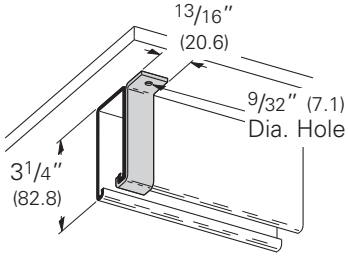
B410-12
Channel Hanger Bracket for B12

- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 11.2 Lbs. (5.1 kg)



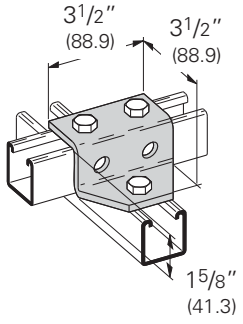
B410-11
Channel Hanger Bracket for B11

- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 13.4 Lbs. (6.1 kg)



B580
Five Hole Gussetted Z-Support

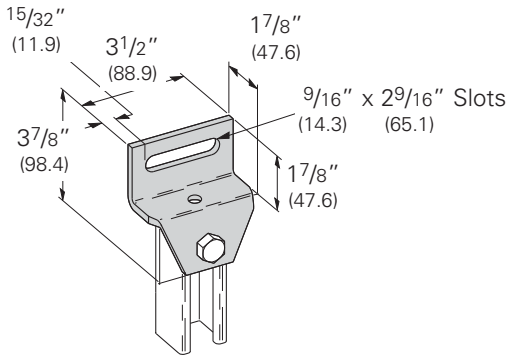
- Standard finishes: ZN, GRN
- Wt./C 100 Lbs. (45.3 kg)



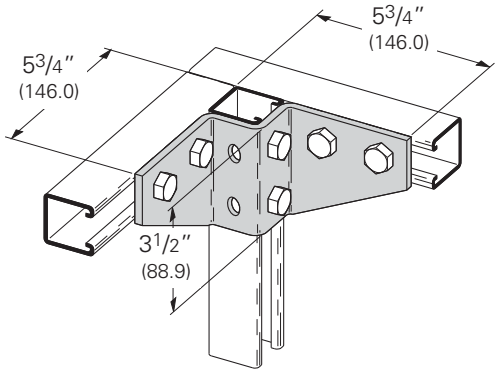
Reference page 106 for general fitting and standard finish specifications.

'Z' & Wing Fittings

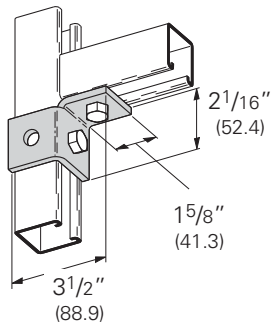
B515
Adjustable Offset Gussetted Z-Support
- Standard finishes: ZN, GRN
- Wt./C 93 Lbs. (42.2 kg)



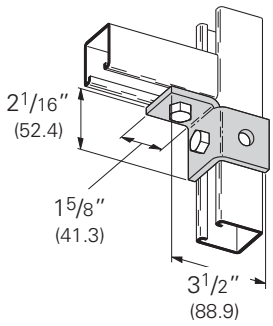
B428
Eight Hole Gussetted Corner Connection
- Standard finishes: ZN, GRN
- Wt./C 203 Lbs. (92.1 kg)



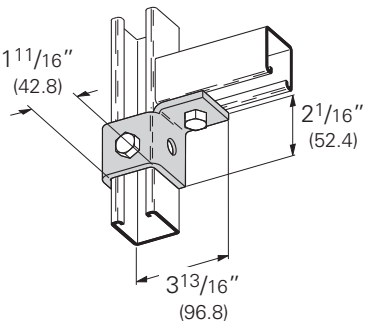
B267R
Three Hole Single Corner Connection (Right Hand)
- Standard finishes: ZN, GRN
- Wt./C 54 Lbs. (24.5 kg)



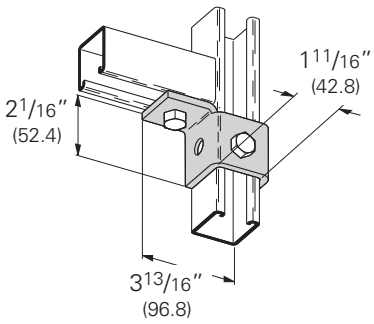
B267L
Three Hole Single Corner Connection (Left Hand)
- Standard finishes: ZN, GRN
- Wt./C 54 Lbs. (24.5 kg)



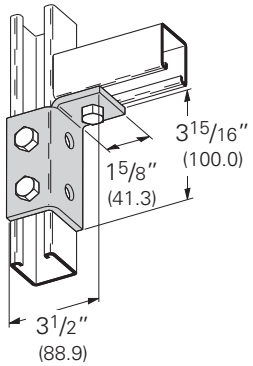
B270R
Four Hole Single Corner Connection (Right Hand)
- Standard finishes: ZN, GRN
- Wt./C 77 Lbs. (34.9 kg)



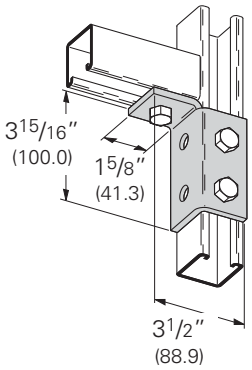
B270L
Four Hole Single Corner Connection (Leftt Hand)
- Standard finishes: ZN, GRN
- Wt./C 77 Lbs. (34.9 kg)



B268R
Five Hole Single Corner Connection (Right Hand)
- Standard finishes: ZN, GRN
- Wt./C 100 Lbs. (45.3 kg)

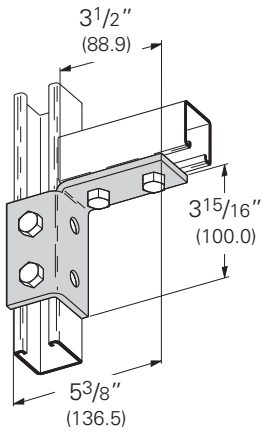


B268L
Five Hole Single Corner Connection (Left Hand)
- Standard finishes: ZN, GRN
- Wt./C 100 Lbs. (45.3 kg)

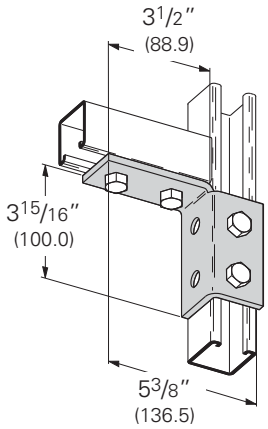


Reference page 106 for general fitting and standard finish specifications.

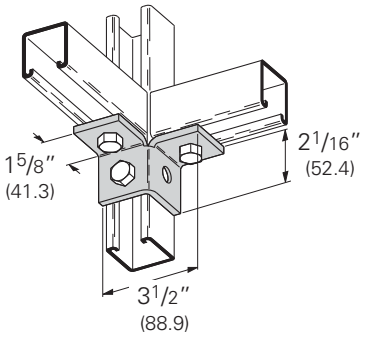
B269R
Six Hole Single Corner Connection (Right Hand)
- Standard finishes: ZN, GRN
- Wt./C 120 Lbs. (54.4 kg)



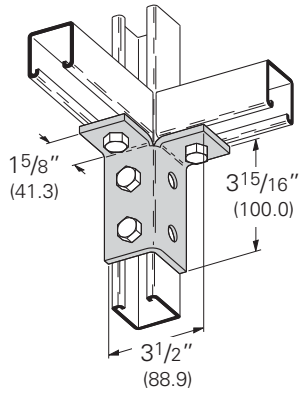
B269L
Six Hole Single Corner Connection (Left Hand)
- Standard finishes: ZN, GRN
- Wt./C 120 Lbs. (54.4 kg)



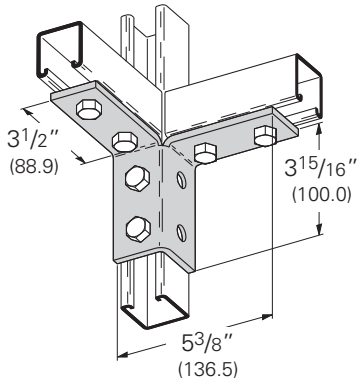
B119
Six Hole Double Corner Connection
- Standard finishes: ZN, GRN
- Wt./C 71 Lbs. (32.2 kg)



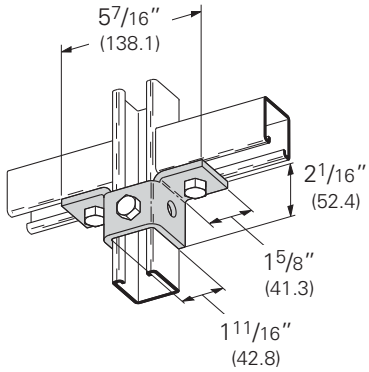
B120
Six Hole Double Corner Connection
- Standard finishes: ZN, GRN
- Wt./C 110 Lbs. (49.9 kg)



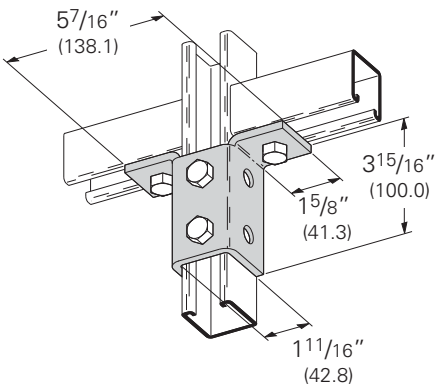
B121
Eight Hole Double Corner Connection
- Standard finishes: ZN, GRN
- Wt./C 152 Lbs. (68.9 kg)



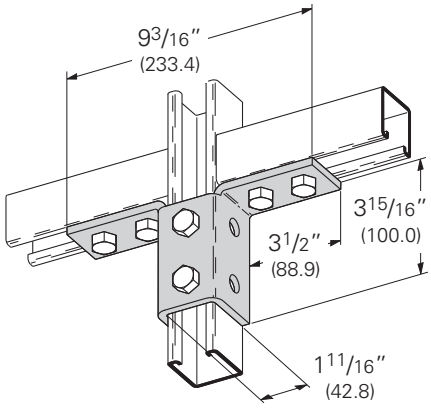
B271
Five Hole Double Wing Connection
- Standard finishes: ZN, GRN
- Wt./C 95 Lbs. (43.1 kg)



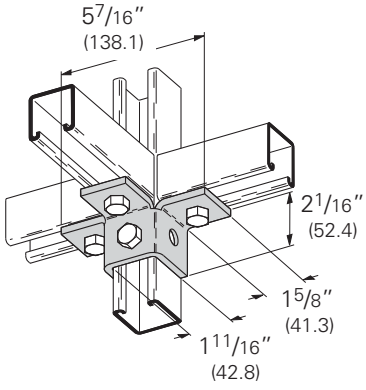
B272
Eight Hole Double Wing Connection
- Standard finishes: ZN, GRN
- Wt./C 156 Lbs. (70.7 kg)



B273
Ten Hole Double Wing Connection
- Standard finishes: ZN, GRN
- Wt./C 185 Lbs. (83.9 kg)



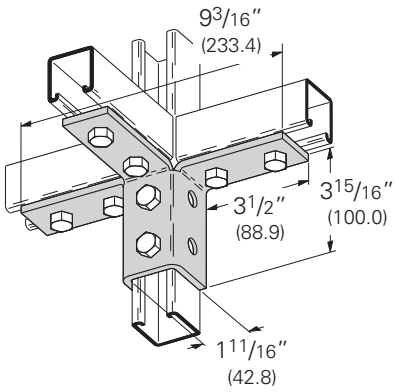
B122
Six Hole Triple Wing Connection
- Standard finishes: ZN, GRN
- Wt./C 110 Lbs. (49.9 kg)



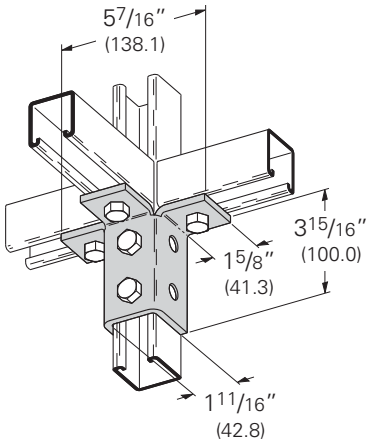
Reference page 106 for general fitting and standard finish specifications.

Wing Fittings

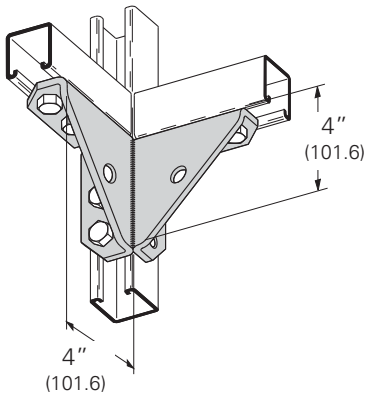
B123
Twelve Hole Triple Wing Connection
- Standard finishes: ZN, GRN
- Wt./C 234 Lbs. (106.1 kg)



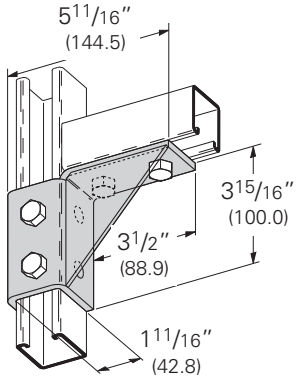
B124
Nine Hole Triple Wing Connection
- Standard finishes: ZN, GRN
- Wt./C 177 Lbs. (80.3 kg)



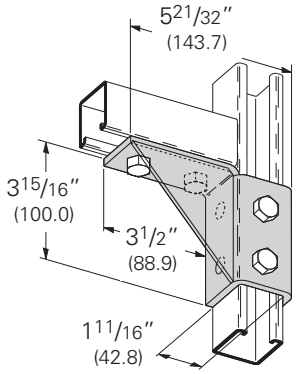
B276
Fourteen Hole Double Corner Gussetted Connection
- Standard finishes: ZN, GRN
- Wt./C 196 Lbs. (88.9 kg)



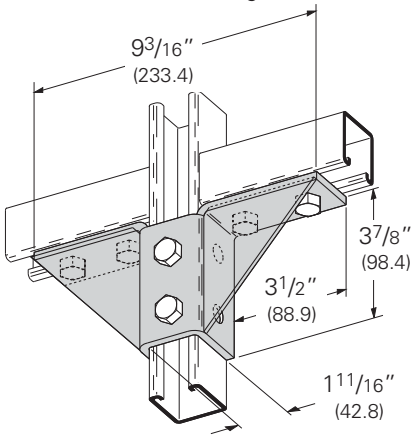
B274R
Eight Hole Single Corner Gussetted Connection (Right Hand)
- Standard finishes: ZN, GRN
- Wt./C 176 Lbs. (79.8 kg)



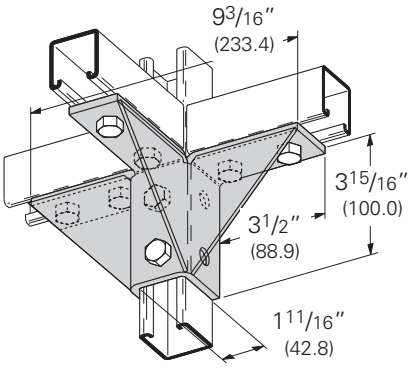
B274L
Eight Hole Single Corner Gussetted Connection (Left Hand)
- Standard finishes: ZN, GRN
- Wt./C 176 Lbs. (79.8 kg)



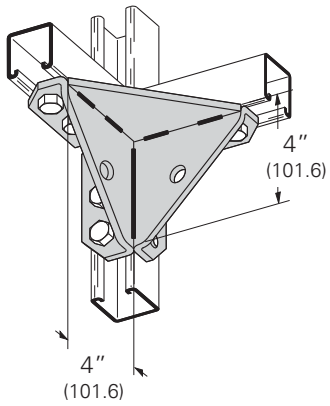
B495
Ten Hole Double Wing Gussetted Connection
- Standard finishes: ZN, GRN
- Wt./C 240 Lbs. (108.8 kg)



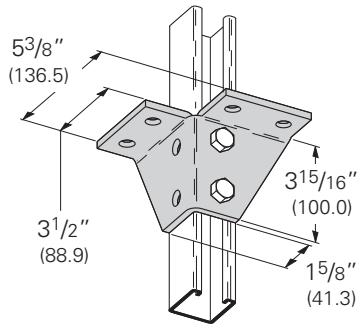
B277
Twelve Hole Triple Wing Gussetted Connection
- Standard finishes: ZN, GRN
- Wt./C 285 Lbs. (129.3 kg)



B362
Eight Hole Double Corner Gussetted Connection
- Standard finishes: ZN, GRN
- Wt./C 226 Lbs. (102.5 kg)

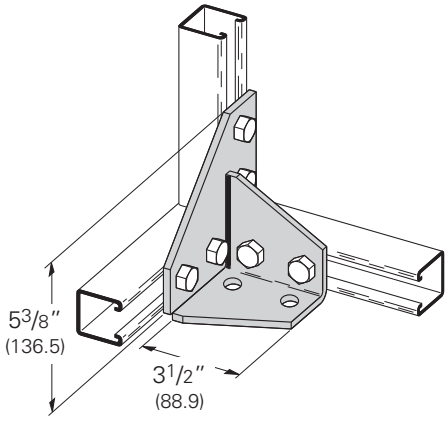


B571
Eight Hole Wing Connection
- Standard finishes: ZN, GRN
- Wt./C 201 Lbs. (91.2 kg)

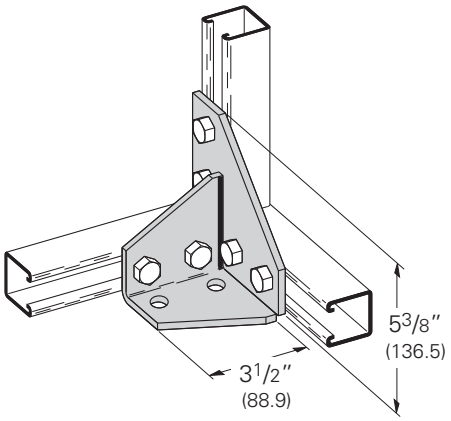


Reference page 106 for general fitting and standard finish specifications.

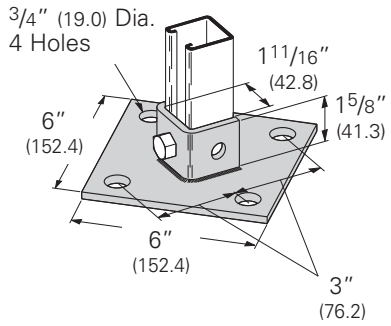
B346L
Eight Hole Double Corner Gussetted Connection (Left Hand)
- Standard finishes: ZN, GRN
- Wt./C 242 Lbs. (109.8 kg)



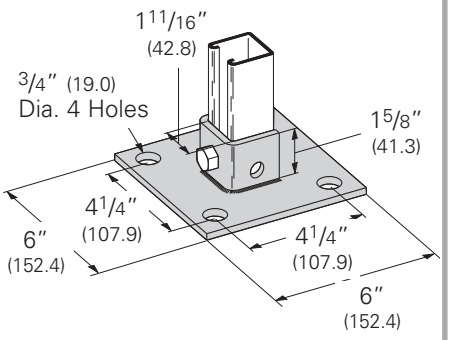
B346R
Eight Hole Double Corner Gussetted Connection (Right Hand)
- Standard finishes: ZN, GRN
- Wt./C 242 Lbs. (109.8 kg)



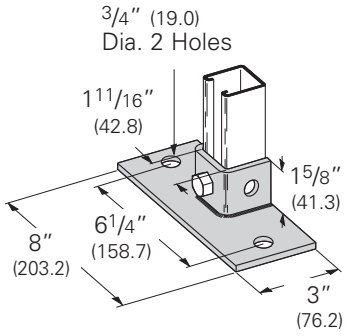
B279
Post Base for B22
- Standard finishes: ZN, GRN
- Wt./C 314 Lbs. (142.4 kg)



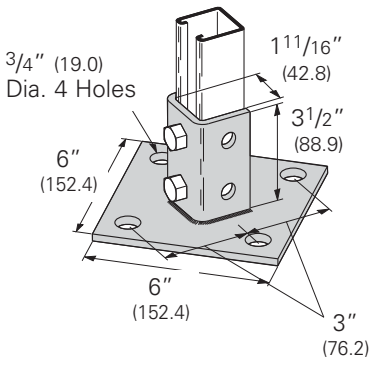
B279SQ
Post Base for B22
- Standard finishes: ZN, GRN
- Wt./C 314 Lbs. (142.4 kg)



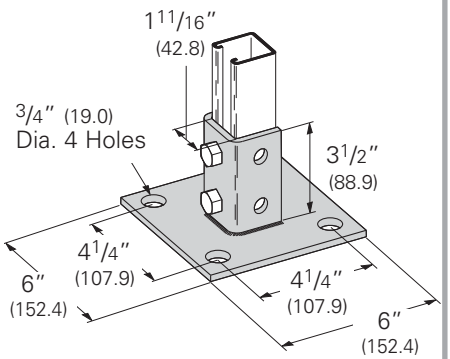
B279FL
Post Base for B22
- Standard finishes: ZN, GRN
- Wt./C 230 Lbs. (104.3 kg)



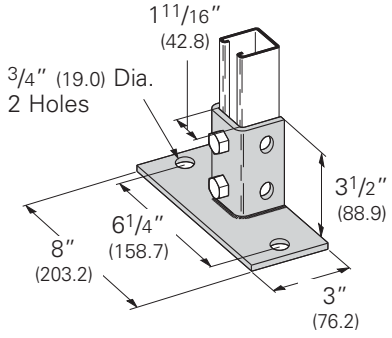
B280
Post Base for B22
- Standard finishes: ZN, GRN, HDG, SS4, AL
- Wt./C 392 Lbs. (177.8 kg)



B280SQ
Post Base for B22
- Standard finishes: ZN, GRN, HDG, SS4, AL
- Wt./C 392 Lbs. (177.8 kg)



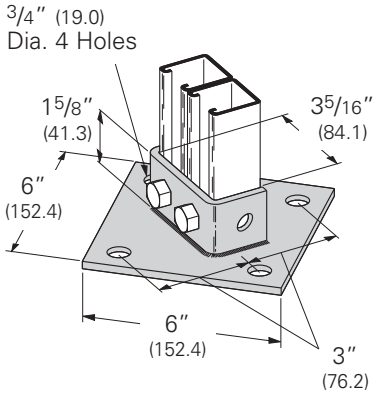
B280FL
Post Base for B22
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 312 Lbs. (141.5 kg)



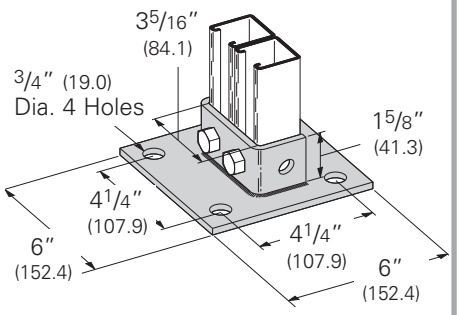
Reference page 106 for general fitting and standard finish specifications.

Post Bases

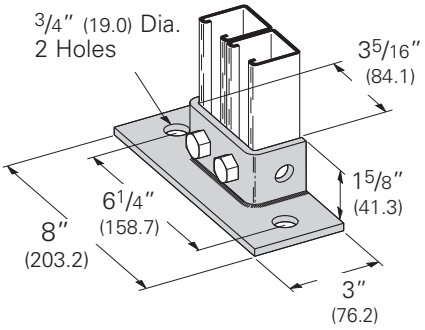
B281A
Post Base for B22A, B, C, ETC.
- Standard finishes: ZN, GRN
- Wt./C 330 Lbs. (149.7 kg)



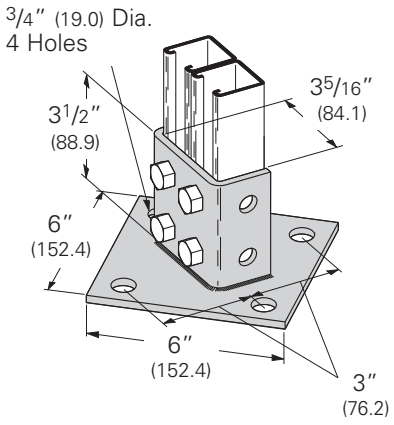
B281ASQ
Post Base for B22A, B, C, Etc.
- Standard finishes: ZN, GRN
- Wt./C 330 Lbs. (149.7 kg)



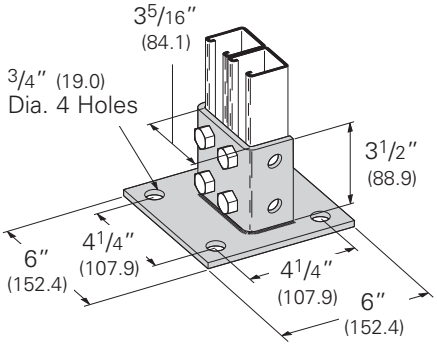
B281AFL
Post Base for B22A, B, C, Etc.
- Standard finishes: ZN, GRN
- Wt./C 250 Lbs. (113.4 kg)



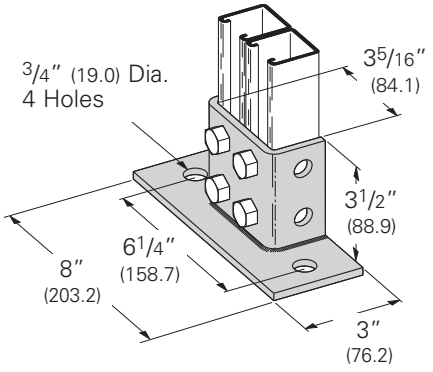
B281
Post Base for B22A, B, C, Etc.
- Standard finishes: ZN, GRN, HDG
- Wt./C 400 Lbs. (181.4 kg)



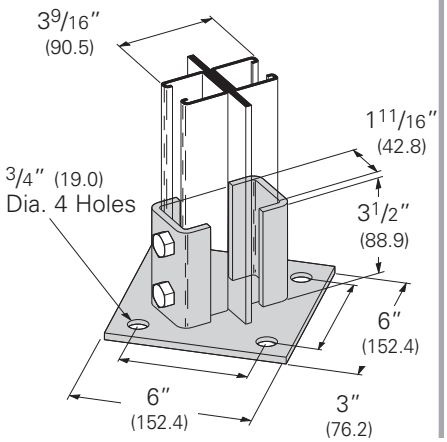
B281SQ
Post Base for B22A, B, C, Etc.
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 400 Lbs. (181.4 kg)



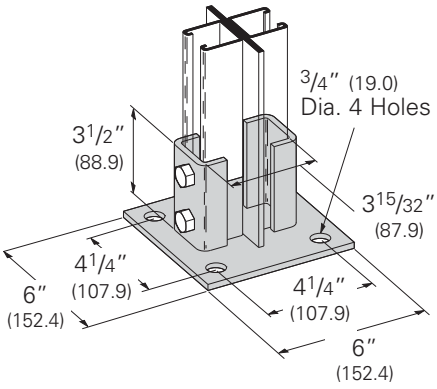
B281FL
Post Base for B22A, B, C, Etc.
- Standard finishes: ZN, GRN
- Wt./C 320 Lbs. (145.1 kg)



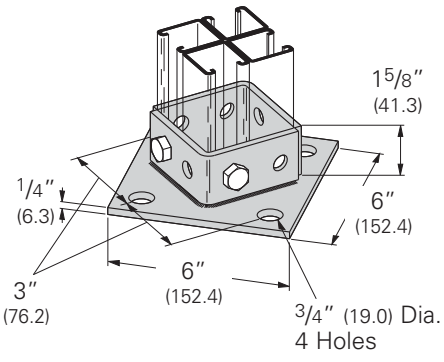
B281M
Post Base for B22-2PL
- Standard finishes: ZN, GRN
- Wt./C 470 Lbs. (213.2 kg)



B281MSQ
Post Base for B22-2PL
- Standard finishes: ZN, GRN
- Wt./C 470 Lbs. (213.2 kg)

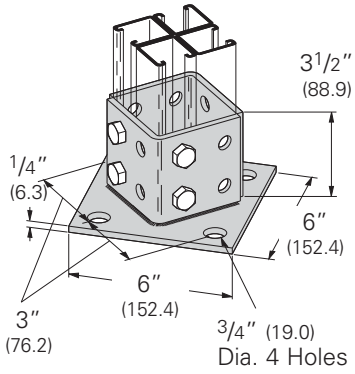


B570
Post Base for Four Channel Combinations
- Standard finishes: ZN, GRN
- Wt./C 397 Lbs. (180.1 kg)

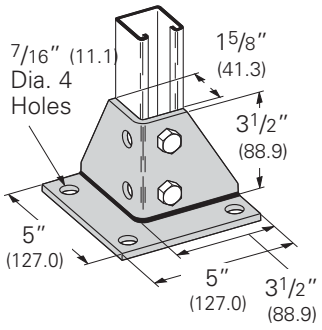


Reference page 106 for general fitting and standard finish specifications.

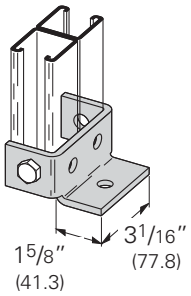
B570A
Post Base for Four Channel Combinations
- Standard finishes: ZN, GRN
- Wt./C 550 Lbs. (249.5 kg)



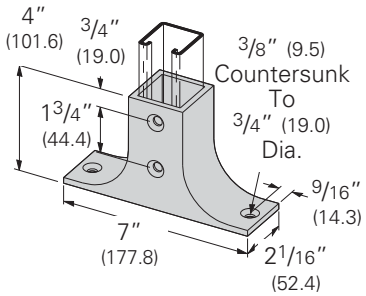
B278
Post Base for B22
- Standard finishes: ZN, GRN
- Wt./C 288 Lbs. (130.6 kg)



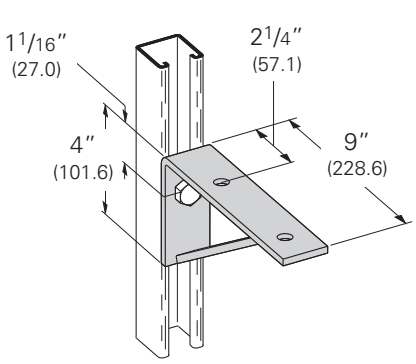
B585
Post Base for B22A
- Standard finishes: ZN, GRN
- Wt./C 97 Lbs. (44.0 kg)



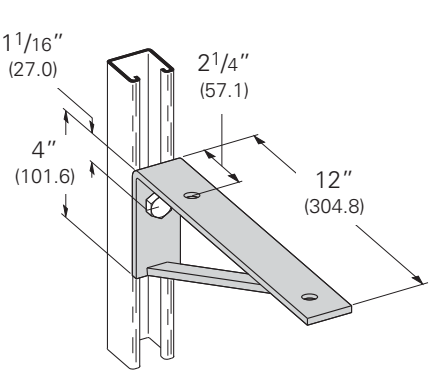
B300
Post Base
- Material: Malleable Iron
- Standard finishes: ZN, GRN
- Wt./C 259 Lbs. (117.5 kg)



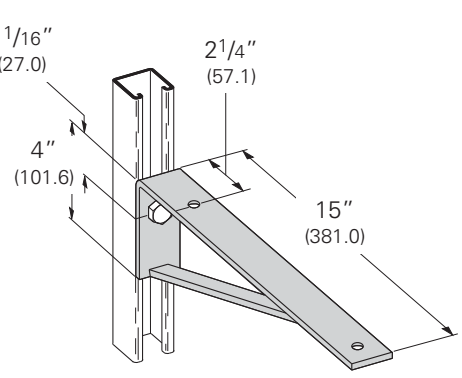
B187 Bracket
- Uniform Loading 1450 Lbs. (6.45 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 5 5/16" (150.8) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 193 Lbs. (87.5 kg)



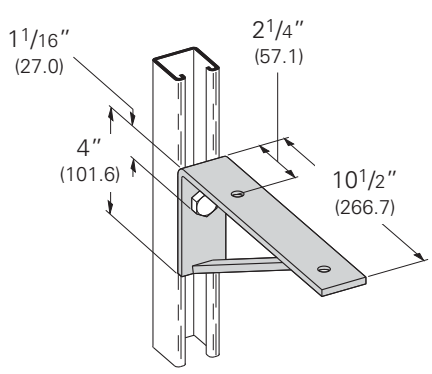
B188 Bracket
- Uniform Loading 1080 Lbs. (4.80 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 8 15/16" (227.0) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 241 Lbs. (109.3 kg)



B189 Bracket
- Uniform Loading 870 Lbs. (3.87 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 11 15/16" (303.2) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 308 Lbs. (139.7 kg)



B541 Bracket
- Uniform Loading 1240 Lbs. (5.51 kN)
- Safety Factor of 2.5
- Hole Spacing on Bracket Top 7 7/16" (188.9) Center to Center
- Standard finishes: ZN, GRN
- Wt./C 201 Lbs. (91.2 kg)

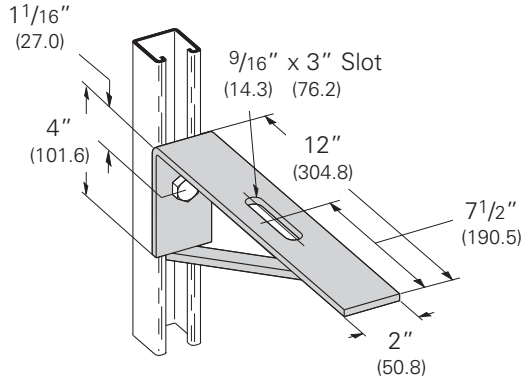


4Dimension compatible fitting

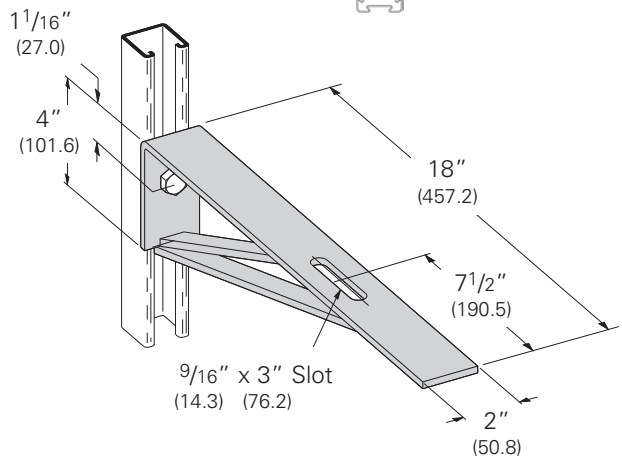
Reference page 106 for general fitting and standard finish specifications.

Post Bases & Brackets

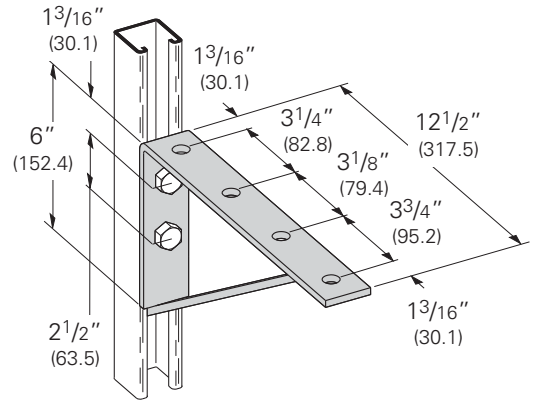
B190 12" (304.8) Bracket
- Uniform Loading 900 Lbs. (4.00 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 260 Lbs. (117.9 kg)



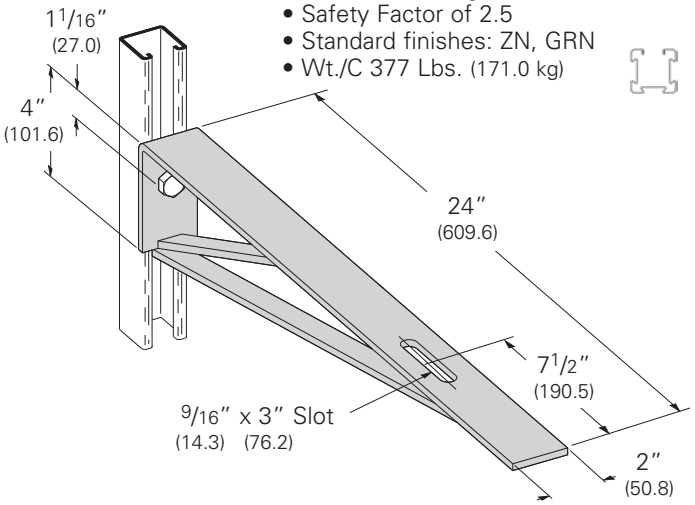
B191-18 18" (457.2) Bracket
- Uniform Loading 600 Lbs. (2.67 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 377 Lbs. (171.0 kg)



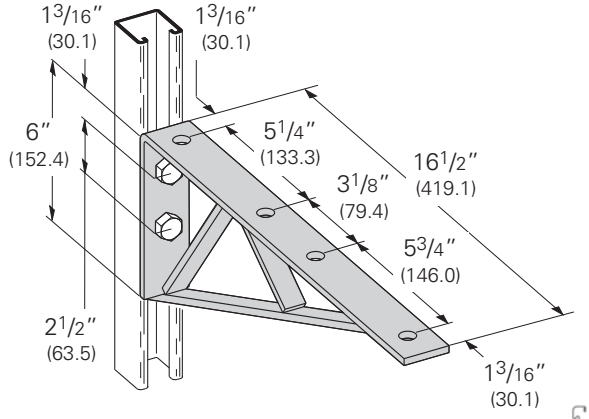
B289-12 12 1/2" (317.5) Bracket
- Uniform Loading 1040 Lbs. (4.63 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 285 Lbs. (129.3 kg)



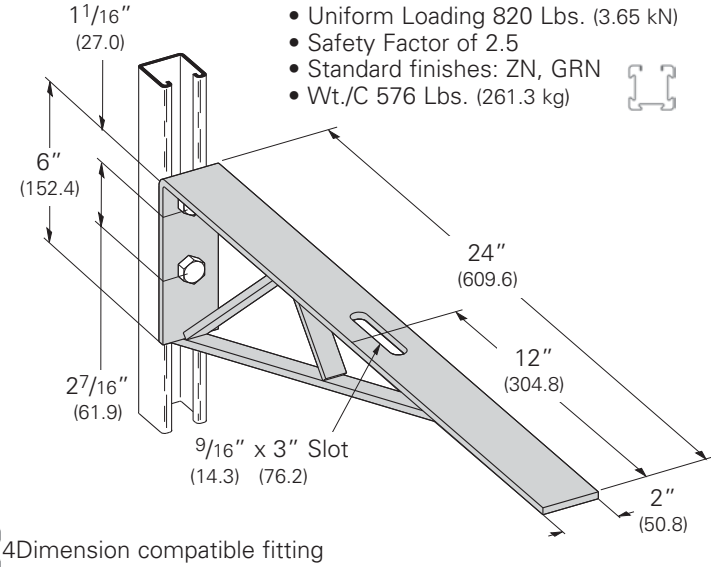
B191-24 24" (609.6) Bracket
- Uniform Loading 450 Lbs. (2.00 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 377 Lbs. (171.0 kg)



B290 16 1/2" (419.1) Bracket
- Uniform Loading 1200 Lbs. (5.34 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 405 Lbs. (183.7 kg)



B192 24" (609.6) Bracket
- Uniform Loading 820 Lbs. (3.65 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 576 Lbs. (261.3 kg)

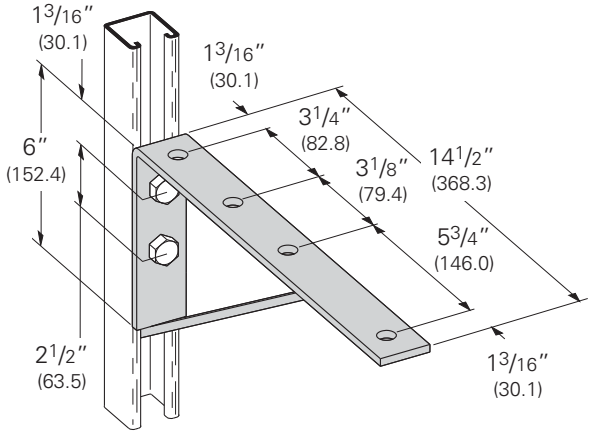


4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

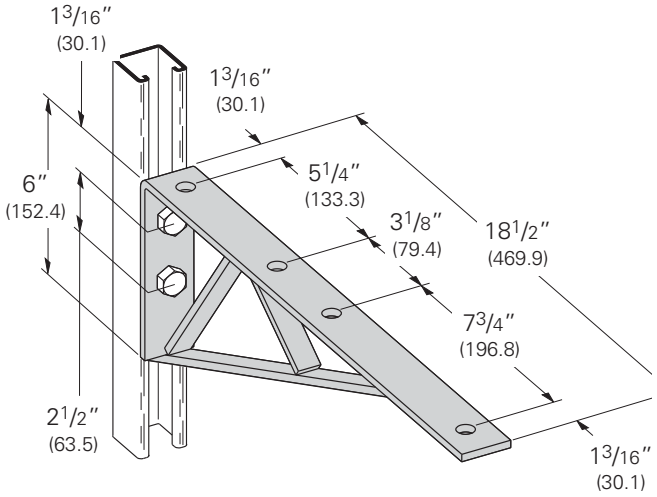
B289-14 14 1/2" (368.3) Bracket

- Uniform Loading 900 Lbs. (4.00 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 295 Lbs. (133.8 kg)



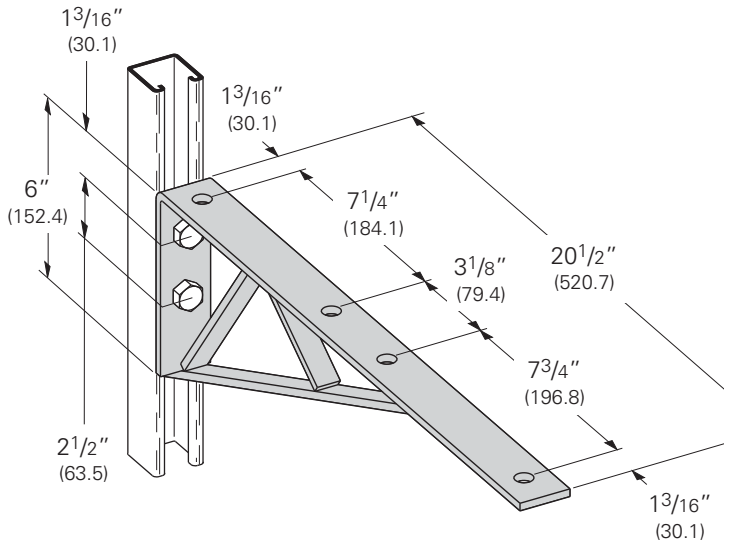
B291 18 1/2" (469.9) Bracket

- Uniform Loading 1070 Lbs. (4.76 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN
- Wt./C 468 Lbs. (212.3 kg)



B292 20 1/2" (520.7) Bracket

- Uniform Loading 600 Lbs. (2.67 kN)
- Safety Factor of 2.5
- Standard finishes: ZN, GRN, HDG, SS4
- Wt./C 490 Lbs. (222.2 kg)



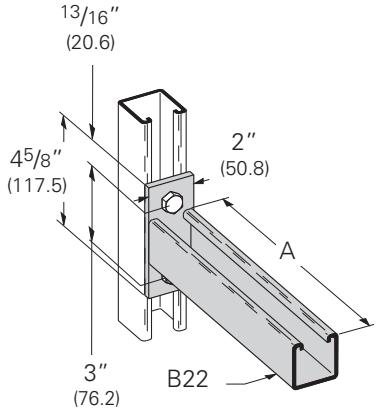
4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

B409
Single Channel Bracket

- Safety Factor of 2.5
- Standard finishes: ZN, GRN, SS4

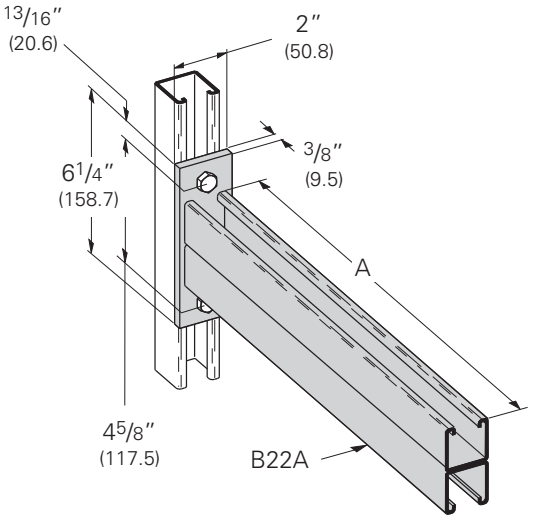
Part No.	A In.	A mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B409-6	6″	(152.4)	1920	(8.54)	152	(68.9)
B409-9	9″	(228.6)	1280	(5.69)	195	(88.4)
B409-12	12″	(304.8)	960	(4.27)	232	(105.2)
B409-14	14″	(355.6)	800	(3.56)	274	(124.3)
B409-16	16″	(406.4)	730	(3.25)	314	(142.4)
B409-18	18″	(457.2)	640	(2.84)	347	(157.4)
B409-24	24″	(609.6)	480	(2.13)	450	(204.1)



B297
Double Channel Bracket

- Safety Factor of 2.5
- Standard finishes: ZN, GRN, HDG

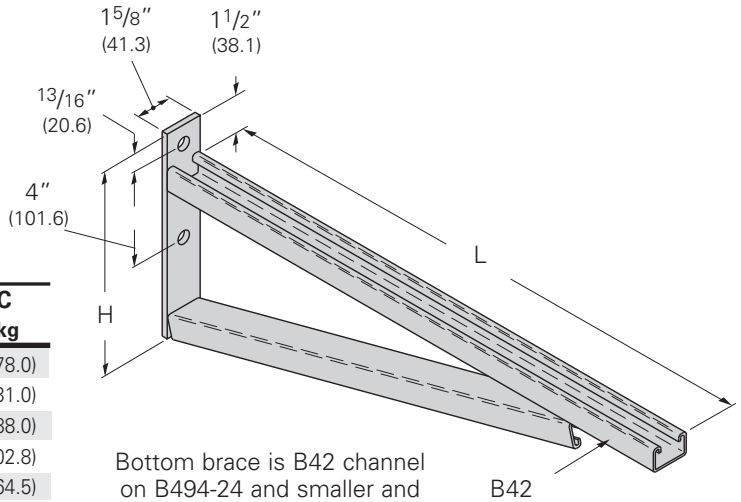
Part No.	A In.	A mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B297-12	12″	(304.8)	1660	(7.37)	485	(220.0)
B297-18	18″	(457.2)	1100	(4.88)	668	(303.0)
B297-24	24″	(609.6)	835	(3.71)	857	(388.7)
B297-30	30″	(762.0)	665	(2.95)	1040	(471.7)
B297-36	36″	(914.4)	550	(2.44)	1240	(562.4)
B297-42	42″	(1066.8)	465	(2.06)	1440	(653.2)



B494
Braced Single Bracket

- Safety Factor of 2.5
- Standard finishes: ZN, GRN

Part No.	L In.	L mm	H In.	H mm	Uniform Load Lbs.	Uniform Load kN	Wt. /C Lbs.	Wt. /C kg
B494-12	12″	(304.8)	83/4″	(222.2)	2500	(11.12)	392	(178.0)
B494-18	18″	(475.2)	83/4″	(222.2)	1700	(7.56)	509	(231.0)
B494-24	24″	(609.6)	83/4″	(222.2)	1300	(5.78)	635	(288.0)
B494-30	30″	(762.0)	111/4″	(285.7)	1600	(7.11)	885	(402.8)
B494-36	36″	(914.4)	111/4″	(285.7)	1100	(4.89)	1024	(464.5)
B494-42	42″	(1066.8)	16″	(406.4)	980	(4.36)	1285	(582.9)
B494-48	48″	(1219.2)	16″	(406.4)	980	(4.36)	1409	(639.1)



Bottom brace is B42 channel on B494-24 and smaller and B22 channel on B494-30 and larger

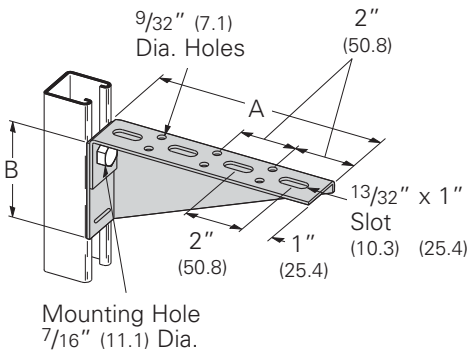
4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

B174SH-B186SH L&R Slotted Bracket

- Safety Factor of 2.5
- Specify L for left or R for right bracing
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN

Part No.	A In.	A mm	B In.	B mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B174SH	24″	(609.6)	6 7/16″	(163.5)	225	(1.00)	370	(167.8)
B175SH	26″	(660.4)	6 15/16″	(176.2)	225	(1.00)	425	(192.8)
B176SH	28″	(711.2)	7 7/16″	(188.9)	225	(1.00)	480	(217.7)
B177SH	30″	(762.0)	7 15/16″	(201.6)	225	(1.00)	520	(235.9)
B178SH	12″	(304.8)	3 7/16″	(87.3)	350	(1.55)	143	(64.8)
B179SH	14″	(355.6)	3 15/16″	(100.0)	350	(1.55)	162	(73.5)
B180SH	16″	(406.4)	4 7/16″	(112.7)	250	(1.11)	204	(92.5)
B181SH	18″	(457.2)	4 15/16″	(125.4)	250	(1.11)	232	(105.2)
B182SH	20″	(508.0)	5 7/16″	(138.1)	250	(1.11)	275	(124.7)
B183SH	22″	(558.8)	5 15/16″	(150.8)	250	(1.11)	317	(143.8)
B184SH	6″	(152.4)	1 15/16″	(49.2)	225	(1.00)	58	(26.3)
B185SH	8″	(203.2)	2 7/16″	(61.9)	225	(1.00)	82	(37.2)
B186SH	10″	(254.0)	2 15/16″	(74.6)	325	(1.44)	103	(46.7)

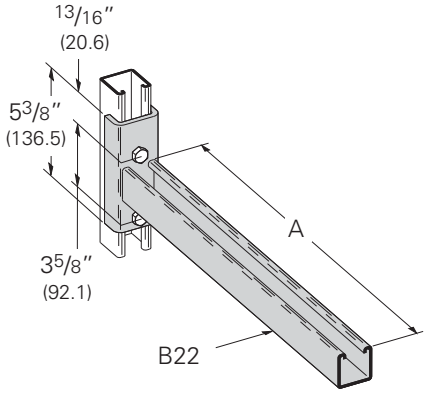


Right bracket shown, left bracket gussett on opposite side.

B196 Channel Clevis Bracket

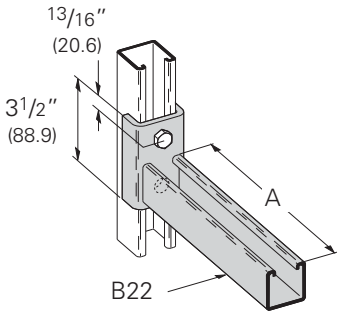
- Safety Factor of 2.5
- Standard finishes: ZN, GRN

Part No.	A In.	A mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B196-18	18″	(457.2)	600	(2.67)	430	(195.0)
B196-24	24″	(609.6)	450	(2.00)	510	(231.3)



B198 Channel Clevis Bracket

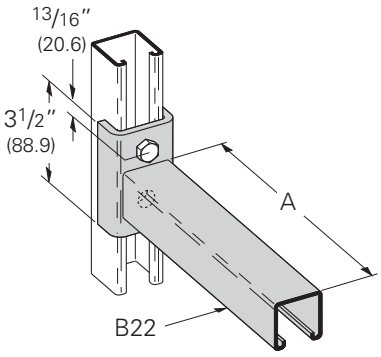
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B198-6	6″	(152.4)	1600	(7.12)	185	(83.9)
B198-12	12″	(304.8)	800	(3.56)	284	(128.8)

B198A Channel Clevis Bracket

- Safety Factor of 2.5
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B198A-6	6″	(152.4)	1600	(7.12)	185	(83.9)
B198A-12	12″	(304.8)	800	(3.56)	284	(128.8)

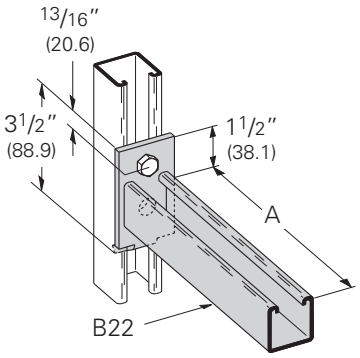
4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

Brackets

B293
Channel Bracket

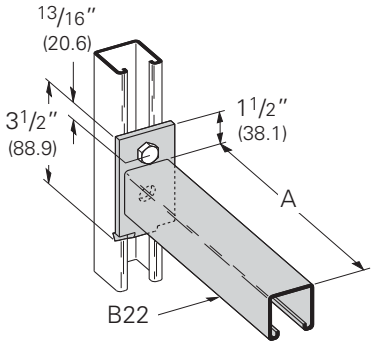
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B293-6	6″	(152.4)	1200	(5.34)	144	(65.3)
B293-12	12″	(304.8)	600	(2.67)	252	(114.3)
B293-18	18″	(457.2)	400	(1.78)	340	(154.2)
B293-24	24″	(609.6)	300	(1.33)	412	(186.9)

B293A
Channel Bracket

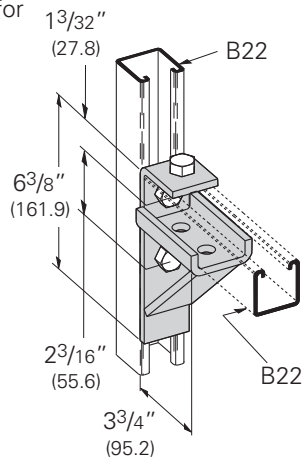
- Safety Factor of 2.5
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B293A-6	6″	(152.4)	1200	(5.34)	144	(65.3)
B293A-12	12″	(304.8)	600	(2.67)	252	(114.3)
B293A-18	18″	(457.2)	400	(1.78)	340	(154.2)
B293A-24	24″	(609.6)	300	(1.33)	412	(186.9)

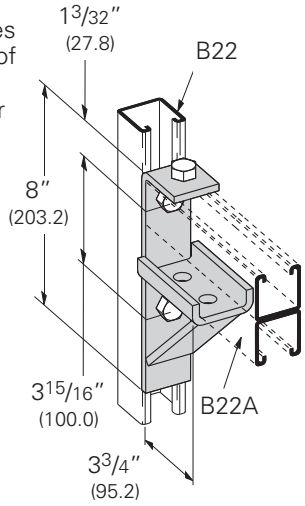
B194 Bracket for B22 & B24

- Safety Factor of 2.5
- 6300 In.-Lbs (712 N•m) applies to fitting only, not to strength of strut arm
- Refer to pages 56, 57 & 59 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 210 Lbs. (95.2 kg)



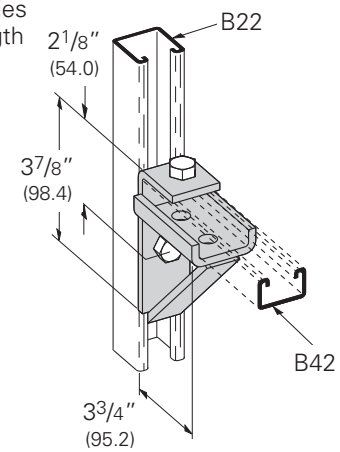
B370 Bracket for B22A & B11

- Safety Factor of 2.5
- 13000 In.-Lbs (1469 N•m) applies to fitting only, not to strength of strut arm
- Refer to pages 51, 56, & 57 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 266 Lbs. (120.6 kg)



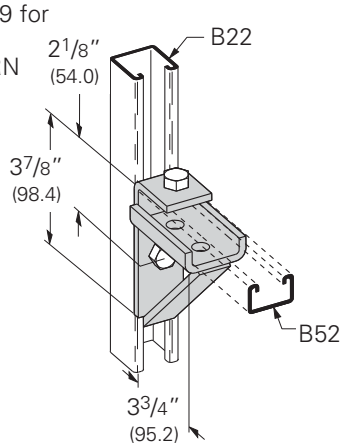
B195 Bracket for B42

- Safety Factor of 2.5
- 2500 In.-Lbs (282 N•m) applies to fitting only, not to strength of strut arm
- Refer to pages 57 & 65 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 174 Lbs. (78.9 kg)



B440
Bracket for B52 & B54

- Safety Factor of 2.5
- 2000 In.-Lbs (226 N•m) applies to fitting only, not to strength of strut arm
- Refer to page 57, 67, & 69 for strut loading data
- Standard finishes: ZN, GRN
- Wt./C 177 Lbs. (80.3 kg)

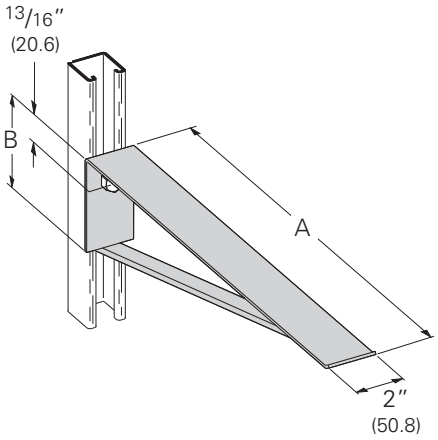


4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

B449-4, 8 & 12
Cable Saddle Bracket

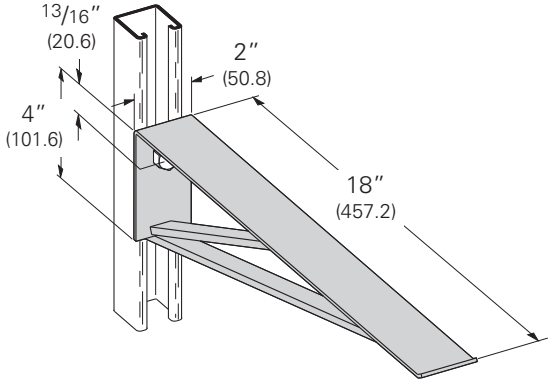
- Safety Factor of 2.5
- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	B In.	B mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B449-4	4 1/2"	(114.3)	2 3/8"	(60.3)	2400	(10.67)	74	(33.5)
B449-8	8 1/2"	(215.9)	2 3/8"	(60.3)	1270	(5.65)	124	(56.2)
B449-12	12 1/2"	(317.5)	4"	(101.6)	860	(3.82)	184	(83.4)

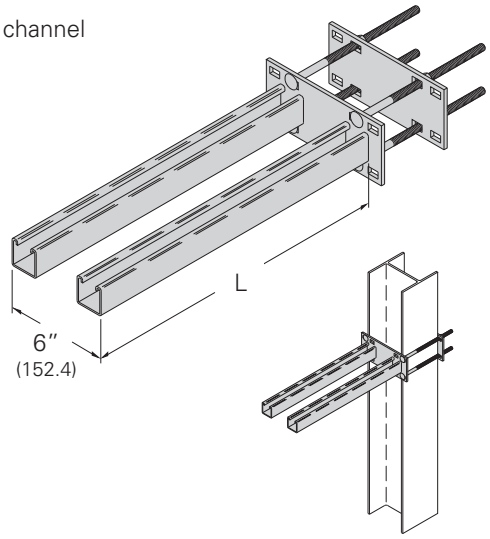
B449-18
18" (457.2) Cable Saddle Bracket

- Safety Factor of 2.5
- Uniform Load 960 Lbs. (4.17 kN)
- Material: 11 Gauge (3.0) ASTM A1011 HSLAS Gr. 50
- Standard finishes: ZN, GRN
- Wt./C 312 Lbs. (141.5 kg)



B409DB Series
Solar Bracket

- Safety Factor of 2.5
- Includes: (1) Channel Bracket Plate - 1/4" x 3 1/2" x 7 3/4" with welded channel
  (1) Back Plate - 1/4" x 3 1/2" x 7 3/4"
  (4) 3/8"-16 x 8 1/2" Square Neck Carriage Bolts
  (4) 3/8"-16 Serrated Flange Hex Nuts
- Fits 4" (101mm) to 6 1/2" (165mm) wide supports
- Standard finishes: ZN, HDG



Part No.	L In.	L mm	Uniform Load Lbs.	Uniform Load kN	Wt./C Lbs.	Wt./C kg
B409DB-12	12"	(304.8)	800	(3.56)	766	(347.4)
B409DB-18	18"	(457.2)	800	(3.56)	956	(433.6)

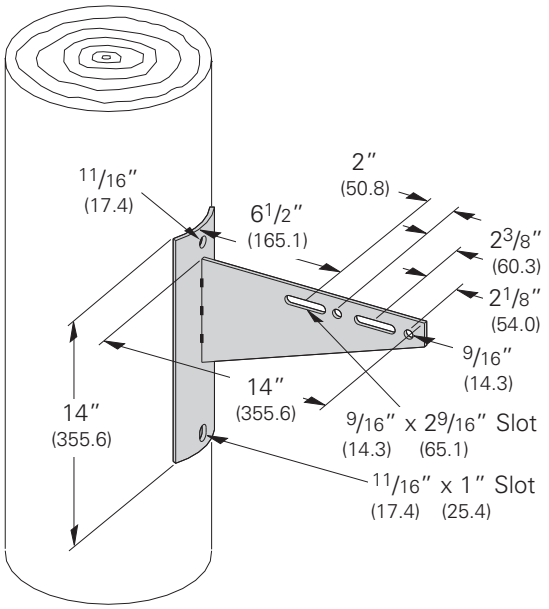
A single channel version and other lengths are available.
Contact Eaton B-Line Division engineering for more information.

4Dimension compatible fitting

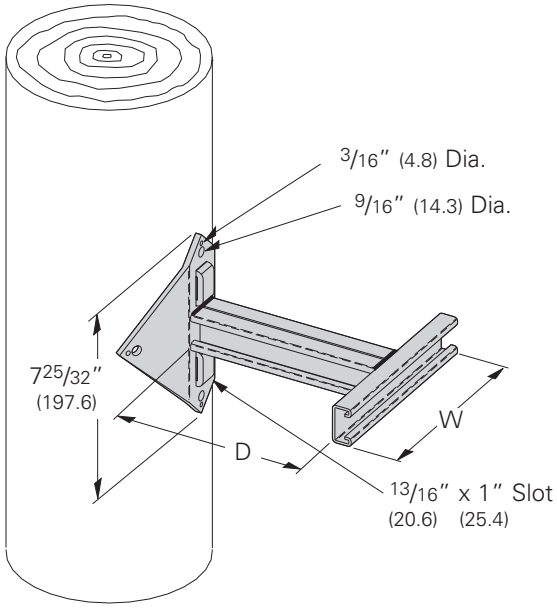
Reference page 106 for general fitting and standard finish specifications.

Brackets

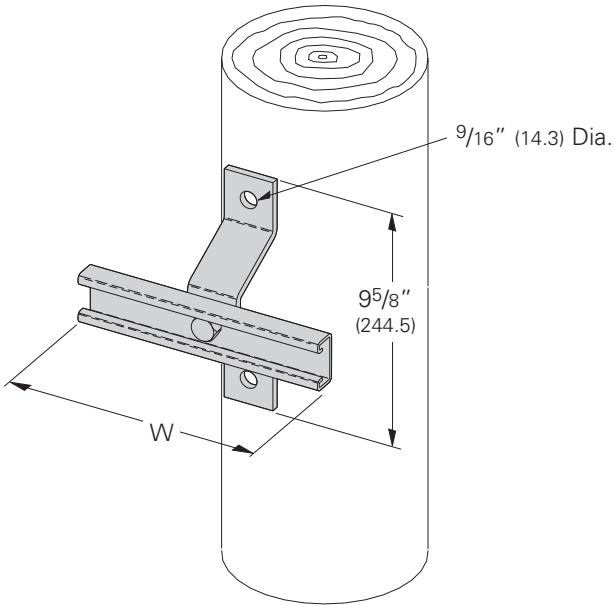
B816
- Standard finishes: ZN, HDG



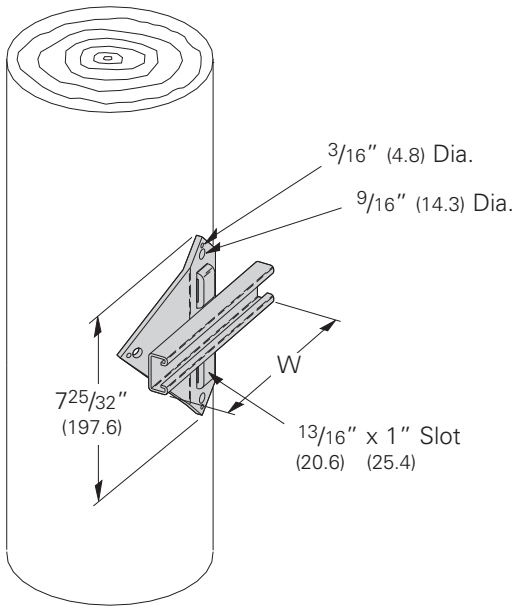
B852S-*-**
- *Specify Width: W = 8, 12, 16
- **Specify Depth: D = 6, 8, 10, 12, 16, 18, 24
- 13/16" (20.6mm) x 1" (25.4mm) banding slots for steel band
- Standard finishes: ZN, HDG



B802D-*
- *Specify Width: W = 8, 12, 16
- Standard finishes: ZN, HDG

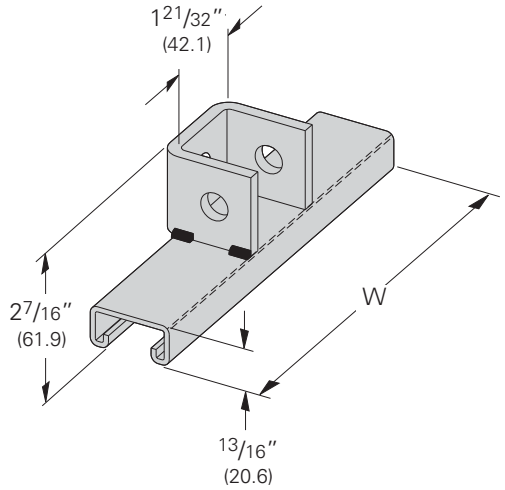


B810-*
- *Specify Width: W = 8, 12, 16
- 13/16" (20.6mm) x 1" (25.6mm) banding slots for steel band
- Standard finishes: ZN, HDG

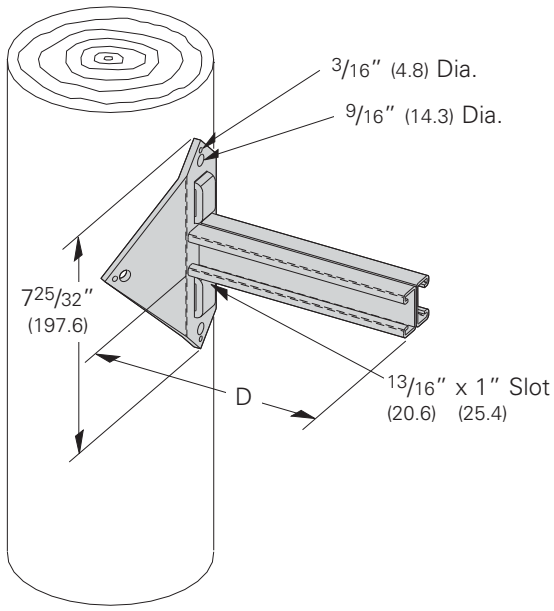


Reference page 106 for general fitting and standard finish specifications.

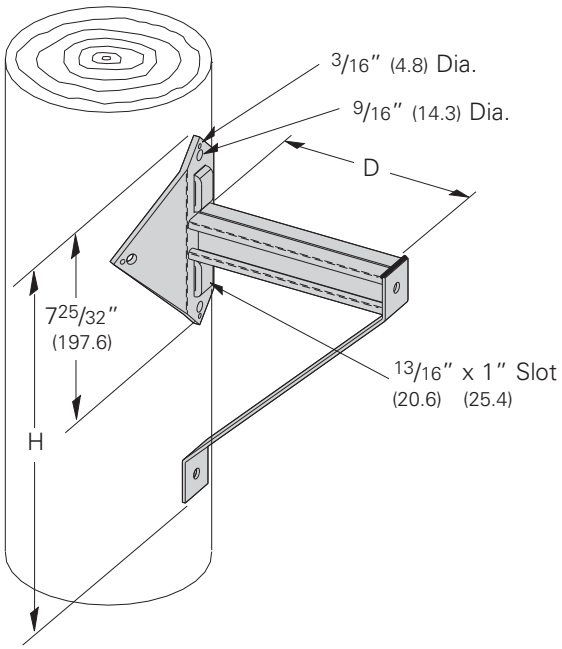
B811-*
- *Specify Width: W = 8, 12, 16
- Can be attached directly to B809 & B812
- Standard finishes: ZN, HDG



B812-*
- *Specify Depth: D = 6, 8, 12, 16, 18, 24
- 13/16″ (20.6mm) x 1″ (25.4mm) banding slots for steel band
- Standard finishes: ZN, HDG



B809B-*
- *Specify Depth: D = 6, 8, 10, 12, 16, 18, 24
- 13/16″ (20.6mm) x 1″ (25.4mm) banding slots for steel band
- Standard finishes: ZN, HDG

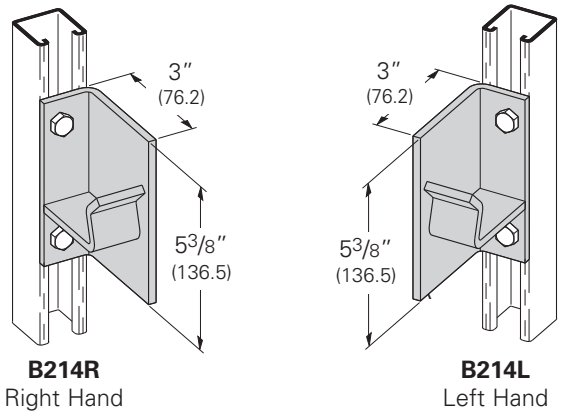


Part No.	D		H	
	In.	mm	In.	mm
B809B-6	6″	(152.4)	12 3/4″	(323.9)
B809B-8	8″	(203.2)	14 3/4″	(374.7)
B809B-10	10″	(254.0)	16 3/4″	(425.5)
B809B-12	12″	(304.8)	18 3/4″	(476.2)
B809B-16	16″	(406.4)	22 3/4″	(577.8)
B809B-18	18″	(457.2)	24 3/4″	(628.6)
B809B-24	24″	(609.6)	27 3/4″	(704.8)

Reference page 106 for general fitting and standard finish specifications.

Miscellaneous Fittings

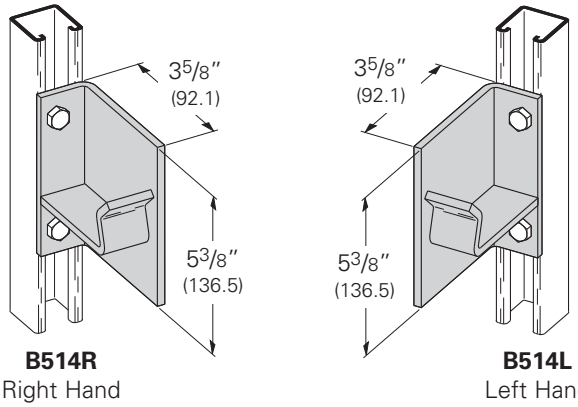
B214 R&L
Reel Rack Support for 1 1/4" (32) Pipe
- Standard finishes: ZN, GRN
- Wt./C 200 Lbs. (90.7 kg)



B214R
Right Hand

B214L
Left Hand

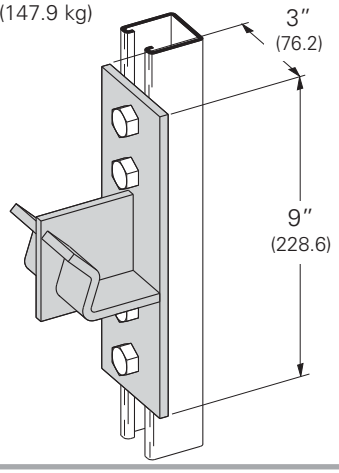
B514 R&L
Reel Rack Support for 2" (50) Pipe
- Standard finishes: ZN, GRN
- Wt./C 246 Lbs. (111.6 kg)



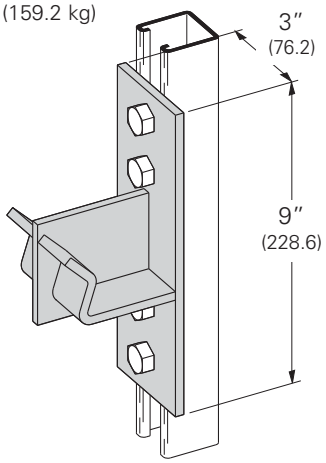
B514R
Right Hand

B514L
Left Hand

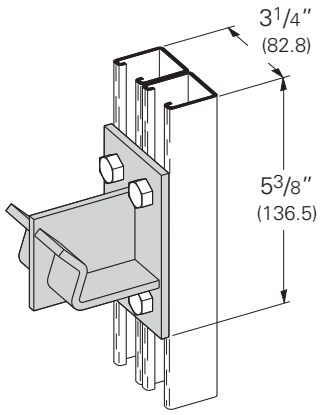
B475
Double Reel Rack Support on Single Channel for 1 1/4" (32) Pipe
- Standard finishes: ZN, GRN
- Wt./C 326 Lbs. (147.9 kg)



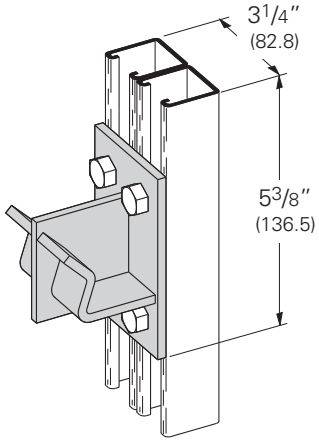
B473
Double Reel Rack Support on Single Channel for 2" (50) Pipe
- Standard finishes: ZN, GRN
- Wt./C 351 Lbs. (159.2 kg)



B474
Double Reel Rack Support on Double Channel for 1 1/4" (32) Pipe
- Standard finishes: ZN, GRN
- Wt./C 257 Lbs. (116.6 kg)



B472
Double Reel Rack Support on Double Channel for 2" (50) Pipe
- Standard finishes: ZN, GRN
- Wt./C 299 Lbs. (135.6 kg)

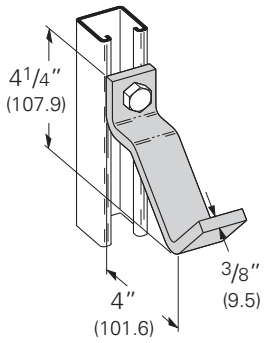


4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

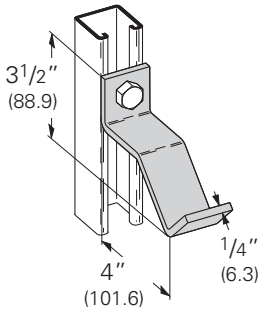
B438
Pipe Support Bracket

- Standard finishes: ZN, GRN
- Material: ASTM A36
- Wt./C 132 Lbs. (59.9 kg)



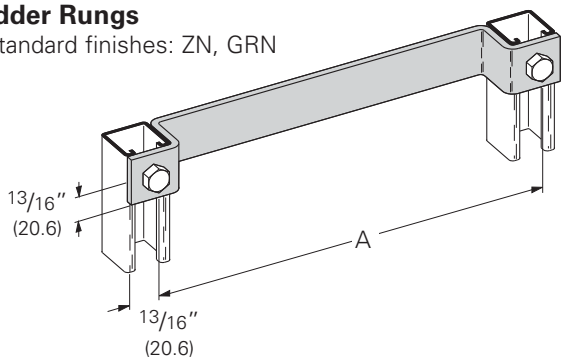
B439
Pipe Support Bracket

- Standard finishes: ZN, GRN
- Wt./C 88 Lbs. (39.9 kg)



B411 Series
Ladder Rungs

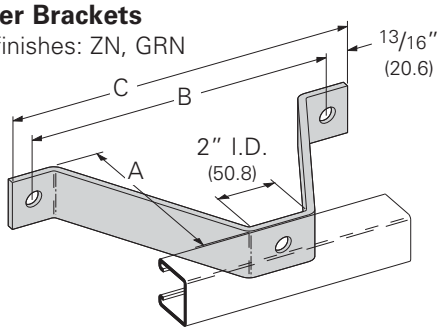
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	Wt./C Lbs.	Wt./C kg
B411-12	12″	(304.8)	176	(79.8)
B411-15	15″	(381.0)	202	(91.6)
B411-18	18″	(457.2)	234	(106.1)

B381-B385
Wall Ladder Brackets

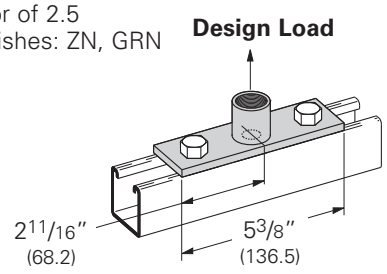
- Standard finishes: ZN, GRN



Part No.	A In.	A mm	B In.	B mm	C In.	C mm	Wt./C Lbs.	Wt./C kg
B381	2 3/8″	(60.3)	6″	(152.4)	7 5/8″	(193.7)	110	(49.9)
B382	4 3/8″	(111.1)	8″	(203.2)	9 5/8″	(244.5)	164	(74.4)
B383	6 3/8″	(161.9)	10″	(254.0)	11 5/8″	(295.3)	200	(90.7)
B384	8 3/8″	(212.7)	12″	(304.8)	13 5/8″	(346.1)	253	(114.7)
B385	10 3/8″	(263.5)	14″	(355.6)	15 5/8″	(396.9)	318	(144.2)

B587-1/2, 3/4 & 1
Pipe Coupling Fitting

- Safety Factor of 2.5
- Standard finishes: ZN, GRN



Part No.	For Pipe Size In.	For Pipe Size mm	Wt./C Lbs.	Wt./C kg	Design Load Lbs.	Design Load kN
B587-1/2	1/2″	(15)	77	(34.9)	1000	(4.45)
B587-3/4	3/4″	(20)	84	(38.1)	1400	(6.23)
B587-1	1″	(25)	105	(47.6)	1900	(8.45)

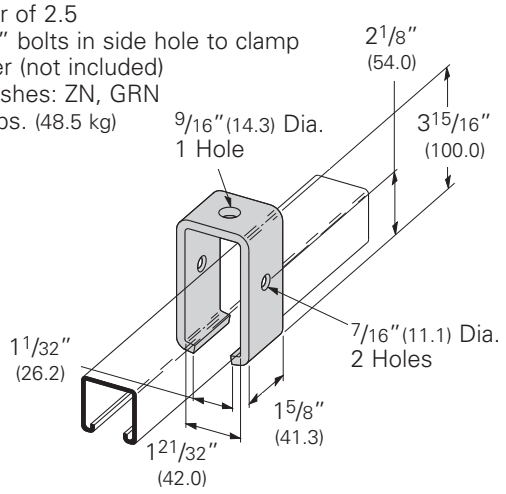
4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

Miscellaneous Fittings

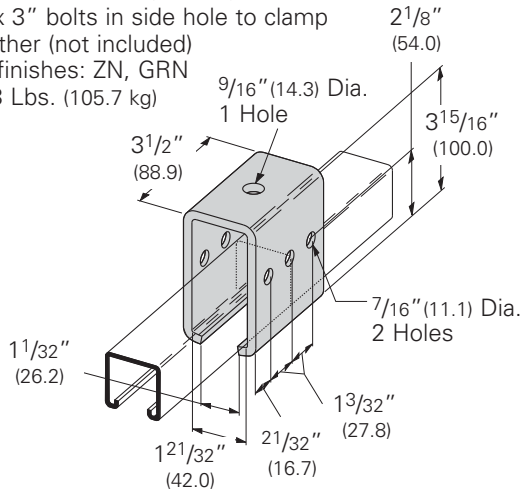
B349
Trolley Beam Support

- Design Load 1200 Lbs. (5.34 kN)
- Safety Factor of 2.5
- Use 3/8" x 3" bolts in side hole to clamp strut together (not included)
- Standard finishes: ZN, GRN
- Wt./C 107 Lbs. (48.5 kg)



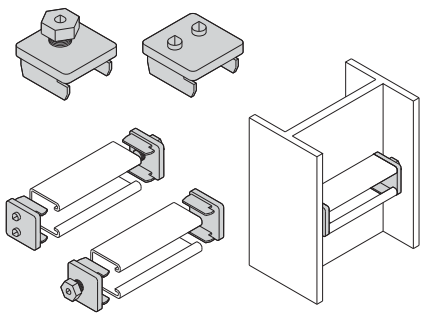
B350
Trolley Beam Joint Support

- Design Load 1200 Lbs. (5.34 kN)
- Use 3/8" x 3" bolts in side hole to clamp strut together (not included)
- Standard finishes: ZN, GRN
- Wt./C 233 Lbs. (105.7 kg)



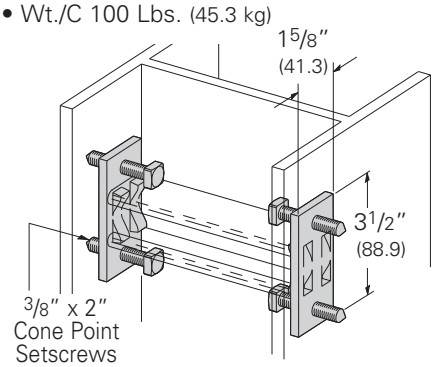
B614
Column Support for B22

- Quick installation (one bolt to tighten)
- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B22 and B24 Channel
- Sold in pairs
- Standard finish: ZN
- Wt./C 50 Lbs. (22.6 kg)



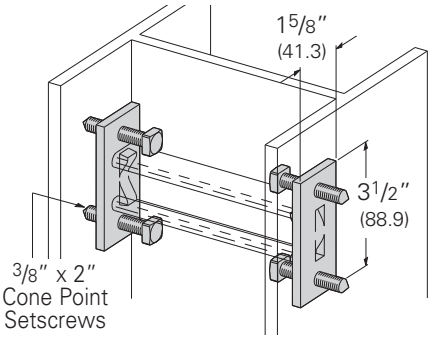
B613
Column Support for B22

- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B22 and B24 Channel
- Setscrews to be torqued to 19 ft./Lbs
- Sold in pairs
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



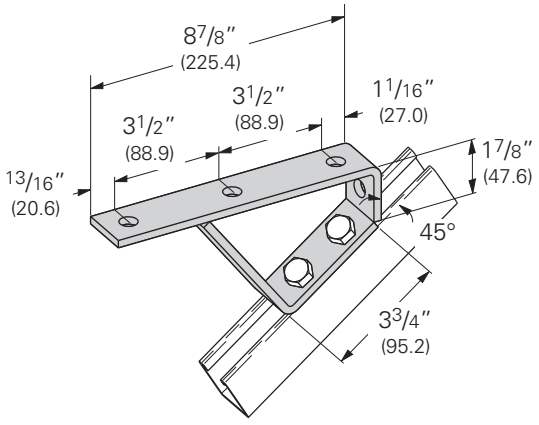
B613A
Column Support for B52

- Design Load 800 Lbs. (3.56 kN) Slip with Safety Factor of 3
- Use with B52 and B54 Channel
- Setscrews to be torqued to 19 ft./Lbs
- Sold in pairs
- Standard finishes: ZN, GRN, HDG
- Wt./C 100 Lbs. (45.3 kg)



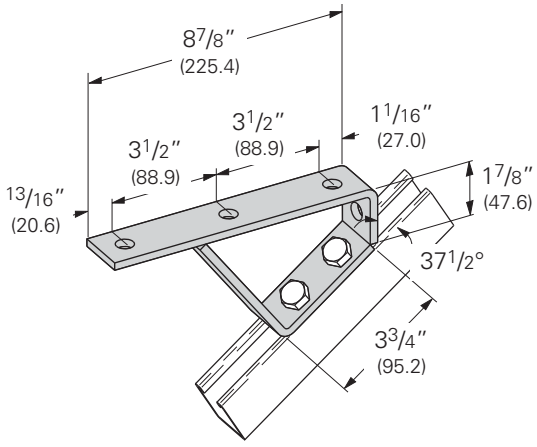
B560
45° Stair Support

- Standard finishes: ZN, GRN
- Wt./C 220 Lbs. (99.8 kg)



B562
37 1/2° Stair Support

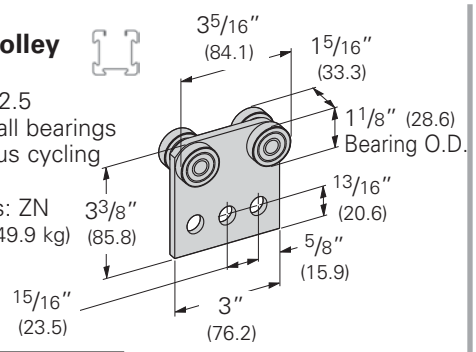
- Standard finishes: ZN, GRN
- Wt./C 206 Lbs. (93.4 kg)



Reference page 106 for general fitting and standard finish specifications.

B376
Four Bearing Trolley Assembly

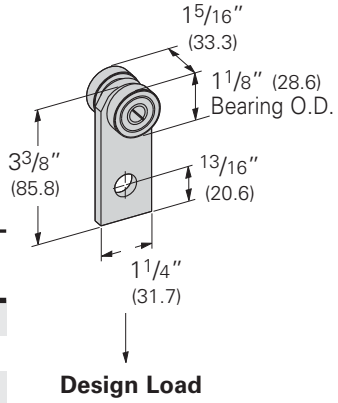
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Standard finishes: ZN
- Wt./C 110 Lbs. (49.9 kg)



Design Load in B22		
Lbs.	kN	RPM
300	(1.33)	@600
450	(2.00)	@300
600	(2.67)	@100

B377
Two Bearing Trolley Assembly

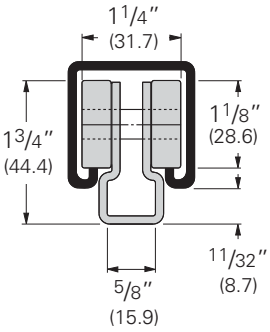
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Standard finishes: ZN
- Wt./C 48 Lbs. (21.8 kg)



Design Load in B22		
Lbs.	kN	RPM
150	(.67)	@600
225	(1.00)	@300
437	(1.94)	@100

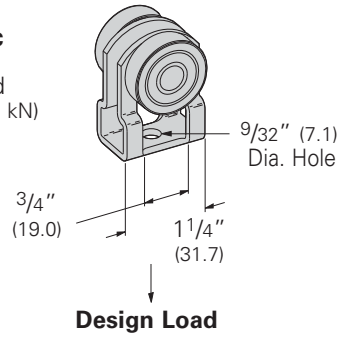
B477
Two Bearing Light Duty Trolley Assembly

- Design Load 50 Lbs. (.22 kN)
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Material:12 Gauge (2.6) ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN
- Wt./C 30 Lbs. (13.6 kg)



B477P
With Plastic Bearings

- Design Load 10 Lbs. (.045 kN)

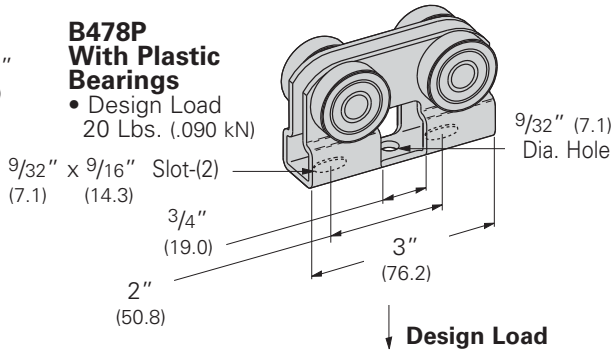


B478
Four Bearing Light Duty Trolley Assembly

- Design Load 100 Lbs. (.44 kN)
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Material:12 Gauge (2.6) ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN
- Wt./C 68 Lbs. (30.8 kg)

B478P
With Plastic Bearings

- Design Load 20 Lbs. (.090 kN)

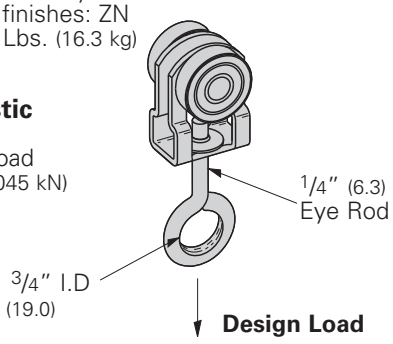


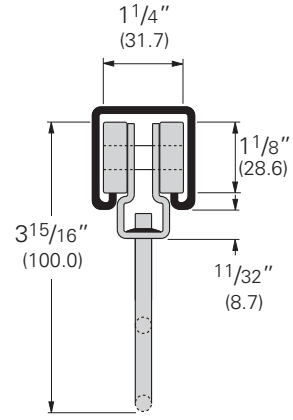
B477H
Two Bearing Light Duty Trolley Assembly with Eye Hook

- Design Load 50 Lbs. (.22 kN)
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Material:12 Gauge (2.6) ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN
- Wt./C 36 Lbs. (16.3 kg)

B477HP
With Plastic Bearings

- Design Load 10 Lbs. (.045 kN)



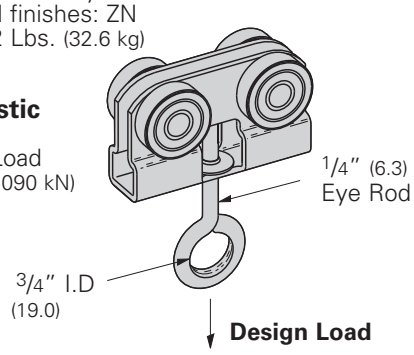


B478H
Four Bearing Light Duty Trolley Assembly with Eye Hook

- Design Load 100 Lbs. (.44 kN)
- Safety Factor of 2.5
- Stainless steel ball bearings
- Not for continuous cycling applications
- Material:12 Gauge (2.6) ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN
- Wt./C 72 Lbs. (32.6 kg)

B478HP
With Plastic Bearings

- Design Load 20 Lbs. (.090 kN)



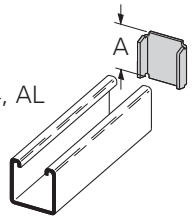
4Dimension compatible fitting

Reference page 106 for general fitting and standard finish specifications.

Miscellaneous Fittings

B203-B206 & B220-B223
Channel End Caps Type X

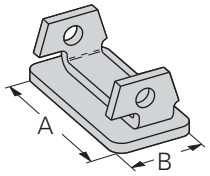
- Material: ASTM A1011 CS Type B
- Standard finishes: ZN, GRN, HDG, SS4, AL



Part No.	Use With	A In.	A mm	Wt./C Lbs.	Wt./C kg
B203	B42	1.015	(25.8)	6	(2.7)
B204	B54	.827	(21.0)	5	(2.2)
B205	B22	1.640	(41.6)	10	(4.5)
B206	B32	1.390	(35.3)	8	(3.6)
B220	B52	.827	(21.0)	4	(1.8)
B221	B12	2.452	(62.3)	15	(6.8)
B222	B11	3.265	(82.9)	20	(9.1)
B223	B24	1.640	(41.6)	10	(4.5)

B283-B286
Channel End Caps

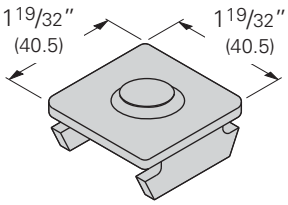
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN



Part No.	Use With	A In.	A mm	B In.	B mm	Wt./C Lbs.	Wt./C kg
B283	B52	1 19/32"	(40.5)	25/32"	(19.8)	6	(2.7)
B284	B54 & B56	1 19/32"	(40.5)	25/32"	(19.8)	6	(2.7)
B285	B22	1 19/32"	(40.5)	1 19/32"	(40.5)	13	(5.9)
B286	B24 & B26	1 19/32"	(40.5)	1 19/32"	(40.5)	14	(6.3)

B287 & B288
Channel End Caps

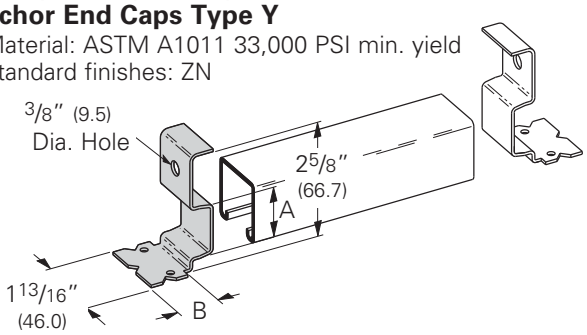
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN, GRN



Part No.	Use With	Wt./C Lbs.	Wt./C kg
B287	B22	13	(5.9)
B288	B24	14	(6.3)

B3322, B3332, B3342, B3352
Anchor End Caps Type Y

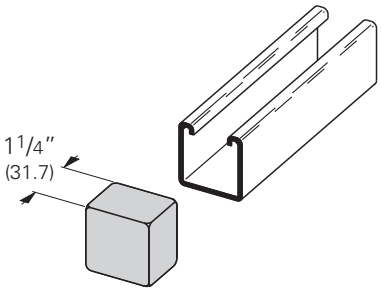
- Material: ASTM A1011 33,000 PSI min. yield
- Standard finishes: ZN



Part No.	Use With	A In.	A mm	B In.	B mm	Wt./C Lbs.	Wt./C kg
B3322	B22I	1.270	(32.2)	1 3/16"	(30.2)	15	(6.8)
B3332	B32I	1.000	(25.4)	1 3/16"	(30.2)	15	(6.8)
B3342	B42I	.645	(16.4)	1 1/4"	(31.8)	15	(6.8)
B3352	B52I	.460	(11.7)	1 5/16"	(33.3)	15	(6.8)

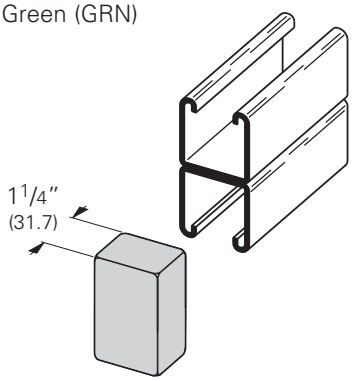
B822
Plastic End Cap for B22 & B24

- Material: Polyvinyl Chloride (PVC/Vinyl)
- Withstands intermittent temperatures up to 350°F (177°C) and 200°F (93°C) continuous
- Wt./C 3 Lbs. (1.3 kg)
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)



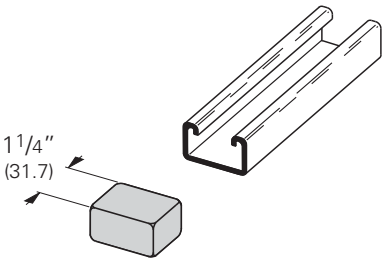
B822A
Plastic End Cap for B22A & B11

- Material: Polyvinyl Chloride (PVC/Vinyl)
- Withstands intermittent temperatures up to 350°F (177°C) and 200°F (93°C) continuous
- Wt./C 5 Lbs. (2.2 kg)
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)



B852
Plastic End Cap for B52

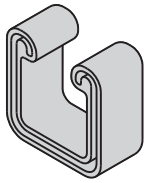
- Material: Polyvinyl Chloride (PVC/Vinyl)
- Withstands intermittent temperatures up to 350°F (177°C) and 200°F (93°C) continuous
- Wt./C 2.5 Lbs. (1.1 kg)
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)



Reference page 106 for general fitting and standard finish specifications.

B823
Profile End Caps

- Material: Polyvinyl Chloride (PVC/Vinyl)
- Withstands intermittent temperatures up to 350°F (177°C) and 200°F (93°C) continuous
- Available in colors: White (W), Yellow (Y), Black (BLK), Gray (GRY), Green (GRN)

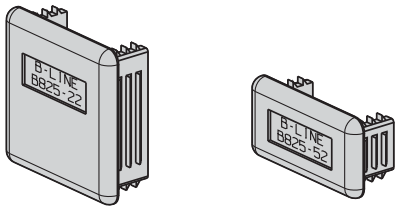


Approx. 3/4" deep
(19.0)

Part No.	Fits Channel Sizes	Wt./C Lbs.	kg
B823-22A	B22A, B24A, B26A	6.9	(3.1)
B823-22	B22, B24, B26	4.1	(1.8)
B823-42	B42	3.8	(1.7)
B823-52	B52, B54, B56	3.5	(1.6)

B825
Plastic End Caps

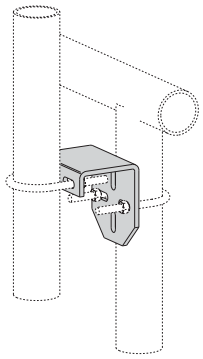
- Material: Polyurethane
- Available in colors: Gray (GRY), Green (GRN)

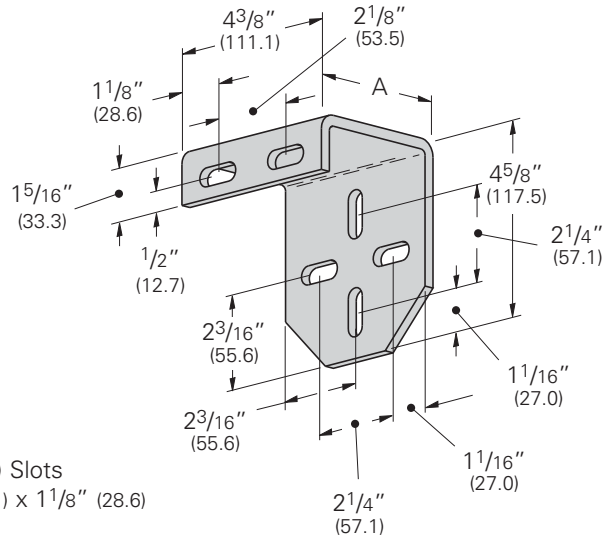


Part No.	Fits Channel Sizes	Wt./C Lbs.	kg
B825-22	B22 & B24	2.0	(0.9)
B825-52	B52 & B54	1.0	(0.4)

B408SLBVNS Series
Stand-Off Brackets

- Material: 1/4" (6.3)
- Standard Finishes: HDG, ZN, GRN
- For pipe or rigid conduit sizes of 1 1/2" (40) and 2" (50) use with B501 Series 'U'-Bolts (see page 53)
- For strut channels 1 5/8" (41.3) wide use with B500 Series Square 'U'-Bolts (see page 53)
- Hardware is not included





Part No.	A In.	(mm)	Wt./C Lbs.	kg
B408SLBVNS	3 1/2"	(88.9)	189	(85.7)
B408SLBVNS1	3"	(76.2)	220	(99.8)
B408SLBVNS2	2"	(50.8)	236	(107.0)

Reference page 106 for general fitting and standard finish specifications.