



Engineering Catalog

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Manufacturers of Cushioned Clamping, Support Systems, and Quick Disconnects



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ZF-2



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

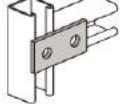
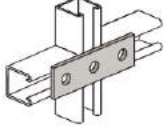
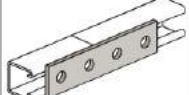
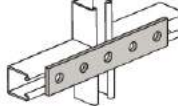
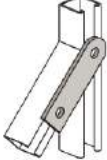

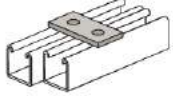
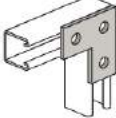
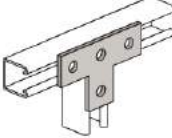
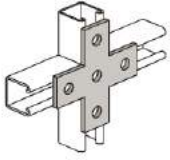
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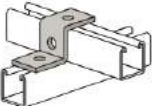
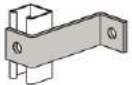
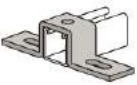
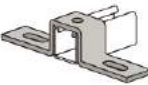
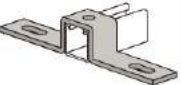

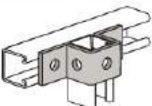
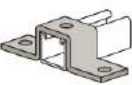

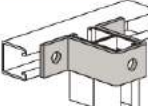
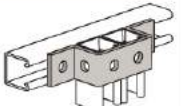







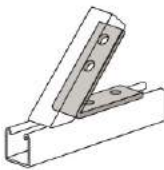
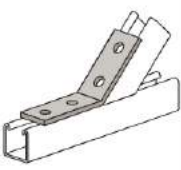
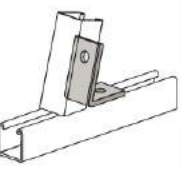
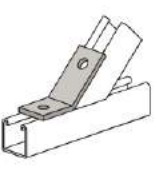


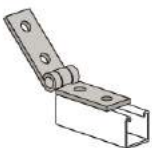
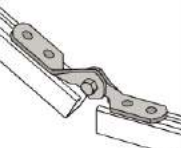
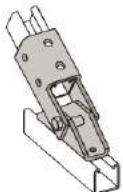
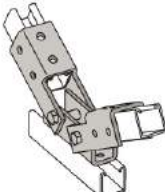

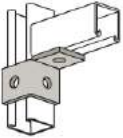
Channel

Channel Nuts
& HardwareGeneral
FittingsPipe & Conduit
SupportsElectrical
FittingsSpring
SteelLoop & Ring
ClampsBelt Clamps
& Z-ClampsConcrete
InsertsRooftop
SupportsGamma
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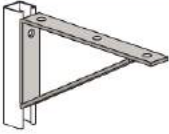
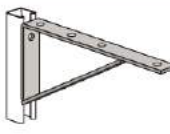

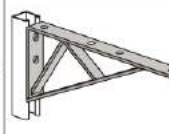
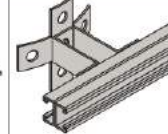
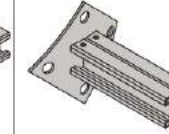
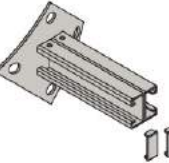
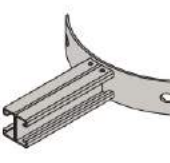
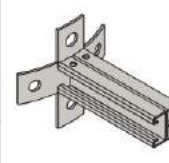

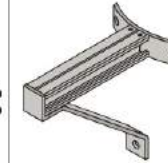
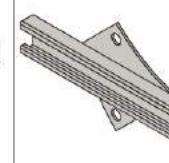
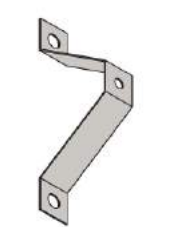
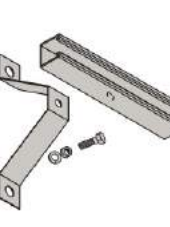
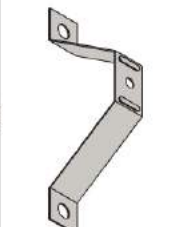
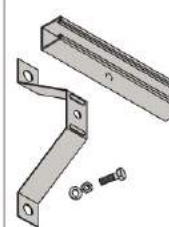
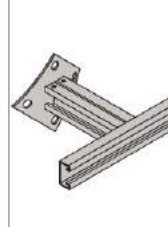
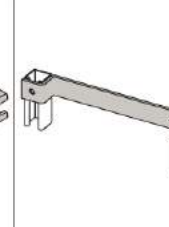
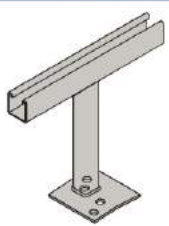
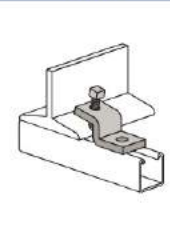
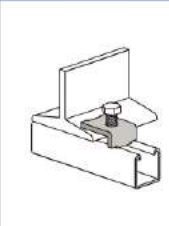
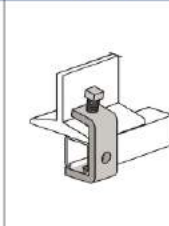
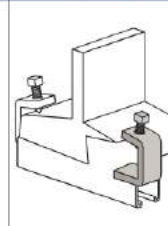
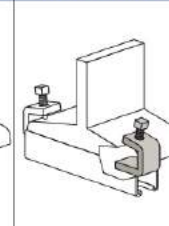
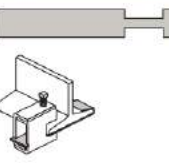

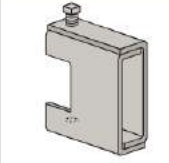
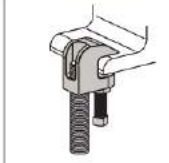
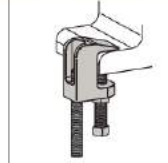
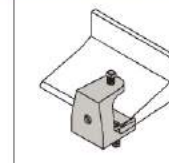
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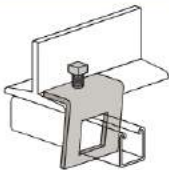
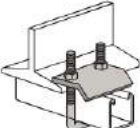

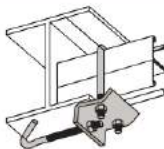
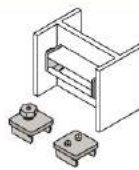
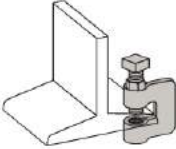


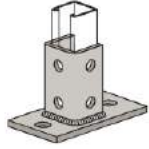
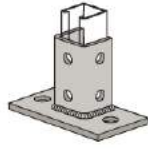

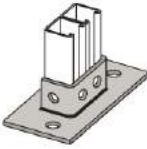
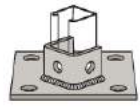
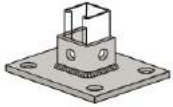

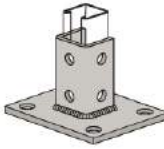

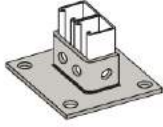
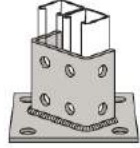
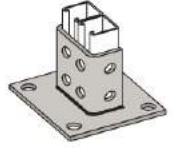


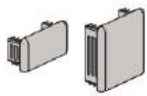

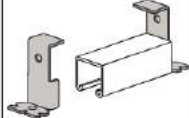
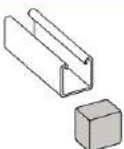

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General Fittings					
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W1017	W1017A-Y	W1017AR	W1017ARA-Y	W1021-X-Y	W1023-Y
					
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W6445	B6445S	W6462	W6469	W6461	W6463	W6460
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W6500	W6500PLASTIC	W6905 & W6906	W6910 & W6911	W6915 & W6916	W6920 & W6921	Force-A-Clamp®
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BCC	BCL CCP	FH C	FH CCP	FHS C	FHS CCP	
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FHV C	CFC	CC CC	CCP CCP	BR	FCH	
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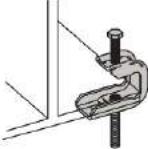


















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PSP, FSM	Silver Claw	BCL	BC92	ABSHP	FHS SH
					
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ZBA Z-Bracket	BBSM	LVMN	LVMS	LVMP	MSC CC CCP
					
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CTS	CSSTS	CCMS	SDTSLP8X1/2	SCT	TCB TCS
					
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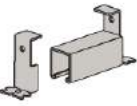
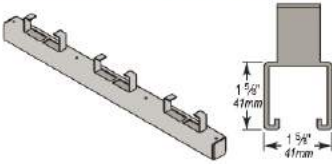
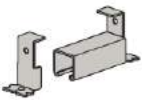
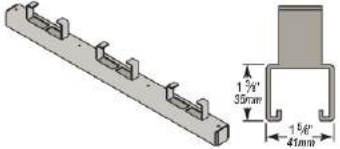
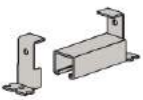
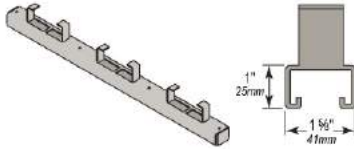
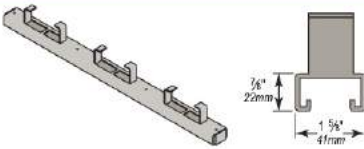
Beta Clamps and Z-Clamps					
Beta Standard	Beta Heavy	Beta Twin	Beta Smoothie Standard	Beta Smoothie Twin	Beta Rubber Standard
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W7350 Series Inserts W300 1-5/8" x 1-3/8" 12 Gauge Channel		W7550 Series Inserts W800 1-5/8" x 1" 12 Gauge Channel	
W7350 to W7352	W7353 to W7370	W7550 to W7552	W7553 to W7570
			
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W7950 Series Inserts W900 1-5/8" x 7/8" 12 Gauge Channel			
W7954 to W7970			
			
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Cush-A-Block® Rooftop Supports				
CBN Series	CBN-BR Bridge Series	CBN Series	CBN-EX Series	CBN-PRB Series
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CBN-RB Series Medium Support	CBN-RB Series Heavy Support	CBN-DS Series		CBN-DSFW Series
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CBM	CBM Series	CBMPH Series	CBMPP Series	CBM REX
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GAMMA Anti-Vibration Pads				
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Industrial Interchange				
				
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1/4" - 210 & O Series	3/4" - 310 & O Series	TF & J Series	SHD & TL Series	O60 - A70 Series
Interchange with ARO 210 Series	Interchange with ARO 310 Series	Interchange with Tru-Plate Series	Interchange with Schrader Standard & Heavy Duty)	Interchange with Hansen 600 & 700 Series
				
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FRL Series	LN & L Series	F180 Series	DR Series	U Series
Interchange with Hansen RL Series	Interchange with Lincoln Long Nose	Interchange with Hansen 180 Series	Interchange with Rectus 21 KA	Universal Coupler
				
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USV Series	SV & SVPC Series	Push Buttons Series	Safety 210 Series	FJT Series
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Hydraulic Quick Disconnects			
FHK & DS Series	Carpet Cleaning	6600 Series	FF Plus Series, Flat Face
Compatible with ISO 7241-1, Series B	Compatible with ISO-B	Conforms with ISO 7241-1, Series A)	Flat Face, Meets ISO 16028 Standard
			
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FF Plus Series Connect Under Pressure Plugs	FF Series, Flush Face	FVEP Series	FH & FIH Series
Flat Face, Meets ISO 16028 Standard	Flush Face, Meets ISO 16028 Standard	FVEP Interchange	Interchange with Snap-Tite H & IH Series
			
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4000 Series	6100 Series	W Series	FST & ST Series
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Blow Guns, Fittings & Accessories, and Hoses & Accessories

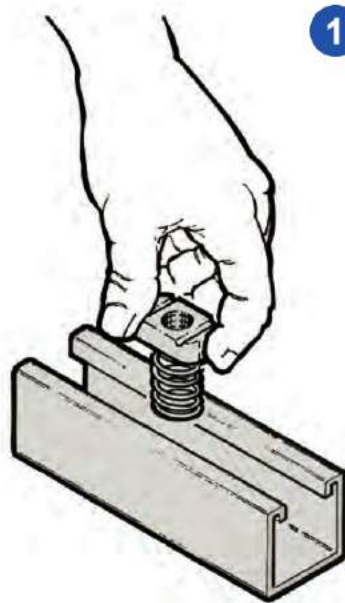
Blow Guns & Accessories				
BG Series Blow Guns	Blow Guns Kits	Blow Gun Accessories	Blow Guns Air Chucks	Handy-Air® Blow Guns & Accessories
				
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Hose Barb Fittings	Steel Pipe Fittings	Brass Fittings	Reusable Hose Fittings	Swivel Fittings
				
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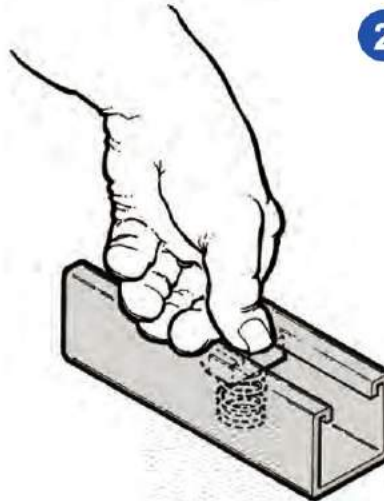
Hoses & Accessories				
Hyrel Hose & Fittings	Polyurethane Recoil Hose	"Push On" Hose	3-Way Hose Manifolds	3-Way Hose Manifolds with Sockets
				
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The Metal Framing System

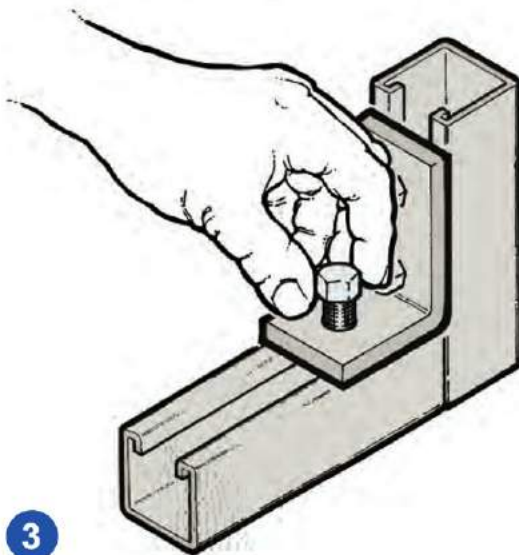


- 1** Insert the appropriate Wesanco® Channel Nut with spring, *parallel* to the slot edges, anywhere along the continuous open slot of the channel.



- 2** Depress the Channel Nut with spring below the in-turned channel edges. Rotate one quarter turn clock-wise, perpendicular, and release pressure on the nut.

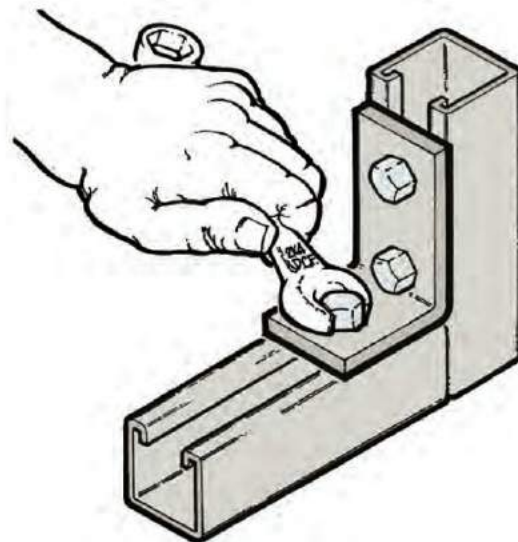
The Nut will lock in-place, its pyramid grip enhanced grooves aligning with the underside of the channel's in-turned edges; the spring being designed to hold the nut in place during assembly.



- 3** Fitting, bracket, or accessory, is located on the channel face over the Channel Nut with spring.
An appropriate diameter and length of bolt is inserted, and the fitting is adjusted for location at this time.

- 4** Properly torquing the bolt draws the Channel Nut with spring up against the in-turned channel lips, forming a strong, secure clamping connection.

Use caution not to bottom the bolt (select one of sufficient length, but not so long as to contact the inside back). **Do not over torque the bolt.**

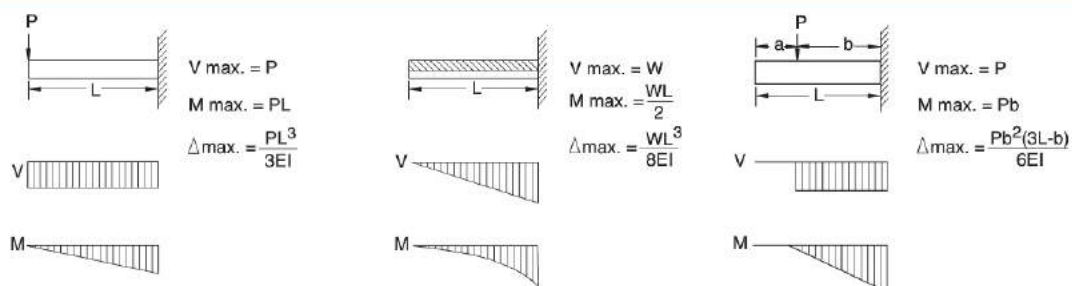


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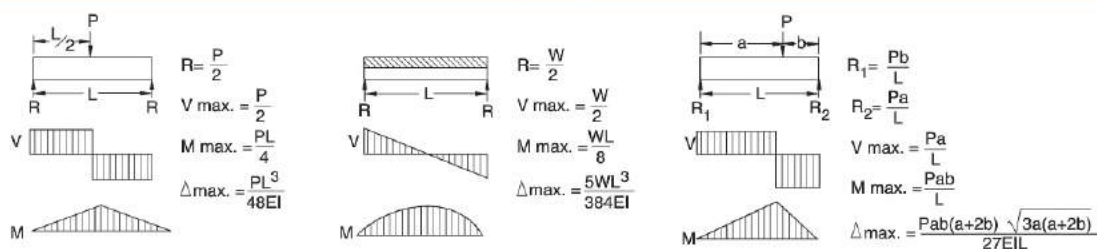


Beam Load Support Formulas

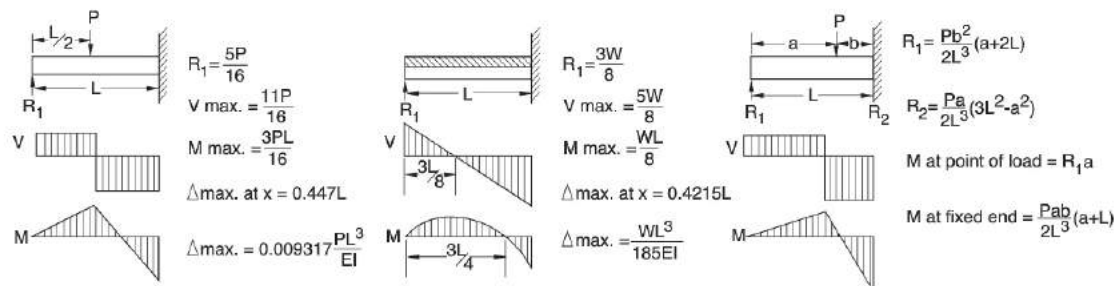
Cantilever Beams



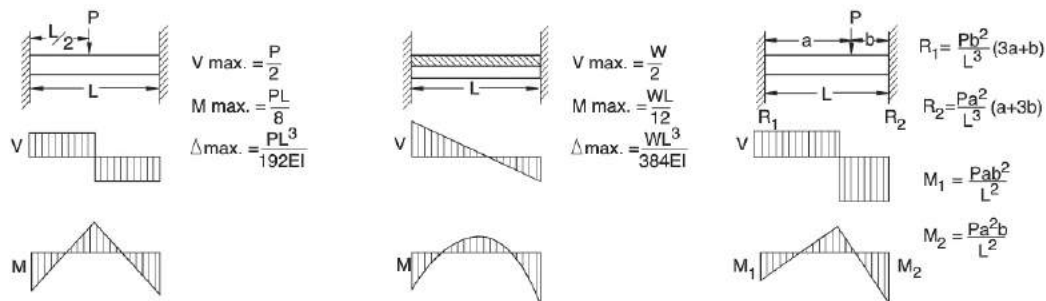
Simple Beams



Beams Fixed At One End & Supported At The Other



Beams Fixed At Both Ends



R – Reaction
 M – Moment
 P – Concentrated Load

W – Total Uniform Load
 V – Shear
 L – Length

Δ – Deflection
 E – Modulus of Elasticity
 I – Moment of Inertia

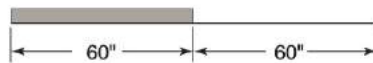
Beam Load Support Formulas



All Beam Load tables are for simple beams supported at the ends. These can be used in the majority of the cases. There are times when it is necessary to know what happens with other loading and support conditions. Some common arrangements are shown below. Simply multiply the values from the Beam Load tables by factors given below.

Load and Support Condition		Load Factor	Deflection Factor
Simple Beam Uniform Load		1.00	1.00
Simple Beam Concentrated Load at Center		0.50	0.80
Simple Beam Two Equal Concentrated Loads at 1/4 Points		1.00	1.10
Beam Fixed at Both Ends Uniform Load		1.50	0.30
Beam Fixed at Both Ends Concentrated Load at Center		1.00	0.40
Cantilever Beam Uniform Load		0.25	2.40
Cantilever Beam Concentrated Load at End		0.12	3.20
Continuous Beam Two Equal Spans - Uniform Load on One Span		1.30	0.92
Continuous Beam Two Equal Spans - Uniform Load on Both Spans		1.00	0.42
Continuous Beam Two Equal Spans - Concentrated Load at Center of One Span		0.62	0.71
Continuous Beam Two Equal Spans - Concentrated Load at Center of Both Spans		0.67	0.48

EXAMPLE I



PROBLEM:

Calculate the load and deflection of an W200 beam continuous over one support and loaded uniformly on one span.

SOLUTION:

A. From load table for W200 the load for a 60" span is 700 lbs. and deflection is 0.35".

B. Multiply by factors from Table above

Load = 700 lb. x 1.30 = 910 lbs.

Deflection = 0.35" x 0.92 = 0.322"

EXAMPLE II



PROBLEM:

Determine load and deflection of an W150 cantilever beam with a concentrated load on the end.

SOLUTION:

A. From load table for W150 the load for a 24" span is 5,360 lbs. and deflection is 0.09".

B. Multiply by factors from Table above.

Load = 5,360 lbs. x 0.12 = 643.2 lbs.

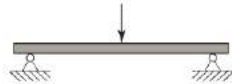
Deflection = 0.09" x 3.20 = 0.288"



Beam - Design Fundamentals

Beams are structural members loaded at right angles (perpendicular) to their length. Most beams are horizontal and subjected to gravity or vertical loads, e.g. a shelf support. However a vertical member can act as a beam under certain conditions, such as, a curtain wall mullion subjected to wind loading. The bending moment developed in a beam is dependent on:

- The amount of load applied
- The type of loading applied
- The support conditions



Beam Loading - Point Load

A load concentrated onto a very small length of the beam is a point load.

Beam Loading - Uniform Load



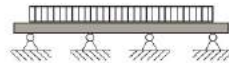
A load spread evenly over a relatively long length of the beam is a uniform load.

Point and uniform loads can be placed on a beam in any combination. A series of point loads can approximate a uniform loading. The load charts and tables are based on a uniform load unless identified otherwise.

Support Conditions - Simple Beam

A simple beam has supports that prevent movement left and right, or up and down, but do not restrain the beam from rotating at the supports into a natural deflected curve. Most connections produce simple beams. The load charts and tables are based on simple beams unless identified otherwise.

Support Conditions - Continuous Beam



Any simple beam that is supported at one or more intermediate points is a continuous beam. A mezzanine joist that passes over three or more columns is an example of a continuous beam.

Support Conditions - Fixed-End Beam



Supports that prevent the beam from rotating into a natural deflected curve produce a fixed-end beam. A welded end connection to very rigid support produces a fixed-end beam.

Support Conditions - Cantilever Beam



A cantilever beam is a fixed-end beam that is supported at one end only, while the other end is unsupported. Brackets are examples of cantilever beams.

Deflection



All beams deflect under load. The amount of deflection is dependent on:

- The amount of load,
- The support conditions,
- The stiffness of the beam's cross-sectional shape,
- The stiffness of the beam material

The stiffness of the beam's cross-sectional shape is measured by its "Moment Of Inertia" or "I". The larger a beam's "I", the stiffer it is and the less it will deflect. A beam's "I" can change for each major axis. The "I" of both major axes (I 1-1 and I 2-2) are provided.

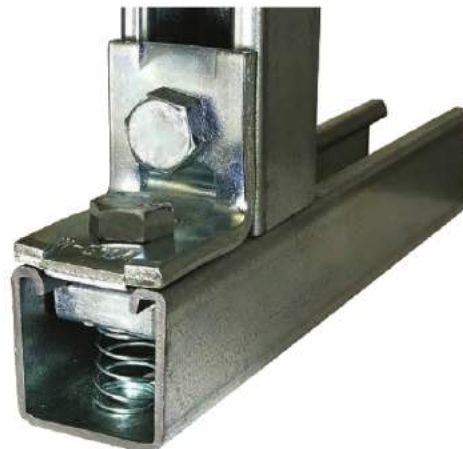
The stiffness of a beam's material is measured by its "Modulus of Elasticity" or "E". The larger a material's "E", the stiffer it is and the less it deflects. For example, steel is about three times stiffer than aluminum and as a result, deflects only one-third as much. Do not confuse stiffness with strength. Two materials may have identical strengths yet still have different "E's". A high-strength aluminum may be as strong as steel and still deflect three times as much.

The load charts and tables give calculated deflections for the loads shown. In many cases, a final design will be determined by the maximum deflection, not the maximum load.

Bending Moment

A beam must not only hold up the anticipated loads, but must also have sufficient additional capacity to safely hold unforeseen variations in applied loads and material strengths. This additional capacity is called a safety factor and is usually regulated by the various design codes and standards. A beam's strength is usually measured by an allowable bending moment or an allowable stress. The traditional approach is the allowable stress method, where a beam is determined to have a maximum allowable stress (in pounds per square inch) which is not to be exceeded.

The approach of the current AISI "Specification For The Design Of Cold-Formed Steel Structural Members" is to use a maximum allowable bending moment (in inch-pounds) which is not to be exceeded. Bending moment divided by a beam's section modulus or "S" equals stress.



Column - Design Fundamentals

Columns are structural members that are loaded parallel to their length. Most columns are vertical and are used to carry loads from a higher level to a lower level. However, any member subjected to compression loads, such as a diagonal or prop brace, is a column.

A column fails by "buckling", which is a sudden loss of straightness and subsequent collapse. Allowable column load is dependent on:

- The length of column
- The type of loading
- The support conditions
- The column's cross-sectional shape and material.

Column Length

The column length is measured from braced point to braced point. A braced point is where the column is restrained from lateral movement (translation) in all directions.

Column Loading – Concentric Loading

Loads applied to the center of gravity of the column cross-section are considered concentric. A beam that passes over and rests on the top of a column is an example of concentric loading.

Column Loading – Eccentric Loading

Any load which is not concentric is eccentric. The amount of eccentricity (in inches) has a major effect on the load-carrying capacity of any particular column. A load that is transmitted to a column using a standard fitting bolted to the slot face, is considered eccentric.

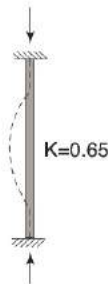
The load tables give allowable loads for both concentric (loaded at C.G.) and certain eccentric (loaded at slot face) loading. Allowable loads for other eccentric loading must be determined by a qualified design professional.

Support Conditions

Based on the support conditions, an appropriate "K" value is selected. This "K" value, which mathematically describes the column end conditions, is used in the column design equations. The most common support condition combinations are as follows:

Support Conditions - Fixed Top – Fixed Bottom

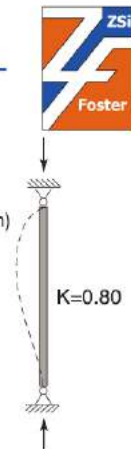
Both ends are restrained against rotation and lateral movement (translation).



Support Conditions - Pinned Top – Fixed Bottom

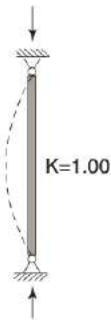
The top is restrained against lateral movement (translation) but is allowed to rotate. The bottom is restrained against rotation and lateral movement.

This is a common support condition and is used to construct the allowable column load applied at the Slot Face tables.



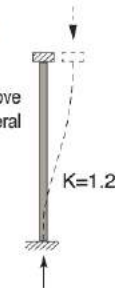
Support Conditions - Pinned Top – Pinned Bottom

Both ends are restrained against lateral movement (translation) but, are allowed to rotate.



Support Conditions - Fixed / Free Top – Fixed Bottom

The top is restrained against rotation, but is allowed to move laterally. The bottom is restrained against rotation and lateral movement (translation).



Cross-Sectional Shape

The cross-sectional shape of a column member determines the value of its "Radius of Gyration" or "r". In general, a member with a large "r" makes a better column than a member with a small "r". Each axis of a column has a different "r". Typically the axis with the smallest "r" determines the final design.



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Materials & Manufacturing Details

General Information

Most Wesanco channels are produced in 10 and 20-foot lengths with a length tolerance of plus or minus $\frac{1}{16}$. Wesanco W600 and W700 are produced in 10 foot lengths only.

Channels

General

Wesanco channels are manufactured by the cold roll forming process which produces cross sections of uniform dimensions within tolerances established by the Metal Framing Manufacturer's Association, Metal Framing Standards Publication No. MFMA-1.

Material

Steel used in the manufacture of Wesanco channels conforms to the ASTM specifications in this catalog.

Design

Design is based on AISI "Specification for the Design of Cold-Formed Steel Structural Members." Maximum bending stress used in design is 25,000 pounds per square inch (PSI). This is based upon a virgin steel minimum yield stress of 33,000 psi cold worked to an average yield stress of 42,000 psi.

Welding

Welds meet the performance requirements of section 4 of AISI "Specification for the design of Cold-Formed Steel Structural Members." All multiple sections of two or more single Wesanco channels are resistance spot-welded approximately 2" to 3" on center.

Channel Nuts

General

Wesanco channel nuts are formed or stamped from steel bar stock and is case hardened after all forming and taping operations have been completed. The nuts are coated with zinc to ASTM-B633 "Electrodeposited Coatings of Zinc on Iron and Steel."

Wesanco channel nuts have uniform and American coarse screw threads.

Channel nuts are available both with and without springs. Springs are made from Galvanized spring steel wire.

Material

The bar steel used in manufacture of Wesanco channel nuts conforms to ASTM A575 or ASTM A576.

Weights and Dimensions

All weights given for materials are approximate shipping weights. Weights will vary somewhat due to permissible tolerances and slight variations in material thickness.

We reserve the right to change design specifications or to add or discontinue specific items without notice.

Fittings

General

Wesanco fittings are manufactured by cold forming steel in punch press dies and conform to those tolerances listed in section 5.3 of Metal Framing Standards Publication No. MFMA-1.

Material

Steel used for Wesanco fittings is Hot-Rolled Pickled and Oiled strip steel or bar conforming to ASTM A 570 or ASTM A575.

Welding

Wesanco fittings having two or more component parts may be arc or resistance welded in accordance with the appropriate American Welding Society Standards.

Finishes

Electroplated Zinc or Electro-Galvanized (EG)

This coating is standard for most ZSi-Foster products. Electro-Galvanized products meet ASTM B633 SC1 or SC3, Type III. Electroplating deposits zinc on the surface of the steel by electrolysis from a bath of zinc salts. The thickness of zinc applied in this method is between 0.2 mils to 0.5 mils [5.1 μ m to 12.7 μ m].

Mill-Galvanized (Pre-Galvanized) (PG)

ASTM A653 G-90 Pre-galvanized zinc is produced by continuously rolling steel coils or sheets through molten zinc at the mills. The coils are slit to size and fabricated by forming, shearing or punching to produce the finished product. During fabrication cut edges are not generally zinc coated. However, the zinc near the uncoated metal becomes a sacrificial anode to protect the bare areas.

Paint-Green Powder Coating (GR)

A dark green low gloss powder coating is applied and thoroughly baked after steel has been cleaned and phosphatized.

Hot Dip Galvanized After Fabrication (HG)

Wesanco channel and fittings which are hot dip galvanized after fabrication conform to one of the following specifications. ASTM A 123, ASTM A153 or ASTM A386.

Silva-Guard (SG)

ZSi-Foster Silva-Guard coating is a multi-step process that meets the 1000 hour salt spray test per ASTM B117 and DIN 50021.

Silva-Guard coating is WEEE, ELV, and RoHS compliant.

SG Finish is approved for outdoor as well as indoor applications. It is a chrome free duplex coating system that combines an inorganic zinc-rich basecoat with an aluminum-rich organic topcoat.

Special Coatings

Other commercially available finishes can be supplied per specification when required to protect applications.

Material Specifications



Channel Specifications			
Material	Current ASTM Designation	Previous ASTM Designation	ASTM Description
Hot Rolled: Channel	A 1011SS GR33	A 570 GR33	Hot rolled carbon steel sheet and strip, structural quality.
Cold Rolled: Channel	A 1008SS GR33, A 1008	A 611	Cold rolled carbon sheet steel.
Pregalvanized: Channel	A 653 SS GR33	A 653 GR33 G90	Steel sheet zinc-coated by hot dip process at mill, structural quality.
Stainless Steel: Channel	A 240 TYPE 304	A 240 TYPE 304	Heat resisting chromium and chromium-nickel stainless steel plate, sheet, strip for pressure vessel.
	A 240 TYPE 316	A 240 TYPE 316	
Aluminum: Channel	B 221 TYPE 6063 T6	B 221 TYPE 6063 TS	Aluminum alloy extruded bar, rod, wire, shape, and tube.

Fittings & Hardware Specifications			
Material	Current ASTM Designation	Previous ASTM Designation	ASTM Description
Bar Stock: Channel Nuts	A 36	A 575	Merchant quality hot rolled carbon steel bars. Steel bars, carbon, hot rolled special quality.
	A 29-03	A 576	
Cold Rolled: Closure Strip	A 1008 CS GR33	A 611	Cold rolled carbon sheet steel.
Pregalvanized: Closure Strip	A 653 GR33 G90	A 653 GR33 G90	Steel sheet, zinc coated (galvanized) by the hot dipped process, commercial quality.
Bar Stock	A 569	A 569	Merchant quality hot rolled carbon steel bars.
Hot Rolled Plate	A 575	A 575	Steel, sheet and strip, carbon drawing quality, special killed, hot rolled.
Fitting (Steel)	A 366	A 366	Steel carbon, cold rolled sheet, commercial quality structural steel.
	A 366	A 366	
	A 36	A 36	
Hardware	A 563	A 563	Carbon and alloy steel nuts. Carbon steel externally threaded standard fasteners.
	A 307	A 307	
Strip Steel: Pipe Clamps	A 569	A 569	Steel, sheet and strip, carbon drawing quality, special killed, hot rolled.
Hot Rolled: Shelf Brackets	A 569	A 569	Steel carbon, cold rolled sheet, commercial quality structural steel.

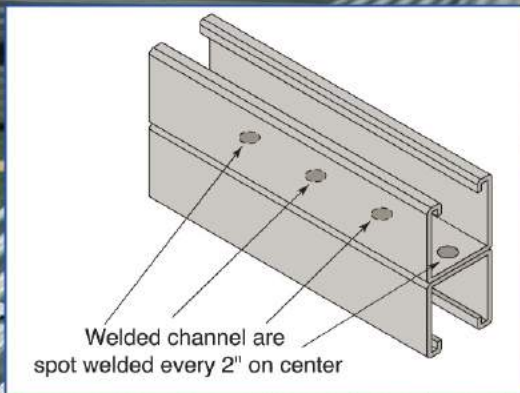


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BACK-TO-BACK CHANNEL WELDS AND STEEL TRACEABILITY

Back-to-Back Channel Welds



Steel Traceability

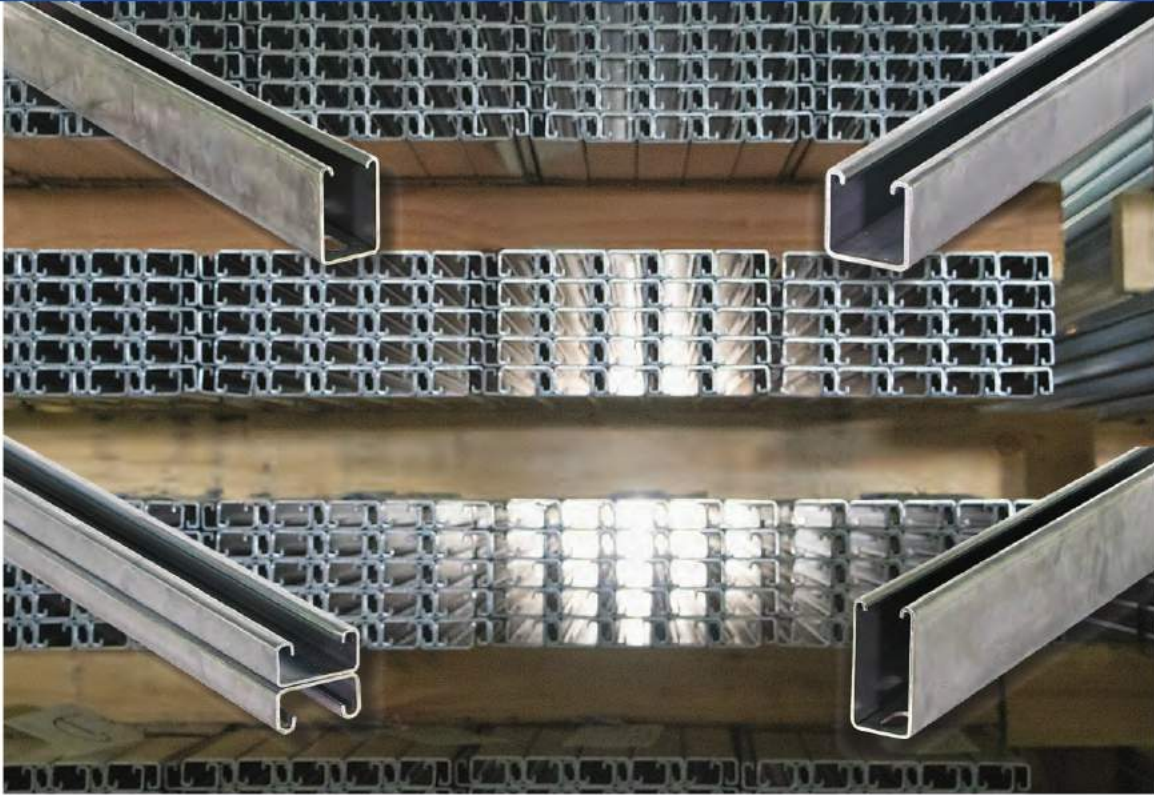
Wesanco Channel is stamped with a material code and a number code used for tracing the origin of the steel



Wesanco Channel is stamped with a material code and a number code used for tracing the origin of the steel



Channel Metal Framing



Channel Material Specifications			
Material	Material Code	ASTM Designation	ASTM Description
Hot Rolled: Channel	Use Finish Code	A 1011SS GR33	Hot rolled carbon steel sheet and strip, structural quality.
Cold Rolled: Channel		A 1008SS GR33, A 1008	Cold rolled carbon sheet steel.
Stainless Steel: Channel	ST304	A 240 TYPE 304	Heat resisting chromium and chromium-nickel stainless steel plate, sheet, strip for pressure vessel.
	ST316	A 240 TYPE 316	
Aluminum: Channel	AL	B 221 TYPE 6063 T6	Aluminum alloy extruded bar, rod, wire, shape and tube.

Channel Finish Specifications		
Finish	Finish Code	Description
Paint-Green Powder Coating	GR	A dark green low gloss powder coating is applied and thoroughly baked after steel has been cleaned and phosphatized.
Electroplated	EG	Wesanco fittings and hardware supplied as "Electro-Galvanized" in accordance with ASTM B 633.
Mill-Galvanized (Pre-Galvanized)	PG	Galvanized steel used in the manufacture of Wesanco channel sections conforms to ASTM A 653 GR33 G90. Uncoated edges resulted from slitting, punching and channel cut off are present.
Hot Dip Galvanized After Fabrication	HG	Wesanco channel and fittings which are hot dip galvanized after fabrication conform to one of the following specifications. ASTM A 123, ASTM A153 or ASTM A386.
Special Coatings	PL, GOLD	Other commercially available finishes can be supplied per specification when required to protect applications.

Call ZSi-Foster at (800) 323-7053 or order now at zsi-foster.com

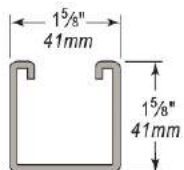


Wesanco® Channel Profiles

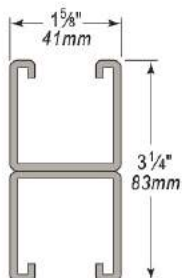
12 Gauge Channel

W200 & W201 (pages 34-39)

W200

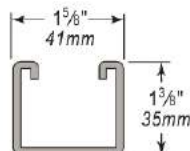


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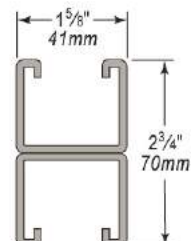


W300 & W301 (pages 44-46)

W300

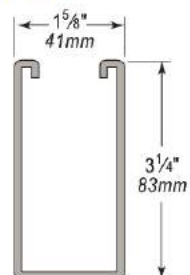


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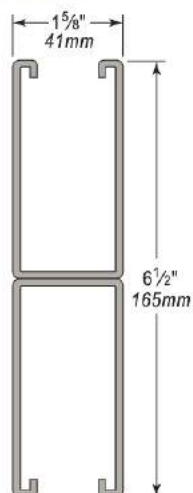


W150 & W151 (pages 67-70)

W150

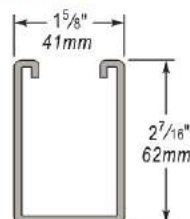


W151

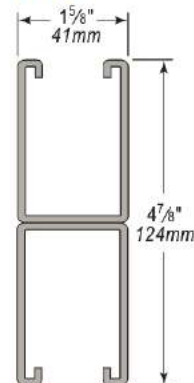


W100 & W101 (pages 63-66)

W100

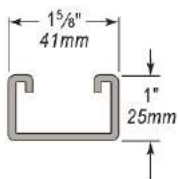


W101

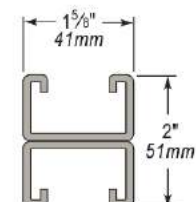


W800 & W801 (pages 47-50)

W800

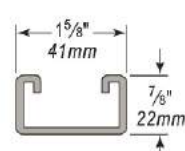


W801

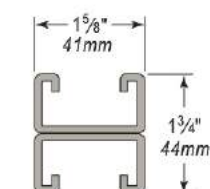


W900 & W901 (pages 51-54)

W900



W901



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

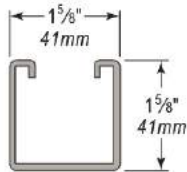
Wesanco® Channel Profiles



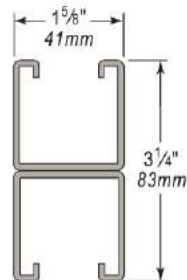
14 Gauge Channel

W210 & W211 (pages 40-43)

W210

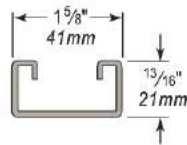


W211

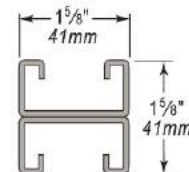


W500 & W501 (pages 55-59)

W500



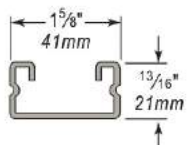
W501



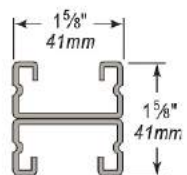
16 Gauge Channel

W400 & W401 (pages 60-62)

W400



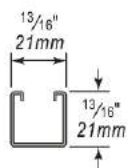
W401



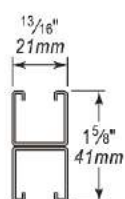
19 Gauge Channel

W600 & W601 (pages 71-73)

W600

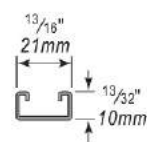


W601

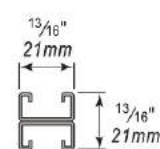


W700 & W701 (pages 74-75)

W700



W701



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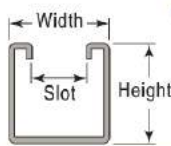


Channels in Descending Order of Strength

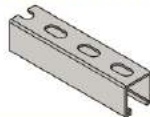
Channel	Channel Style	Area		Weight		I x		S x		Moment	
		In ²	(cm ²)	lbs / ft	(kg/m)	In ⁴	(cm ⁴)	In ³	(cm ³)	in-lbs	(N•m)
W151		1.804"	(11.64)	6.14	(9.1)	6.339"	(263.9)	1.951	(32.0)	48,180	(5,440)
W101		1.463"	(9.44)	4.98	(7.4)	2.867"	(119.3)	1.176	(19.3)	28,940	(3,270)
W150		0.902"	(5.82)	3.07	(4.6)	1.113"	(46.3)	0.639	(10.5)	15,770	(1,780)
W201		1.122"	(7.24)	3.82	(5.7)	0.954"	(39.7)	0.587	(9.6)	14,360	(1,620)
W301		1.017"	(6.56)	3.46	(5.1)	0.608"	(25.3)	0.443	(7.3)	10,810	(1,220)
W211		0.834"	(5.38)	2.84	(4.2)	0.739"	(30.8)	0.455	(7.5)	11,340	(1,280)
W100		0.732"	(4.72)	2.49	(3.7)	0.530"	(22.0)	0.400	(6.5)	9,820	(1,110)
W200		0.561"	(3.62)	1.91	(2.8)	0.188"	(7.8)	0.207	(3.4)	5,070	(570)
W901		0.807"	(5.21)	2.75	(4.1)	0.183"	(7.6)	0.209	(3.4)	5,060	(570)
W300		0.508"	(3.28)	1.73	(2.6)	0.123"	(5.1)	0.158	(2.6)	3,840	(430)
W210		0.417"	(2.69)	1.42	(2.1)	0.148"	(6.2)	0.169	(2.8)	4,060	(460)
W801		0.859"	(5.54)	2.92	(4.3)	0.261"	(10.9)	0.261	(4.3)	3,610	(410)
W501		0.590"	(3.81)	2.01	(3.0)	0.122"	(5.1)	0.150	(2.4)	3,610	(410)
W800		0.430"	(2.77)	1.46	(2.2)	0.054"	(2.2)	0.093	(1.5)	3,610	(410)
W401		0.487"	(3.14)	1.66	(2.5)	0.105"	(4.4)	0.129	(2.1)	3,210	(360)
W900		0.403"	(2.60)	1.37	(2.0)	0.038"	(1.6)	0.074	(1.2)	1,800	(200)
W500		0.295"	(1.90)	1.00	(1.5)	0.026"	(1.1)	0.056	(0.9)	1,360	(150)
W400		0.244"	(1.57)	0.83	(1.2)	0.023"	(1.0)	0.050	(0.8)	1,230	(140)
W601		0.214"	(1.38)	0.73	(1.1)	0.045"	(1.9)	0.056	(0.9)	1,390	(160)
W600		0.107"	(0.69)	0.36	(0.5)	0.009"	(0.4)	0.020	(0.3)	510	(60)
W701		0.149"	(0.96)	0.51	(0.8)	0.007"	(0.3)	0.018	(0.3)	450	(50)
W700		0.074"	(0.48)	0.25	(0.4)	0.002"	(0.1)	0.007	(0.1)	170	(20)



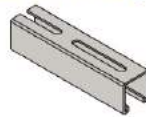
Wesanco® Channel Selection Chart



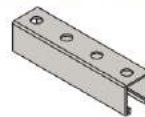
"SS" - Channel With Short Slots



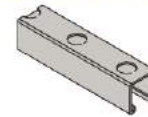
"SL" - Channel With Long Slots



"H" - Channel With Holes



"KO" - Channel With Knock-Outs



Channel	Channel Dimensions				Steel Gauge	Hole Patterns				Finish						Special Metals		
	Style	Width	Height	Slot Width		SS	SL	H	KO	PG	EG	HG	GR	PL	Gold	ST304	ST316	EA
W100			2 7/16" (62mm)		12	◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W101			4 7/8" (124mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W150			3 1/4" (83mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W151			6 1/2" (165mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W200			1 5/8" (41mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	■
W201		1 5/8" (41mm)	3 1/4" (83mm)	7/8" (22mm)	14	◆	◆	◆	◆	■	-	■	■	■	■	■	■	■
W210			1 5/8" (41mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W211			3 1/4" (83mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W300			1 5/8" (35mm)		12	◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W301			2 3/4" (70mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W400			3/16" (21mm)		16	◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W401			1 5/8" (41mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W500			3/16" (21mm)		14	◆	◆	◆	◆	■	-	■	■	■	■	■	■	■
W501			1 5/8" (41mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	■
W600			3/16" (21mm)		19	-	-	-	-	-	■	■	■	■	■	-	-	-
W601		1 3/16" (21mm)	1 5/8" (41mm)	7/16" (11mm)		-	-	-	-	-	■	■	■	■	■	-	-	-
W700			7/32" (10mm)			-	-	-	-	-	■	■	■	■	■	-	-	-
W701			3/16" (21mm)			-	-	-	-	-	■	■	■	■	■	-	-	-
W800			1" (25mm)		12	◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W801			2" (51mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W900			7/8" (23mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-
W901			1 3/4" (44mm)			◆	◆	◆	◆	■	-	■	■	■	■	■	■	-

◆ Pierced Available

For finish and material specifications see pages 24 - 25

PG - Pre-Galvanized • EG - Electro-Galvanized • HG - Hot Dip Galvanized • GR - Paint-Green Powder Coating • PL - Uncoated Steel • GOLD - Yellow Zinc Dichromate
 ST304 - Stainless Steel Type 304 • ST316 - Stainless Steel Type 316 • EA - Extruded Aluminum

ZSi-Foster Engineering Catalog

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WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Belt Clamps & Z-Clamps

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Roofing Supports

Gamma Pads

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Wesanco® Pierced Channel

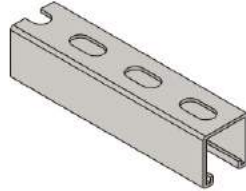
Pierced Channel

Channel with Short Slots

$\frac{9}{16}$ " x $1\frac{1}{8}$ " (14mm x 29mm)

Slots are punched on 2" (51mm) centers.

Add "SS" to channel number.
Example: W200SS

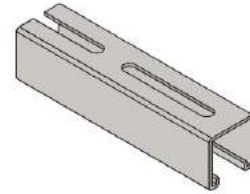


Channel with Long Slots

$\frac{13}{32}$ " x 3" (10mm x 76mm)

Slots are punched on 4" (102mm) centers.

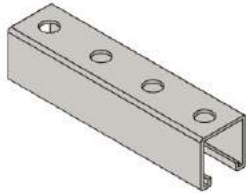
Add "SL" to channel number.
Example: W200SL



Channel with Holes

$\frac{9}{16}$ " (14mm) Holes are punched on $1\frac{7}{8}$ " (48mm) centers.

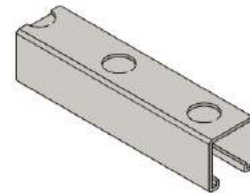
Add "H" to channel number.
Example: W200H



Channel with Knock-Outs

$\frac{7}{8}$ " (22mm) Knock-outs are punched on 6" (152mm) centers.

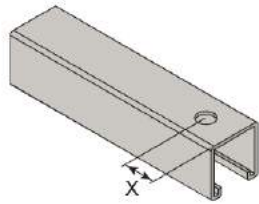
Add "KO" to channel number.
Example: W200KO



Channel with Specialty Custom Perforations

Designation is indicated by adding type of perforation from standard selection and pertinent dimensional information.

Example: W200H 1" from each end. If used as a trapeze reference page 246.

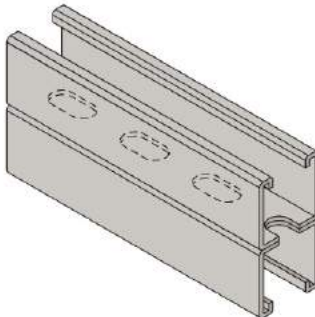


Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95

Pierced Combinations

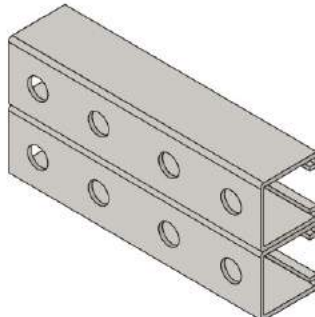


Channel with Short Slots

$\frac{9}{16}$ " x $1\frac{1}{8}$ " (14mm x 29mm)

Slots are punched on 2" (51mm) centers.

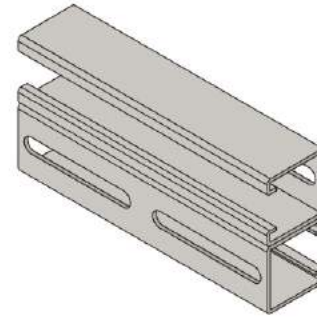
Add "SS" to channel number.
Example: W201SS



Channel with Holes

$\frac{9}{16}$ " (14mm) Holes are punched on $1\frac{7}{8}$ " (48mm) centers.

Add "H" to channel number.
Example: W202H



Channel with Long Slots

$\frac{13}{32}$ " x 3" (10mm x 76mm)

Slots are punched on 4" (102mm) centers.

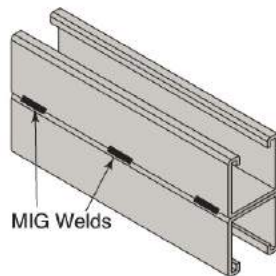
Add "SL" to channel number.
Example: W203SL



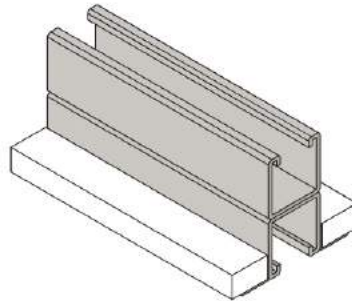
Custom Channel



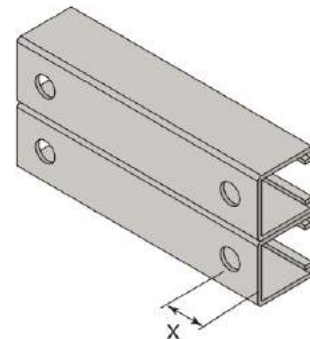
Specialty Combinations



MIG Welded To Meet Specific Engineering Request



Combination/ Ceiling Support



Channel Custom Pierced

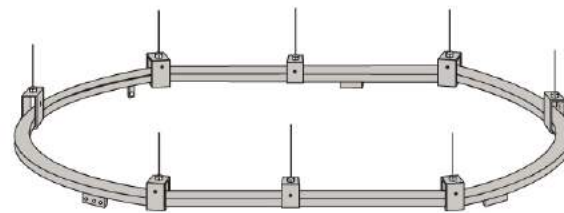
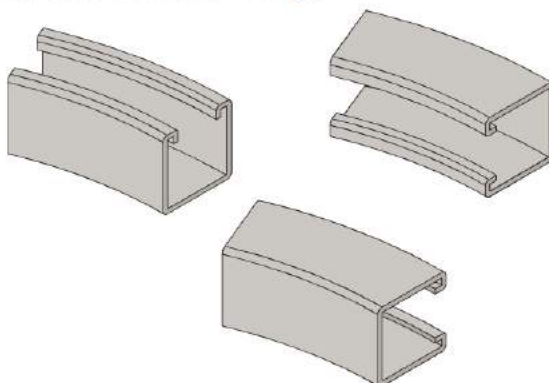
Channel for Trolley Systems

The Wesanco trolley system moves equipment from 10 to 600 lbs., with reliability, ease, and economy. Trolleys can be ganged to accommodate higher loads. Trolleys, featuring corrosion-free stainless wheel bearings and steel or acetyl wheels that require no lubrication, deliver built-in value and dependability for a wide range of applications. Throughout the system, famous Wesanco quality assures dependable, trouble-free performance.

Composed of three basic elements; trolleys, track, and supports. Wesanco trolley systems are efficient and economical. Different trolleys give users a wide range of weight capacities and suspension options, to allow tailoring of the system to exact application needs.

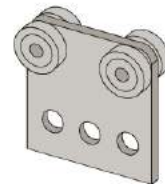
Track is available in 20 foot sections and can be easily field cut according to project requirements. Longer lengths and curved sections (shown below) are available on special order. A complete system of easy-to-use supports, including beam clamps, make installation a breeze.

Radiused Channel for Trolleys



W6600

Four Wheel Trolley



W6601 & W6605

Four Wheel Trolley



W6602

Two Wheel Trolley



W6606

Two Wheel Trolley



See page 97 for more trolley information



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Clamps

Belt Clamps
& Z-Clamps

Concrete
Inserts

Rooftop
Supports

Gamma
Pads

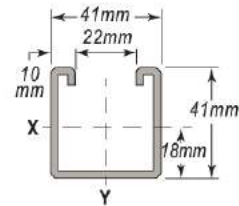
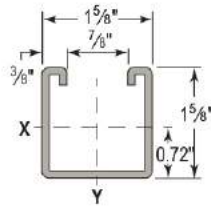
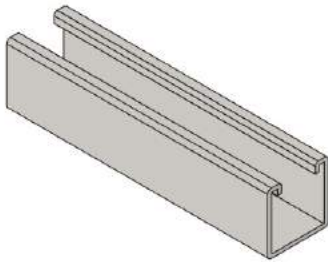
Technical
Data



W200 & W201 - 12 Gauge Channel

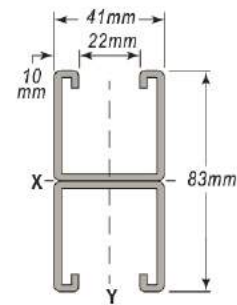
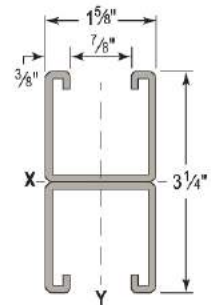
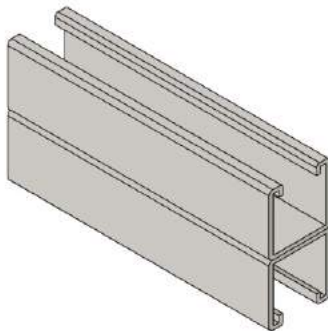
W200: 1 $\frac{5}{8}$ " x 1 $\frac{5}{8}$ " (41mm x 41mm) & W201: 1 $\frac{5}{8}$ " x 3 $\frac{1}{4}$ " (41mm x 83mm)

W200: 1 $\frac{5}{8}$ " x 1 $\frac{5}{8}$ " (41mm x 41mm)



Available in 10', 20' & Pre-Cut lengths see page 36 • Finishes: PG, HG, GR, PL, Gold, EA, ST304, & ST316

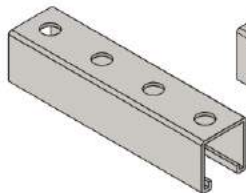
W201: 1 $\frac{5}{8}$ " x 3 $\frac{1}{4}$ " (41mm x 83mm)



Available in 10', 20' & Pre-Cut lengths see page 37 • Finishes: PG, HG, GR, PL, Gold, EA, ST304, & ST316

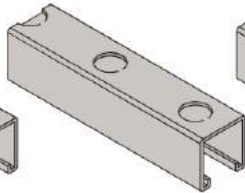
Pierced Channel

W200H



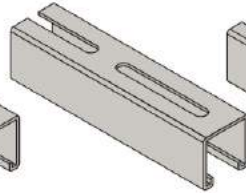
Channel With Holes
3/16" Holes are punched on 1-1/2" centers.

W200KO



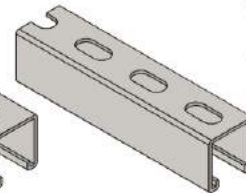
Channel With Knock-Outs
7/8" Knock-outs are punched on 6" centers.

W200SL



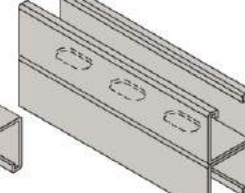
Channel With Long Slots
3/32" x 3" Slots are punched on 4" centers.

W200SS



Channel With Short Slots
3/16" x 1-1/4" Slots are punched on 2" centers.

W201SS



Channel With Short Slots
3/16" x 1-1/4" Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Standard Spring



Channel Nut Without Spring



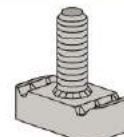
Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut



Stud Nut without Spring



Stud Nut with Spring



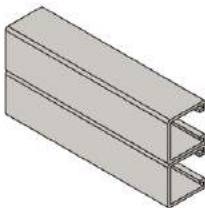
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W200 Series Combination Channel



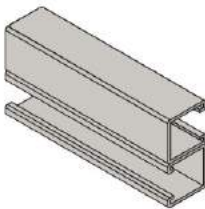
W202

1⁵/₈" x 3¹/₄"
(41mm x 83mm)



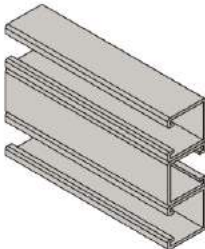
W203

1⁵/₈" x 3¹/₄"
(41mm x 83mm)



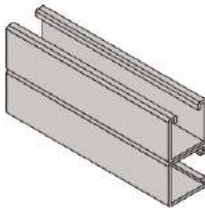
W203B3

1⁵/₈" x 4⁷/₈"
(41mm x 124mm)



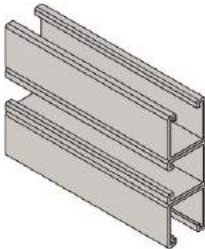
W204

1⁵/₈" x 3¹/₄"
(41mm x 83mm)



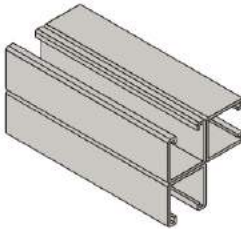
W204A3

1⁵/₈" x 4⁷/₈"
(41mm x 124mm)



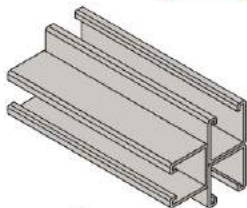
W205

3¹/₄" x 3¹/₄"
(83mm x 83mm)



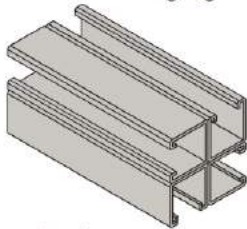
W206

3¹/₄" x 3¹/₄"
(83mm x 83mm)



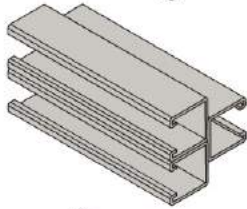
W207

3¹/₄" x 3¹/₄"
(83mm x 83mm)



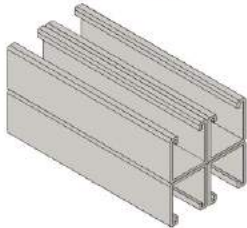
W208

3¹/₄" x 3¹/₄"
(83mm x 83mm)



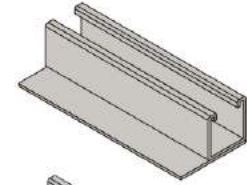
W209

3¹/₄" x 3¹/₄"
(83mm x 83mm)



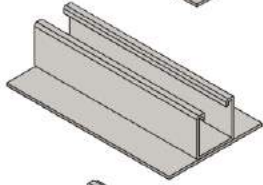
W220

2¹³/₁₆" x 1³/₄"
(71mm x 46mm)



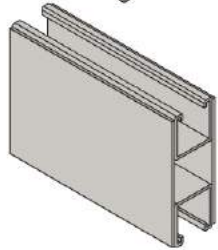
W221

4" x 1³/₄"
(102mm x 46mm)



W222

1⁷/₈" x 4⁷/₈"
(48mm x 124mm)



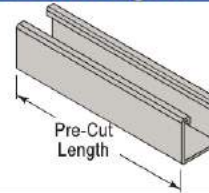
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W200 Pre-Cut Channel

W200: 1 $\frac{5}{8}$ " x 1 $\frac{5}{8}$ " (41mm x 41mm) - Solid Channel - Pre-Cut Lengths



W200 - 1 $\frac{5}{8}$ " x 1 $\frac{5}{8}$ " - 12 Gauge - Solid Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W200PG6IN	W200ST3046IN	W200ST3166IN
12" (0.31m)	W200PG12IN	W200ST30412IN	W200ST31612IN
18" (0.45m)	W200PG18IN	W200ST30418IN	W200ST31618IN
24" (0.61m)	W200PG24IN	W200ST30424IN	W200ST31624IN
30" (0.76m)	W200PG30IN	W200ST30430IN	W200ST31630IN
36" (0.91m)	W200PG36IN	W200ST30436IN	W200ST31636IN
42" (1.07m)	W200PG42IN	W200ST30442IN	W200ST31642IN
48" (1.22m)	W200PG48IN	W200ST30448IN	W200ST31648IN
54" (1.37m)	W200PG54IN	W200ST30454IN	W200ST31654IN
60" (1.52m)	W200PG60IN	W200ST30460IN	W200ST31660IN
72" (1.83m)	W200PG72IN	W200ST30472IN	W200ST31672IN
80" (2.03m)	W200PG80IN	W200ST30480IN	W200ST31680IN
96" (2.44m)	W200PG96IN	W200ST30496IN	W200ST31696IN
10' (3.05m)	W200PG10	W200ST30410	W200ST31610
20' (6.10m)	W200PG20	W200ST30420	W200ST31620

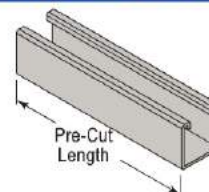
Note: Minimum order quantity is 100 pieces for any size under 10'.

W200SS: 1 $\frac{5}{8}$ " x 1 $\frac{5}{8}$ " (41mm x 41mm) - Channel with Short Slots - Pre-Cut Lengths



Channel With Short Slots

$\frac{9}{16}$ " x 1 $\frac{1}{8}$ " (14mm x 29mm) Slots
are punched on 2" (51mm) centers.



W200SS - 1 $\frac{5}{8}$ " x 1 $\frac{5}{8}$ " - 12 Gauge - Channel with Short Slots			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W200SSPG6IN	W200SSST3046IN	W200SSST3166IN
12" (0.31m)	W200SSPG12IN	W200SSST30412IN	W200SSST31612IN
18" (0.45m)	W200SSPG18IN	W200SSST30418IN	W200SSST31618IN
24" (0.61m)	W200SSPG24IN	W200SSST30424IN	W200SSST31624IN
30" (0.76m)	W200SSPG30IN	W200SSST30430IN	W200SSST31630IN
36" (0.91m)	W200SSPG36IN	W200SSST30436IN	W200SSST31636IN
42" (1.07m)	W200SSPG42IN	W200SSST30442IN	W200SSST31642IN
48" (1.22m)	W200SSPG48IN	W200SSST30448IN	W200SSST31648IN
54" (1.37m)	W200SSPG54IN	W200SSST30454IN	W200SSST31654IN
60" (1.52m)	W200SSPG60IN	W200SSST30460IN	W200SSST31660IN
72" (1.83m)	W200SSPG72IN	W200SSST30472IN	W200SSST31672IN
80" (2.03m)	W200SSPG80IN	W200SSST30480IN	W200SSST31680IN
96" (2.44m)	W200SSPG96IN	W200SSST30496IN	W200SSST31696IN
10' (3.05m)	W200SSPG10	W200SSST30410	W200SSST31610
20' (6.10m)	W200SSPG20	W200SSST30420	W200SSST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.

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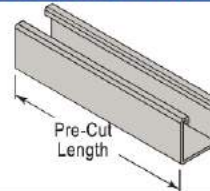


WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W201 & W202 Pre-Cut Channel



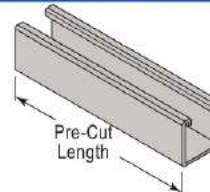
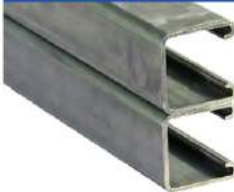
W201: 1⁵/₈" x 3¹/₄" (41mm x 83mm) - Solid Back-to-Back Channel - Pre-Cut Lengths



W201 - 1 ⁵ / ₈ " x 3 ¹ / ₄ " - 12 Gauge Solid Back-to-Back Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W201PG6IN	W201ST3046IN	W201ST3166IN
12" (0.31m)	W201PG12IN	W201ST30412IN	W201ST31612IN
18" (0.45m)	W201PG18IN	W201ST30418IN	W201ST31618IN
24" (0.61m)	W201PG24IN	W201ST30424IN	W201ST31624IN
30" (0.76m)	W201PG30IN	W201ST30430IN	W201ST31630IN
36" (0.91m)	W201PG36IN	W201ST30436IN	W201ST31636IN
42" (1.07m)	W201PG42IN	W201ST30442IN	W201ST31642IN
48" (1.22m)	W201PG48IN	W201ST30448IN	W201ST31648IN
54" (1.37m)	W201PG54IN	W201ST30454IN	W201ST31654IN
60" (1.52m)	W201PG60IN	W201ST30460IN	W201ST31660IN
72" (1.83m)	W201PG72IN	W201ST30472IN	W201ST31672IN
80" (2.03m)	W201PG80IN	W201ST30480IN	W201ST31680IN
96" (2.44m)	W201PG96IN	W201ST30496IN	W201ST31696IN
10' (3.05m)	W201PG10	W201ST30410	W201ST31610
20' (6.10m)	W201PG20	W201ST30420	W201ST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.

W202: 1⁵/₈" x 3¹/₄" (41mm x 83mm) - Solid Side-to-Side Channel - Pre-Cut Lengths



W202 - 1 ⁵ / ₈ " x 3 ¹ / ₄ " - 12 Gauge Solid Side-to-Side Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W202PG6IN	W202ST3046IN	W202ST3166IN
12" (0.31m)	W202PG12IN	W202ST30412IN	W202ST31612IN
18" (0.45m)	W202PG18IN	W202ST30418IN	W202ST31618IN
24" (0.61m)	W202PG24IN	W202ST30424IN	W202ST31624IN
30" (0.76m)	W202PG30IN	W202ST30430IN	W202ST31630IN
36" (0.91m)	W202PG36IN	W202ST30436IN	W202ST31636IN
42" (1.07m)	W202PG42IN	W202ST30442IN	W202ST31642IN
48" (1.22m)	W202PG48IN	W202ST30448IN	W202ST31648IN
54" (1.37m)	W202PG54IN	W202ST30454IN	W202ST31654IN
60" (1.52m)	W202PG60IN	W202ST30460IN	W202ST31660IN
72" (1.83m)	W202PG72IN	W202ST30472IN	W202ST31672IN
80" (2.03m)	W202PG80IN	W202ST30480IN	W202ST31680IN
96" (2.44m)	W202PG96IN	W202ST30496IN	W202ST31696IN
10' (3.05m)	W202PG10	W202ST30410	W202ST31610
20' (6.10m)	W202PG20	W202ST30420	W202ST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.

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WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Introduction

Channel

Channel Nuts
& Hardware

General
Fittings

Pipe & Conduit
Supports

Electrical
Fittings

Spring
Steel

Loop & Ring
Clamps

Belt Clamps
& Z-Clamps

Concrete
Inserts

Roofing
Supports

Gamma
Pads

Technical
Data



W200 Channel Loads

12 Gauge - 1⁵/₈" x 1⁵/₈" (41mm x 41mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. In. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W200	1.91	0.561	0.188	0.207	0.579	0.238	0.293	0.652
	(2.84)	(3.62)	(7.83)	(3.39)	(1.47)	(9.91)	(4.80)	(1.66)

W200 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	3,480	0.01	3,480	3,480	3,480
24	1,740	0.06	1,740	1,740	1,740
36	1,160	0.13	1,160	1,160	910
48	870	0.23	870	770	510
60	700	0.35	660	490	330
72	580	0.51	460	340	230
84	500	0.70	340	250	170
96	430	0.89	260	190	130
108	390	1.15	200	150	100
120	350	1.42	160	120	80

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	15.7	0.35	15.7	15.7	15.7
600	7.9	1.39	7.9	7.9	7.9
900	5.2	3.13	5.2	5.2	4.2
1,200	3.9	5.53	3.9	3.6	2.4
1,500	3.2	8.72	3.0	2.3	1.5
1,800	2.6	12.52	2.1	1.6	1.1
2,100	2.2	16.85	1.6	1.2	0.8
2,400	2.0	22.13	1.2	0.9	0.6
2,700	1.7	27.93	0.9	0.7	0.4
3,000	1.6	34.39	0.8	0.6	0.4

W200 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	3,870	12,430	12,120	11,640	11,110
24	3,620	10,830	9,970	8,830	7,780
36	3,250	8,970	7,780	6,420	5,330
48	2,800	7,300	6,030	4,710	3,820
60	2,410	5,940	4,710	3,650	2,970
72	2,110	4,850	3,820	2,970	2,410
84	1,870	4,060	3,210	2,490	1,990
96	1,680	3,490	2,760	2,120	1,670
108	1,530	3,060	2,410	1,830	**
120	1,390	2,710	2,120	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	17.3	55.4	54.0	52.0	49.6
600	16.1	48.4	44.7	39.7	35.1
900	14.5	40.3	35.1	29.0	24.1
1,200	12.6	32.9	27.3	21.4	17.3
1,500	10.9	26.8	21.4	16.5	13.5
1,800	9.5	22.0	17.3	13.5	10.9
2,100	8.5	18.4	14.5	11.3	9.1
2,400	7.6	15.8	12.5	9.6	7.6
2,700	6.9	13.8	10.9	8.3	**
3,000	6.3	12.3	9.6	**	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W201 Channel Loads

12 Gauge - 1⁵/₈" x 3¹/₄" (41mm x 83mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W201	3.82	1.122	0.954	0.587	0.922	0.477	0.587	0.652
	(5.68)	(7.24)	(39.71)	(9.62)	(2.34)	(19.85)	(9.62)	(1.66)

W201 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	2,500 *	0.00	2,500 *	2,500 *	2,500 *
24	2,500 *	0.02	2,500 *	2,500 *	2,500 *
36	2,500 *	0.05	2,500 *	2,500 *	2,500 *
48	2,460	0.13	2,460	2,460	2,460
60	1,970	0.20	1,970	1,970	1,670
72	1,640	0.28	1,640	1,640	1,160
84	1,410	0.39	1,410	1,280	850
96	1,230	0.50	1,230	980	650
108	1,090	0.64	1,030	770	510
120	980	0.78	830	630	420

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	11.1 *	0.05	11.1 *	11.1 *	11.1 *
600	11.1 *	0.39	11.1 *	11.1 *	11.1 *
900	11.1 *	1.31	11.1 *	11.1 *	11.1 *
1,200	11.1 *	3.10	11.1 *	11.1 *	11.1 *
1,500	8.9	4.84	8.9	8.9	7.7
1,800	7.4	6.98	7.4	7.4	5.3
2,100	6.4	9.50	6.4	5.9	3.9
2,400	5.6	12.39	5.6	4.5	3.0
2,700	4.9	15.66	4.7	3.6	2.4
3,000	4.4	19.36	3.8	2.9	1.9

W201 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	6,700	25,700	25,480	25,120	24,720
24	6,580	24,510	23,830	22,900	22,010
36	6,430	23,020	22,010	20,810	19,820
48	6,290	21,580	20,450	18,860	16,320
60	6,130	20,370	18,860	15,680	12,520
72	5,730	19,160	16,320	12,520	9,040
84	5,270	17,120	13,760	9,570	6,640
96	4,770	15,040	11,310	7,320	5,090
108	4,240	12,980	9,040	5,790	4,020
120	3,750	11,010	7,320	4,890	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	29.8	114.4	113.4	111.9	110.1
600	29.3	109.2	106.3	102.2	98.3
900	28.6	102.7	98.3	92.9	88.5
1,200	28.0	96.4	91.4	84.7	73.7
1,500	27.4	91.0	84.7	70.9	57.0
1,800	25.7	86.1	73.7	57.0	41.5
2,100	23.7	77.2	62.5	43.9	30.5
2,400	21.5	68.1	51.6	33.6	23.4
2,700	19.2	59.0	41.5	26.6	18.5
3,000	17.0	50.3	33.6	21.5	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots 0.90

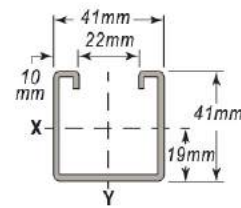
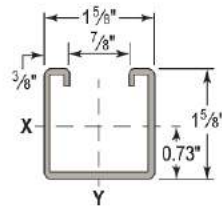
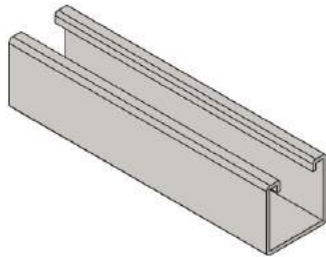




W210 & W211 - 14 Gauge Channel

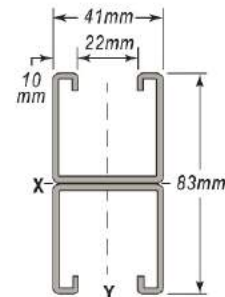
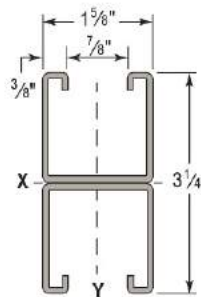
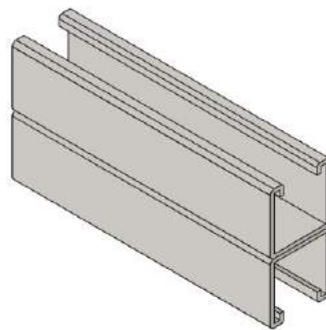
W210: 1⁵/₈" x 1⁵/₈" (41mm x 41mm) & W211: 1⁵/₈" x 3¹/₄" (41mm x 83mm)

W210: 1⁵/₈" x 1⁵/₈" (41mm x 41mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

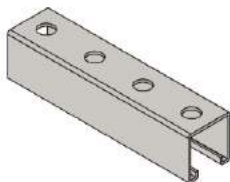
W211: 1⁵/₈" x 3¹/₄" (41mm x 83mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

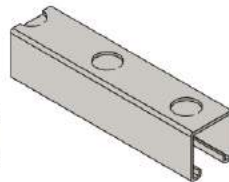
Pierced Channel

W210H



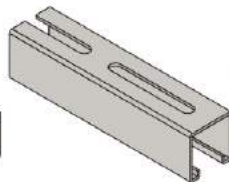
Channel With Holes
3/16" Holes are punched on 1-3/8" centers.

W210KO



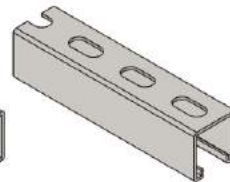
Channel With Knock-Outs
7/8" Knock-outs are punched on 6" centers.

W210SL



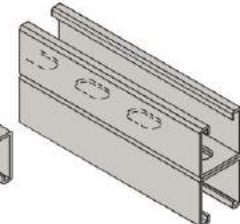
Channel With Long Slots
3/32" x 3" Slots are punched on 4" centers.

W210SS



Channel With Short Slots
3/16" x 1-1/8" Slots are punched on 2" centers.

W211SS



Channel With Short Slots
3/16" x 1-1/8" Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Standard Spring



Channel Nut Without Spring



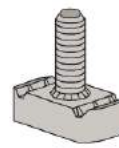
Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut



Stud Nut without Spring



Stud Nut with Spring



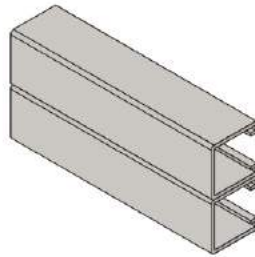
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W210 Series Combination Channel



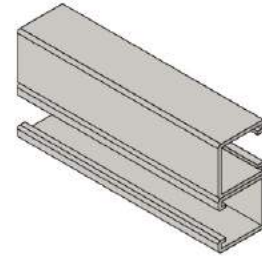
W212

1⁵/₈" x 3¹/₄"
(41mm x 83mm)



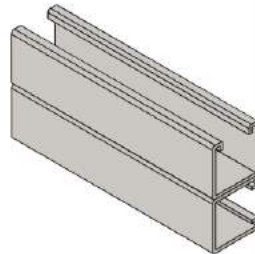
W213

1⁵/₈" x 3¹/₄"
(41mm x 83mm)



W214

1⁵/₈" x 3¹/₄"
(41mm x 83mm)



Note: Additional combinations are available upon request

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Electrical Fittings
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Loop & Ring Clamps
Belt Clamps & Z-Clamps
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Rooftop Supports
Gamma Pads
Technical Data





W210 Channel Loads

14 Gauge - 1⁵/₈" x 1⁵/₈" (41mm x 41mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. In. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W210	1.42	0.417	0.148	0.169	0.596	0.183	0.225	0.662
	(2.11)	(2.69)	(6.16)	(2.77)	(1.51)	(7.62)	(3.69)	(1.68)

W210 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	2,840	0.01	2,840	2,840	2,840
24	1,420	0.06	1,420	1,420	1,420
36	950	0.13	950	950	720
48	710	0.23	710	610	400
60	570	0.37	520	390	260
72	470	0.52	360	270	180
84	410	0.72	260	200	130
96	350	0.92	200	150	100
108	320	1.20	160	120	80
120	280	1.44	130	100	60

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	12.8	0.36	12.8	12.8	12.8
600	6.4	1.44	6.4	6.4	6.4
900	4.3	3.24	4.3	4.3	3.3
1,200	3.2	5.75	3.2	2.8	1.9
1,500	2.6	9.05	2.4	1.8	1.2
1,800	2.1	12.94	1.6	1.2	0.8
2,100	1.8	17.55	1.2	0.9	0.6
2,400	1.6	23.01	0.9	0.7	0.4
2,700	1.4	29.12	0.7	0.5	0.4
3,000	1.3	36.20	0.6	0.4	0.3

W210 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	3,110	9,250	9,020	8,660	8,250
24	2,880	8,030	7,330	6,360	5,420
36	2,460	6,480	5,420	4,190	3,210
48	1,980	4,990	3,830	2,760	2,160
60	1,570	3,740	2,760	2,050	1,640
72	1,300	2,860	2,160	1,640	1,320
84	1,100	2,310	1,780	1,370	1,110
96	950	1,950	1,520	1,170	950
108	840	1,690	1,320	1,030	**
120	750	1,490	1,170	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	13.8	41.2	40.3	38.7	36.9
600	12.9	35.9	32.9	28.6	24.5
900	11.1	29.1	24.5	19.0	14.6
1,200	8.9	22.6	17.4	12.5	9.8
1,500	7.1	17.0	12.5	9.3	7.4
1,800	5.9	13.0	9.8	7.4	6.0
2,100	5.0	10.5	8.1	6.2	5.0
2,400	4.3	8.9	6.9	5.3	4.3
2,700	3.8	7.7	6.0	4.7	**
3,000	3.4	6.8	5.3	4.1	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W211 Channel Loads

14 Gauge - 1⁵/₈" x 3¹/₄" (41mm x 83mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W211	2.84	0.834	0.739	0.455	0.942	0.365	0.450	0.662
	(4.23)	(5.38)	(30.76)	(7.46)	(2.39)	(15.19)	(7.37)	(1.68)

W211 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	1,600 *	0.00	1,600 *	1,600 *	1,600 *
24	1,600 *	0.01	1,600 *	1,600 *	1,600 *
36	1,600 *	0.04	1,600 *	1,600 *	1,600 *
48	1,600 *	0.11	1,600 *	1,600 *	1,600 *
60	1,530	0.20	1,530	1,530	1,290
72	1,270	0.28	1,270	1,270	900
84	1,090	0.39	1,090	990	660
96	950	0.50	950	760	500
108	850	0.64	800	600	400
120	760	0.78	650	480	320

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	7.1 *	0.04	7.1 *	7.1 *	7.1 *
600	7.1 *	0.32	7.1 *	7.1 *	7.1 *
900	7.1 *	1.08	7.1 *	7.1 *	7.1 *
1,200	7.1 *	2.56	7.1 *	7.1 *	7.1 *
1,500	6.9	4.84	6.9	6.9	5.9
1,800	5.7	6.96	5.7	5.7	4.1
2,100	4.9	9.51	4.9	4.5	3.0
2,400	4.3	12.41	4.3	3.5	2.3
2,700	3.8	15.66	3.6	2.8	1.8
3,000	3.5	19.49	3.0	2.2	1.5

W211 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	5,140	19,130	18,970	18,700	18,390
24	5,040	18,230	17,670	16,860	16,010
36	4,890	16,970	16,010	14,760	13,610
48	4,720	15,590	14,360	12,920	11,740
60	4,500	14,260	12,920	11,480	9,280
72	4,230	13,080	11,740	9,280	6,690
84	3,890	12,080	10,210	7,080	4,920
96	3,490	11,150	8,380	5,420	3,770
108	3,060	9,620	6,690	4,280	2,980
120	2,690	8,160	5,420	3,470	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	22.9	85.1	84.4	83.3	82.0
600	22.4	81.2	78.8	75.3	71.6
900	21.8	75.8	71.6	66.1	61.0
1,200	21.1	69.7	64.3	57.9	52.7
1,500	20.1	63.9	57.9	51.5	42.2
1,800	18.9	58.7	52.7	42.2	30.7
2,100	17.5	54.2	46.3	32.5	22.6
2,400	15.7	50.4	38.3	24.9	17.3
2,700	13.9	43.8	30.7	19.7	13.7
3,000	12.2	37.3	24.9	15.9	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots 0.90



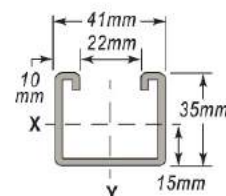
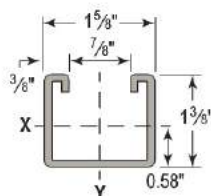
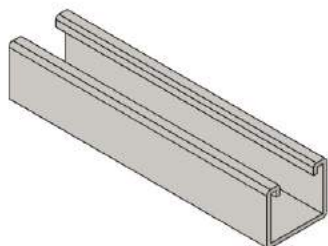
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W300 & W301 - 12 Gauge Channel

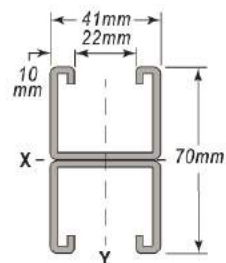
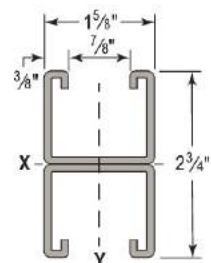
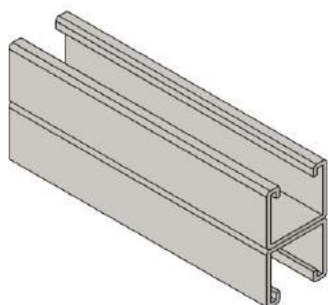
W300: 1 $\frac{5}{8}$ " x 1 $\frac{3}{8}$ " (41mm x 35mm) & W301: 1 $\frac{5}{8}$ " x 2 $\frac{3}{4}$ " (41mm x 70mm)

W300: 1 $\frac{5}{8}$ " x 1 $\frac{3}{8}$ " (41mm x 35mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

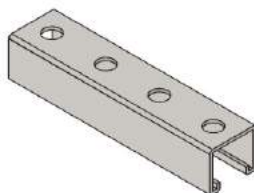
W301: 1 $\frac{5}{8}$ " x 2 $\frac{3}{4}$ " (41mm x 70mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

Pierced Channel

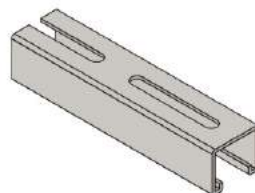
W300H



Channel With Holes

$\frac{9}{16}$ " Holes are punched on 1 $\frac{1}{2}$ " centers.

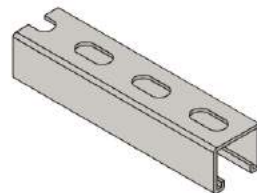
W300SL



Channel With Long Slots

$\frac{1}{2}$ " x 3" Slots are punched on 4" centers.

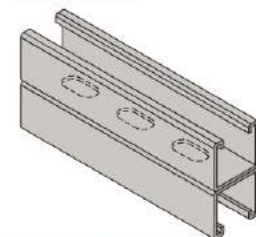
W300SS



Channel With Short Slots

$\frac{9}{16}$ " x 1 $\frac{1}{8}$ " Slots are punched on 2" centers.

W301SS



Channel With Short Slots

$\frac{9}{16}$ " x 1 $\frac{1}{8}$ " Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Standard Spring



Channel Nut Without Spring



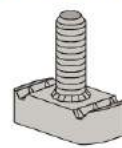
Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut



Stud Nut without Spring



Stud Nut with Spring



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www.zsi-foster.com



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W300 Channel Loads

12 Gauge - 1⁵/₈" x 1³/₈" (41mm x 35mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W300	1.73	0.508	0.123	0.158	0.491	0.208	0.256	0.64
	(2.57)	(3.28)	(5.12)	(2.59)	(1.25)	(8.66)	(4.20)	(1.63)

W300 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	2,650	0.02	2,650	2,650	2,650
24	1,320	0.07	1,320	1,320	1,320
36	880	0.15	880	880	600
48	660	0.26	660	500	340
60	530	0.41	430	320	210
72	440	0.59	300	220	150
84	380	0.81	220	160	110
96	330	1.05	170	130	80
108	290	1.31	130	100	70
120	260	1.62	110	80	50

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	12.0	0.40	12.0	12.0	12.0
600	6.0	1.63	6.0	6.0	6.0
900	4.0	3.66	4.0	4.0	2.8
1,200	3.0	6.46	3.0	2.3	1.6
1,500	2.4	10.16	2.0	1.5	1.0
1,800	2.0	14.63	1.4	1.0	0.7
2,100	1.7	19.62	1.0	0.8	0.5
2,400	1.5	26.21	0.8	0.6	0.4
2,700	1.3	32.92	0.6	0.4	0.3
3,000	1.2	40.65	0.5	0.4	0.3

W300 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	3,480	11,260	10,980	10,550	10,080
24	3,260	9,830	9,100	8,150	7,280
36	2,980	8,260	7,280	6,180	5,280
48	2,640	6,890	5,860	4,760	3,890
60	2,340	5,780	4,760	3,720	3,010
72	2,080	4,880	3,890	3,010	2,330
84	1,860	4,130	3,270	2,470	**
96	1,680	3,550	2,790	1,890	**
108	1,480	3,110	2,330	**	**
120	1,280	2,740	1,890	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	15.5	50.1	48.9	47.1	45.0
600	14.5	43.9	40.7	36.6	32.7
900	13.3	37.1	32.7	27.8	23.8
1,200	11.8	31.0	26.4	21.5	17.6
1,500	10.5	26.1	21.5	16.8	13.7
1,800	9.3	22.1	17.6	13.7	10.7
2,100	8.4	18.7	14.8	11.3	**
2,400	7.6	16.1	12.6	8.7	**
2,700	6.8	14.1	10.7	**	**
3,000	5.8	12.4	8.7	**	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W301 Channel Loads

12 Gauge - 1⁵/₈" x 2³/₄" (41mm x 70mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W301	3.46	1.017	0.608	0.443	0.774	0.416	0.512	0.64
	(5.15)	(6.56)	(25.31)	(7.26)	(1.97)	(17.32)	(8.39)	(1.63)

W301 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	2,110 *	0.00	2,110 *	2,110 *	2,110 *
24	2,110 *	0.02	2,110 *	2,110 *	2,110 *
36	2,110 *	0.07	2,110 *	2,110 *	2,110 *
48	1,860	0.15	1,860	1,860	1,660
60	1,490	0.23	1,490	1,490	1,060
72	1,240	0.34	1,240	1,110	740
84	1,060	0.46	1,060	810	540
96	930	0.60	830	620	410
108	830	0.76	660	490	330
120	740	0.93	530	400	270

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	9.4 *	0.06	9.4 *	9.4 *	9.4 *
600	9.4 *	0.51	9.4 *	9.4 *	9.4 *
900	9.4 *	1.73	9.4 *	9.4 *	9.4 *
1,200	8.4	3.68	8.4	8.4	7.6
1,500	6.7	5.74	6.7	6.7	4.9
1,800	5.6	8.27	5.6	5.1	3.4
2,100	4.8	11.26	4.8	3.7	2.5
2,400	4.2	14.63	3.8	2.8	1.9
2,700	3.7	18.62	3.0	2.3	1.5
3,000	3.4	23.11	2.4	1.8	1.2

W301 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	6,000	23,260	23,040	22,700	22,330
24	5,890	22,130	21,520	20,730	20,000
36	5,770	20,830	20,000	19,080	17,990
48	5,670	19,670	18,820	16,850	14,500
60	5,470	18,750	16,850	13,900	10,990
72	5,150	17,140	14,500	10,990	7,860
84	4,740	15,240	12,140	8,320	5,770
96	4,280	13,310	9,890	6,370	4,420
108	3,800	11,420	7,860	5,030	**
120	3,370	9,620	6,370	4,070	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	26.7	103.5	102.6	101.1	99.5
450	26.5	101.3	99.5	96.8	94.2
600	26.2	98.6	95.9	92.5	89.3
750	25.9	95.7	92.5	88.5	85.1
900	25.7	92.9	89.3	85.1	80.7
1,050	25.4	90.2	86.4	81.9	73.3
1,200	25.2	87.8	84.0	75.8	65.5
1,500	24.4	83.7	75.8	62.9	50.1
1,800	23.1	77.0	65.5	50.1	36.1
2,100	21.3	68.7	55.1	38.2	26.5

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots 0.90



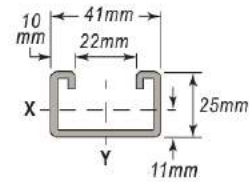
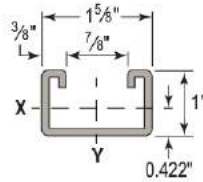
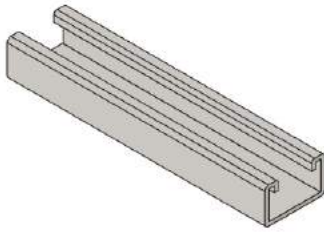
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W800 & W801 - 12 Gauge Channel



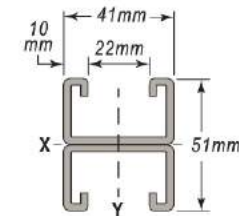
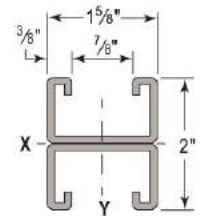
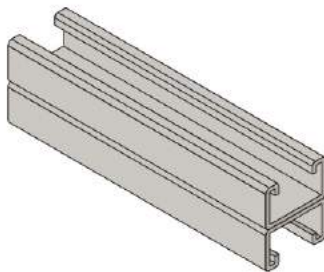
W800: 1⁵/₈" x 1" (41mm x 25mm) & W801: 1⁵/₈" x 2" (41mm x 51mm)

W800: 1⁵/₈" x 1" (41mm x 25mm)



Available in 10', 20' & Pre-Cut lengths see page 48 • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

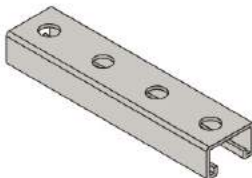
W801: 1⁵/₈" x 2" (41mm x 51mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

Pierced Channel

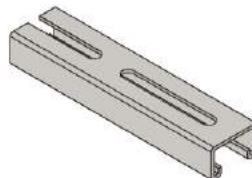
W800H



Channel With Holes

⁵/₁₆" Holes are punched on 1-¹/₄" centers.

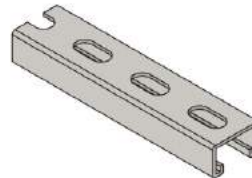
W800SL



Channel With Long Slots

³/₄" x 3" Slots are punched on 4" centers.

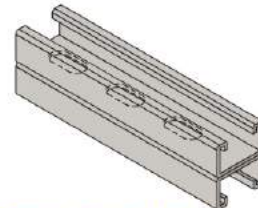
W800SS



Channel With Short Slots

⁵/₁₆" x 1-¹/₄" Slots are punched on 2" centers.

W801SS



Channel With Short Slots

⁵/₁₆" x 1-¹/₄" Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Short Spring



Channel Nut Without Spring



Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut

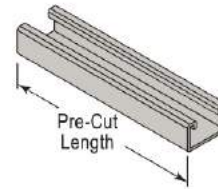




W800 Pre-Cut Channel

1 $\frac{5}{8}$ " x 1" (41mm x 25mm) - 12 Gauge

W800: 1 $\frac{5}{8}$ " x 1" (41mm x 25mm) - Solid Channel - Pre-Cut Lengths



W800 - 1 $\frac{5}{8}$ " x 1" - 12 Gauge - Solid Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W800PG6IN	W800ST3046IN	W800ST3166IN
12" (0.31m)	W800PG12IN	W800ST30412IN	W800ST31612IN
18" (0.45m)	W800PG18IN	W800ST30418IN	W800ST31618IN
24" (0.61m)	W800PG24IN	W800ST30424IN	W800ST31624IN
30" (0.76m)	W800PG30IN	W800ST30430IN	W800ST31630IN
36" (0.91m)	W800PG36IN	W800ST30436IN	W800ST31636IN
42" (1.07m)	W800PG42IN	W800ST30442IN	W800ST31642IN
48" (1.22m)	W800PG48IN	W800ST30448IN	W800ST31648IN
54" (1.37m)	W800PG54IN	W800ST30454IN	W800ST31654IN
60" (1.52m)	W800PG60IN	W800ST30460IN	W800ST31660IN
72" (1.83m)	W800PG72IN	W800ST30472IN	W800ST31672IN
80" (2.03m)	W800PG80IN	W800ST30480IN	W800ST31680IN
96" (2.44m)	W800PG96IN	W800ST30496IN	W800ST31696IN
10' (3.05m)	W800PG10	W800ST30410	W800ST31610
20' (6.10m)	W800PG20	W800ST30420	W800ST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W800 Channel Loads

12 Gauge - 1⁵/₈" x 1" (41mm x 25mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W800	1.46	0.43	0.054	0.093	0.354	0.163	0.200	0.615
	(2.17)	(2.77)	(2.25)	(1.52)	(0.90)	(6.78)	(3.28)	(1.56)

W800 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	1,560	0.02	1,560	1,560	1,560
18	1,040	0.05	1,040	1,040	1,040
24	780	0.09	780	780	590
30	630	0.14	630	570	380
36	520	0.20	520	390	260
42	450	0.27	380	290	190
48	390	0.35	290	220	150
60	310	0.55	190	140	90
72	260	0.79	130	100	70
84	220	1.07	100	70	50

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	7.1	0.54	7.1	7.1	7.1
450	4.7	1.23	4.7	4.7	4.7
600	3.5	2.17	3.5	3.5	2.7
750	2.8	3.43	2.8	2.6	1.7
900	2.4	4.90	2.4	1.8	1.2
1,050	2.0	6.61	1.8	1.3	0.9
1,200	1.8	8.77	1.3	1.0	0.7
1,500	1.4	13.71	0.8	0.7	0.4
1,800	1.2	19.25	0.6	0.4	0.3
2,100	1.0	27.04	0.4	0.3	0.2

W800 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	2,220	9,730	9,590	9,350	9,070
18	2,190	9,390	9,070	8,580	8,010
24	2,150	8,920	8,400	7,600	6,730
30	2,090	8,350	7,600	6,500	5,370
36	2,020	7,700	6,730	5,370	4,090
42	1,930	7,000	5,820	4,290	3,010
48	1,820	6,280	4,930	3,320	2,310
60	1,540	4,820	3,320	2,120	**
72	1,280	3,490	2,310	**	**
84	1,060	2,570	1,690	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	9.9	43.3	42.7	41.7	40.5
450	9.7	41.8	40.5	38.3	35.9
600	9.6	39.8	37.5	34.1	30.3
750	9.3	37.4	34.1	29.3	24.4
900	9.0	34.6	30.3	24.4	18.7
1,050	8.6	31.5	26.3	19.6	13.8
1,200	8.2	28.3	22.4	15.3	10.6
1,500	7.0	21.9	15.3	9.7	**
1,800	5.8	16.1	10.6	**	**
2,100	4.8	11.8	7.8	**	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Introduction

Channel

Channel Nuts & Hardware

General Fittings

Pipe & Conduit Supports

Electrical Fittings

Spring Steel

Loop & Ring Clamps

Belt Clamps & Z-Clamps

Concrete Inserts

Roofing Supports

Gamma Pads

Technical Data



W801 Channel Loads

12 Gauge - 1⁵/₈" x 2" (41mm x 51mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W801	2.92	0.859	0.261	0.261	0.551	0.325	0.400	0.615
	(4.35)	(5.54)	(10.86)	(4.28)	(1.40)	(13.53)	(6.55)	(1.56)

W801 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	1,520 *	0.00	1,520 *	1,520 *	1,520 *
18	1,520 *	0.02	1,520 *	1,520 *	1,520 *
24	1,520 *	0.04	1,520 *	1,520 *	1,520 *
30	1,520 *	0.07	1,520 *	1,520 *	1,520 *
36	1,460	0.12	1,460	1,460	1,270
42	1,250	0.16	1,250	1,250	930
48	1,090	0.20	1,090	1,070	710
60	870	0.32	870	680	460
72	730	0.46	630	470	320
84	620	0.62	470	350	230

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	6.8 *	0.11	6.8 *	6.8 *	6.8 *
450	6.8 *	0.36	6.8 *	6.8 *	6.8 *
600	6.8 *	0.86	6.8 *	6.8 *	6.8 *
750	6.8 *	1.68	6.8 *	6.8 *	6.8 *
900	6.6	2.83	6.6	6.6	5.8
1,050	5.6	3.86	5.6	5.6	4.3
1,200	4.9	5.03	4.9	4.9	3.3
1,500	4.0	7.88	4.0	3.2	2.1
1,800	3.3	11.32	2.9	2.2	1.5
2,100	2.8	15.31	2.1	1.6	1.1

W801 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	5,660	19,300	18,950	18,430	17,870
18	5,660	18,500	17,870	17,000	16,160
24	5,440	17,580	16,720	15,640	14,720
30	5,320	16,650	15,640	14,510	13,590
36	5,210	15,770	14,720	13,590	11,460
42	5,110	14,990	13,940	11,810	9,360
48	4,920	14,310	12,880	10,050	7,400
60	4,320	12,710	10,050	6,820	4,730
72	3,680	10,400	7,400	4,730	3,290
84	3,030	8,200	5,430	3,480	2,420

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	25.2	85.9	84.4	82.2	79.7
450	24.8	82.5	79.7	75.9	72.2
600	24.2	78.5	74.7	69.9	65.8
750	23.7	74.4	69.9	64.9	60.9
900	23.2	70.5	65.8	60.9	51.9
1,050	22.8	67.0	62.4	53.4	42.6
1,200	22.0	64.0	58.1	45.7	33.9
1,500	19.4	57.3	45.7	31.3	21.8
1,800	16.5	47.2	33.9	21.8	15.1
2,100	13.8	37.5	25.0	16.0	11.1

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots 0.90



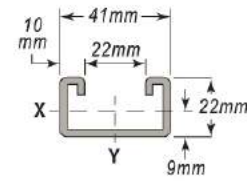
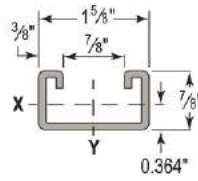
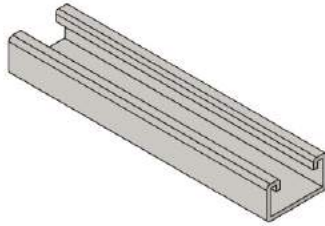
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W900 & W901 - 12 Gauge Channel



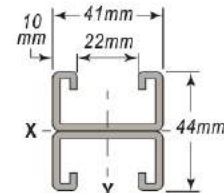
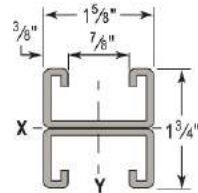
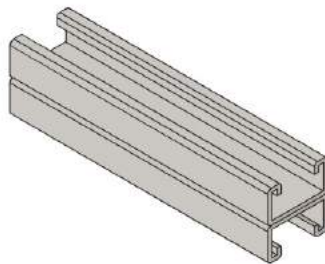
W900: 1 $\frac{5}{8}$ " x 7/8" (41mm x 22mm) & W901: 1 $\frac{5}{8}$ " x 1 $\frac{3}{4}$ " (41mm x 44mm)

W900: 1 $\frac{5}{8}$ " x 7/8" (41mm x 22mm)



Available in 10', 20' & Pre-Cut lengths see page 52 • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

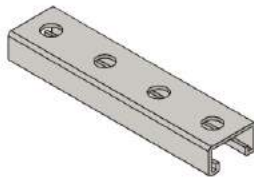
W901: 1 $\frac{5}{8}$ " x 1 $\frac{3}{4}$ " (41mm x 44mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

Pierced Channel

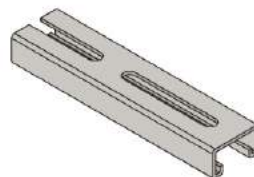
W900H



Channel With Holes

5/16" Holes are punched on 1-3/4" centers.

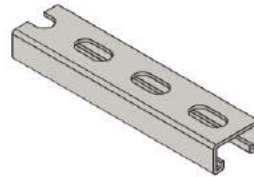
W900SL



Channel With Long Slots

1-3/8" x 3" Slots are punched on 4" centers.

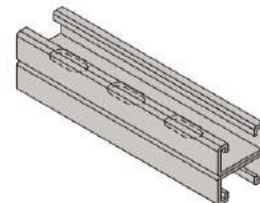
W900SS



Channel With Short Slots

5/16" x 1-1/4" Slots are punched on 2" centers.

W901SS



Channel With Short Slots

5/16" x 1-1/4" Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Short Spring



Channel Nut Without Spring



Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut

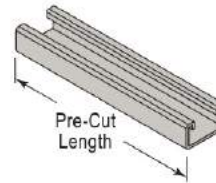
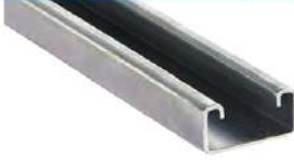




W900 Pre-Cut Channel

1⁵/₈" x 7⁷/₈" (41mm x 22mm) - 12 Gauge

W900: 1⁵/₈" x 7⁷/₈" (41mm x 22mm) - Solid Channel - Pre-Cut Lengths



W900 - 1 ⁵ / ₈ " x 7 ⁷ / ₈ " - 12 Gauge - Solid Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W900PG6IN	W900ST3046IN	W900ST3166IN
12" (0.31m)	W900PG12IN	W900ST30412IN	W900ST31612IN
18" (0.45m)	W900PG18IN	W900ST30418IN	W900ST31618IN
24" (0.61m)	W900PG24IN	W900ST30424IN	W900ST31624IN
30" (0.76m)	W900PG30IN	W900ST30430IN	W900ST31630IN
36" (0.91m)	W900PG36IN	W900ST30436IN	W900ST31636IN
42" (1.07m)	W900PG42IN	W900ST30442IN	W900ST31642IN
48" (1.22m)	W900PG48IN	W900ST30448IN	W900ST31648IN
54" (1.37m)	W900PG54IN	W900ST30454IN	W900ST31654IN
60" (1.52m)	W900PG60IN	W900ST30460IN	W900ST31660IN
72" (1.83m)	W900PG72IN	W900ST30472IN	W900ST31672IN
80" (2.03m)	W900PG80IN	W900ST30480IN	W900ST31680IN
96" (2.44m)	W900PG96IN	W900ST30496IN	W900ST31696IN
10' (3.05m)	W900PG10	W900ST30410	W900ST31610
20' (6.10m)	W900PG20	W900ST30420	W900ST31620

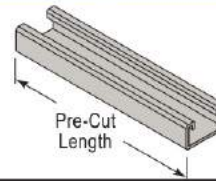
Note: Minimum order quantity is 100 pieces for any size under 10'.

W900SS: 1⁵/₈" x 7⁷/₈" (41mm x 22mm) - Channel with Short Slots - Pre-Cut Lengths



Channel With Short Slots

⁹/₁₆" x 1¹/₈" (14mm x 29mm) Slots
are punched on 2" (51mm) centers.



W900SS - 1 ⁵ / ₈ " x 7 ⁷ / ₈ " - 12 Gauge - Channel with Short Slots			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W900SSPG6IN	W900SSST3046IN	W900SSST3166IN
12" (0.31m)	W900SSPG12IN	W900SSST30412IN	W900SSST31612IN
18" (0.45m)	W900SSPG18IN	W900SSST30418IN	W900SSST31618IN
24" (0.61m)	W900SSPG24IN	W900SSST30424IN	W900SSST31624IN
30" (0.76m)	W900SSPG30IN	W900SSST30430IN	W900SSST31630IN
36" (0.91m)	W900SSPG36IN	W900SSST30436IN	W900SSST31636IN
42" (1.07m)	W900SSPG42IN	W900SSST30442IN	W900SSST31642IN
48" (1.22m)	W900SSPG48IN	W900SSST30448IN	W900SSST31648IN
54" (1.37m)	W900SSPG54IN	W900SSST30454IN	W900SSST31654IN
60" (1.52m)	W900SSPG60IN	W900SSST30460IN	W900SSST31660IN
72" (1.83m)	W900SSPG72IN	W900SSST30472IN	W900SSST31672IN
80" (2.03m)	W900SSPG80IN	W900SSST30480IN	W900SSST31680IN
96" (2.44m)	W900SSPG96IN	W900SSST30496IN	W900SSST31696IN
10' (3.05m)	W900SSPG10	W900SSST30410	W900SSST31610
20' (6.10m)	W900SSPG20	W900SSST30420	W900SSST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.

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www.zsi-foster.com



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W900 Channel Loads

12 Gauge - 1⁵/₈" x 7⁷/₈" (41mm x 22mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W900	1.37	0.403	0.038	0.074	0.307	0.147	0.181	0.604
	(2.04)	(2.60)	(1.58)	(1.21)	(0.78)	(6.12)	(2.97)	(1.53)

W900 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	1,250	0.03	1,250	1,250	1,250
18	830	0.06	830	830	740
24	620	0.10	620	620	420
30	500	0.16	500	400	270
36	420	0.23	370	280	180
42	360	0.31	270	200	140
48	310	0.40	210	160	100
60	250	0.63	130	100	70
72	210	0.91	90	70	50
84	180	1.24	70	50	30

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	5.6	0.62	5.6	5.6	5.6
450	3.7	1.38	3.7	3.7	3.4
600	2.8	2.45	2.8	2.8	1.9
750	2.3	3.87	2.3	1.8	1.2
900	1.9	5.51	1.7	1.3	0.8
1,050	1.6	7.50	1.2	0.9	0.6
1,200	1.4	9.96	0.9	0.7	0.5
1,500	1.1	15.19	0.6	0.4	0.3
1,800	0.9	22.05	0.4	0.3	0.2
2,100	0.8	30.01	0.3	0.2	0.1

W900 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	2,560	8,900	8,670	8,360	8,040
18	2,500	8,400	8,040	7,580	6,980
24	2,440	7,880	7,430	6,510	5,530
30	2,330	7,380	6,510	5,280	4,100
36	2,190	6,620	5,530	4,100	2,890
42	2,020	5,840	4,560	3,050	2,120
48	1,820	5,040	3,650	2,340	1,620
60	1,420	3,540	2,340	1,500	**
72	1,110	2,460	1,620	**	**
84	**	1,810	**	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	11.4	39.6	38.7	37.3	35.9
450	11.1	37.5	35.9	33.9	31.3
600	10.9	35.2	33.2	29.3	25.0
750	10.4	33.1	29.3	23.9	18.7
900	9.8	29.8	25.0	18.7	13.3
1,050	9.1	26.3	20.8	14.0	9.7
1,200	8.2	22.9	16.8	10.7	7.5
1,500	6.4	16.3	10.7	6.9	**
1,800	5.1	11.3	7.5	**	**
2,100	**	8.3	**	**	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W901 Channel Loads

12 Gauge - 1⁵/₈" x 1³/₄" (41mm x 44mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W901	2.75	0.807	0.183	0.209	0.476	0.295	0.363	0.604
	(4.09)	(5.21)	(7.62)	(3.42)	(1.21)	(12.28)	(5.95)	(1.53)

W901 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	1,310 *	0.01	1,310 *	1,310 *	1,310 *
18	1,310 *	0.02	1,310 *	1,310 *	1,310 *
24	1,310 *	0.04	1,310 *	1,310 *	1,310 *
30	1,310 *	0.09	1,310 *	1,310 *	1,280
36	1,170	0.13	1,170	1,170	890
42	1,000	0.18	1,000	980	650
48	880	0.23	880	750	500
60	700	0.37	640	480	320
72	580	0.52	440	330	220
84	500	0.72	330	240	160

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	5.8 *	0.13	5.8 *	5.8 *	5.8 *
450	5.8 *	0.45	5.8 *	5.8 *	5.8 *
600	5.8 *	1.06	5.8 *	5.8 *	5.8 *
750	5.8 *	2.07	5.8 *	5.8 *	5.8 *
900	5.3	3.25	5.3	5.3	4.1
1,050	4.5	4.42	4.5	4.5	3.0
1,200	4.0	5.76	4.0	3.4	2.3
1,500	3.2	8.97	2.9	2.2	1.5
1,800	2.6	12.88	2.0	1.5	1.0
2,100	2.3	17.68	1.5	1.1	0.8

W901 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	4,510	18,310	18,090	17,780	17,470
18	4,470	17,820	17,470	17,040	16,590
24	4,430	17,320	16,900	16,110	15,040
30	4,380	16,870	16,110	14,760	13,260
36	4,290	16,230	15,040	13,260	11,360
42	4,190	15,390	13,870	11,680	9,470
48	4,070	14,460	12,630	10,090	7,670
60	3,770	12,470	10,090	7,090	4,920
72	3,370	10,410	7,670	4,920	3,420
84	2,880	8,400	5,650	3,620	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	20.1	81.5	80.6	79.2	77.8
450	19.9	79.4	77.8	75.9	74.1
600	19.7	77.2	75.4	72.0	67.4
750	19.5	75.2	72.0	66.1	59.6
900	19.1	72.6	67.4	59.6	51.3
1,050	18.7	68.9	62.3	52.7	43.0
1,200	18.2	64.9	56.9	45.8	35.1
1,500	16.9	56.2	45.8	32.6	22.6
1,800	15.2	47.2	35.1	22.6	15.7
2,100	13.0	38.3	26.0	16.6	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots..... 0.90



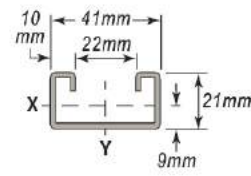
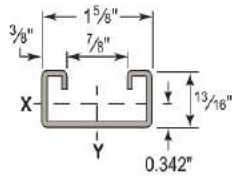
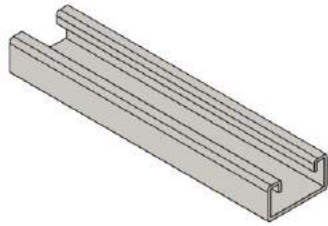
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W500 & W501 - 14 Gauge Channel



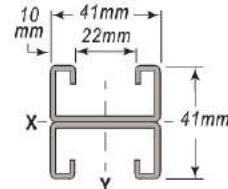
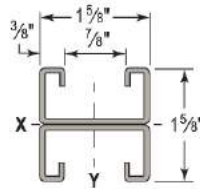
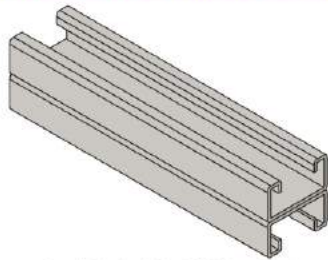
W500: $1\frac{5}{8}" \times 1\frac{3}{16}"$ (41mm x 21mm) & W501: $1\frac{5}{8}" \times 1\frac{5}{8}"$ (41mm x 41mm)

W500: $1\frac{5}{8}" \times 1\frac{3}{16}"$ (41mm x 21mm)



Available in 10', 20' & Pre-Cut lengths see page 56 • Finishes: PG, HG, GR, PL, Gold, EA, ST304, & ST316

W501: $1\frac{5}{8}" \times 1\frac{5}{8}"$ (41mm x 41mm)

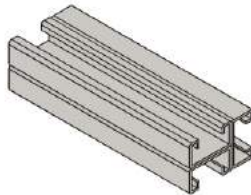


Available in 10', 20' & Pre-Cut lengths see page 57 • Finishes: PG, HG, GR, PL, Gold, EA, ST304, & ST316

W501 Series Combination Channel

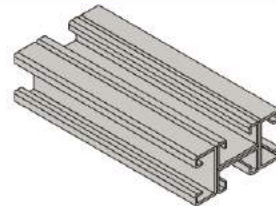
W503

$1\frac{5}{8}" \times 2\frac{7}{16}"$
(41mm x 62mm)



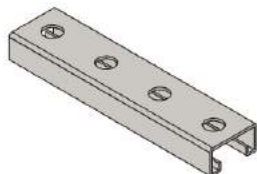
W504

$3\frac{1}{4}" \times 1\frac{5}{8}"$
(83mm x 41mm)



Pierced Channel

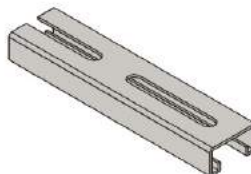
W500H



Channel With Holes

$\frac{3}{16}"$ Holes are punched on $1\frac{1}{8}"$ centers.

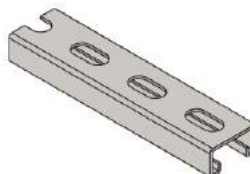
W500SL



Channel With Long Slots

$1\frac{1}{2}" \times 3"$ Slots are punched on 4" centers.

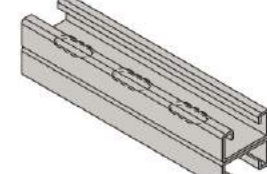
W500SS



Channel With Short Slots

$\frac{3}{16}" \times 1\frac{1}{4}"$ Slots are punched on 2" centers.

W501SS



Channel With Short Slots

$\frac{3}{16}" \times 1\frac{1}{8}"$ Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Short Spring



Channel Nut Without Spring



Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Introduction

Channel

Channel Nuts & Hardware

General Fittings

Pipe & Conduit Supports

Electrical Fittings

Spring Steel

Loop & Ring Clamps

Beta Clamps & Z-Clamps

Concrete Inserts

Rooftop Supports

Gamma Pads

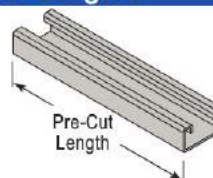
Technical Data



W500 Pre-Cut Channel

$1\frac{5}{8}" \times 1\frac{3}{16}"$ (41mm x 21mm) - 14 Gauge

W500: $1\frac{5}{8}" \times 1\frac{3}{16}"$ (41mm x 21mm) - Solid Channel - Pre-Cut Lengths



W500 - $1\frac{5}{8}" \times 1\frac{3}{16}"$ - 14 Gauge - Solid Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W500PG6IN	W500ST3046IN	W500ST3166IN
12" (0.31m)	W500PG12IN	W500ST30412IN	W500ST31612IN
18" (0.45m)	W500PG18IN	W500ST30418IN	W500ST31618IN
24" (0.61m)	W500PG24IN	W500ST30424IN	W500ST31624IN
30" (0.76m)	W500PG30IN	W500ST30430IN	W500ST31630IN
36" (0.91m)	W500PG36IN	W500ST30436IN	W500ST31636IN
42" (1.07m)	W500PG42IN	W500ST30442IN	W500ST31642IN
48" (1.22m)	W500PG48IN	W500ST30448IN	W500ST31648IN
54" (1.37m)	W500PG54IN	W500ST30454IN	W500ST31654IN
60" (1.52m)	W500PG60IN	W500ST30460IN	W500ST31660IN
72" (1.83m)	W500PG72IN	W500ST30472IN	W500ST31672IN
80" (2.03m)	W500PG80IN	W500ST30480IN	W500ST31680IN
96" (2.44m)	W500PG96IN	W500ST30496IN	W500ST31696IN
10' (3.05m)	W500PG10	W500ST30410	W500ST31610
20' (6.10m)	W500PG20	W500ST30420	W500ST31620

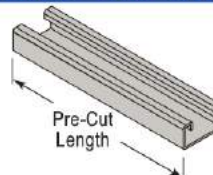
Note: Minimum order quantity is 100 pieces for any size under 10'.

W500SS: $1\frac{5}{8}" \times 1\frac{3}{16}"$ (41mm x 21mm) - Channel with Short Slots - Pre-Cut Lengths



Channel With Short Slots

$\frac{9}{16}" \times 1\frac{1}{8}"$ (14mm x 29mm) Slots
are punched on 2" (51mm) centers.



W500SS - $1\frac{5}{8}" \times 1\frac{3}{16}"$ - 14 Gauge - Channel with Short Slots			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W500SSPG6IN	W500SSST3046IN	W500SSST3166IN
12" (0.31m)	W500SSPG12IN	W500SSST30412IN	W500SSST31612IN
18" (0.45m)	W500SSPG18IN	W500SSST30418IN	W500SSST31618IN
24" (0.61m)	W500SSPG24IN	W500SSST30424IN	W500SSST31624IN
30" (0.76m)	W500SSPG30IN	W500SSST30430IN	W500SSST31630IN
36" (0.91m)	W500SSPG36IN	W500SSST30436IN	W500SSST31636IN
42" (1.07m)	W500SSPG42IN	W500SSST30442IN	W500SSST31642IN
48" (1.22m)	W500SSPG48IN	W500SSST30448IN	W500SSST31648IN
54" (1.37m)	W500SSPG54IN	W500SSST30454IN	W500SSST31654IN
60" (1.52m)	W500SSPG60IN	W500SSST30460IN	W500SSST31660IN
72" (1.83m)	W500SSPG72IN	W500SSST30472IN	W500SSST31672IN
80" (2.03m)	W500SSPG80IN	W500SSST30480IN	W500SSST31680IN
96" (2.44m)	W500SSPG96IN	W500SSST30496IN	W500SSST31696IN
10' (3.05m)	W500SSPG10	W500SSST30410	W500SSST31610
20' (6.10m)	W500SSPG20	W500SSST30420	W500SSST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.

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www.zsi-foster.com



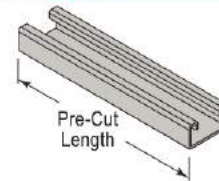
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W501 Pre-Cut Channel

1⁵/₈" x 1⁵/₈" (41mm x 41mm) - 14 Gauge



W501: 1⁵/₈" x 1⁵/₈" (41mm x 41mm) - Solid Channel - Pre-Cut Lengths



W501 - 1 ⁵ / ₈ " x 1 ⁵ / ₈ " - 14 Gauge - Solid Back-to-Back Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W501PG6IN	W501ST3046IN	W501ST3166IN
12" (0.31m)	W501PG12IN	W501ST30412IN	W501ST31612IN
18" (0.45m)	W501PG18IN	W501ST30418IN	W501ST31618IN
24" (0.61m)	W501PG24IN	W501ST30424IN	W501ST31624IN
30" (0.76m)	W501PG30IN	W501ST30430IN	W501ST31630IN
36" (0.91m)	W501PG36IN	W501ST30436IN	W501ST31636IN
42" (1.07m)	W501PG42IN	W501ST30442IN	W501ST31642IN
48" (1.22m)	W501PG48IN	W501ST30448IN	W501ST31648IN
54" (1.37m)	W501PG54IN	W501ST30454IN	W501ST31654IN
60" (1.52m)	W501PG60IN	W501ST30460IN	W501ST31660IN
72" (1.83m)	W501PG72IN	W501ST30472IN	W501ST31672IN
80" (2.03m)	W501PG80IN	W501ST30480IN	W501ST31680IN
96" (2.44m)	W501PG96IN	W501ST30496IN	W501ST31696IN
10' (3.05m)	W501PG10	W501ST30410	W501ST31610
20' (6.10m)	W501PG20	W501ST30420	W501ST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W500 Channel Loads

14 Gauge - 1⁵/₈" x 1³/₁₆" (41mm x 21mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W500	1.00	0.296	0.026	0.056	0.297	0.109	0.135	0.609
	(1.49)	(1.90)	(1.08)	(0.92)	(0.75)	(4.54)	(2.21)	(1.55)

W500 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	930	0.03	930	930	930
18	620	0.06	620	620	510
24	470	0.11	470	430	290
30	370	0.17	370	270	180
36	310	0.24	250	190	130
42	270	0.34	190	140	90
48	230	0.43	140	110	70
60	190	0.69	90	70	50
72	160	1.01	60	50	30
84	130	1.30	50	40	20

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	4.2	0.67	4.2	4.2	4.2
450	2.8	1.50	2.8	2.8	2.4
600	2.1	2.65	2.1	2.0	1.3
750	1.7	4.19	1.7	1.2	0.8
900	1.4	6.09	1.2	0.9	0.6
1,050	1.2	8.16	0.8	0.6	0.4
1,200	1.1	10.83	0.7	0.5	0.3
1,500	0.8	16.74	0.4	0.3	0.2
1,800	0.7	24.37	0.3	0.2	0.1
2,100	0.6	33.86	0.2	0.2	0.1

W500 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	2,010	6,530	6,360	6,110	5,840
18	1,950	6,140	5,840	5,420	5,010
24	1,890	5,700	5,280	4,650	3,910
30	1,800	5,250	4,650	3,720	2,840
36	1,680	4,740	3,910	2,840	1,980
42	1,510	4,140	3,180	2,100	1,460
48	1,330	3,540	2,510	1,610	1,110
60	1,020	2,430	1,610	**	**
72	780	1,690	1,110	**	**
84	**	1,240	**	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	8.9	29.1	28.3	27.3	26.1
450	8.7	27.4	26.1	24.3	22.5
600	8.4	25.5	23.7	20.9	17.7
750	8.1	23.5	20.9	16.9	13.0
900	7.5	21.3	17.7	13.0	9.1
1,050	6.8	18.7	14.5	9.6	6.7
1,200	6.0	16.1	11.5	7.4	5.1
1,500	4.6	11.2	7.4	4.7	**
1,800	3.6	7.7	5.1	**	**
2,100	**	5.7	**	**	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced. Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W501 Channel Loads

14 Gauge - 1⁵/₈" x 1⁵/₈" (41mm x 41mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W501	2.01	0.59	0.122	0.15	0.454	0.219	0.269	0.609
	(2.99)	(3.81)	(5.08)	(2.46)	(1.15)	(9.12)	(4.41)	(1.55)

W501 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	790 *	0.00	790 *	790 *	790 *
18	790 *	0.02	790 *	790 *	790 *
24	790 *	0.04	790 *	790 *	790 *
30	790 *	0.08	790 *	790 *	790 *
36	790 *	0.13	790 *	790 *	590 *
42	720	0.19	720	650	430
48	630	0.25	630	500	330
60	500	0.39	420	320	210
72	420	0.57	300	220	150
84	360	0.78	220	160	110

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	3.5 *	0.12	3.5 *	3.5 *	3.5 *
450	3.5 *	0.41	3.5 *	3.5 *	3.5 *
600	3.5 *	0.96	3.5 *	3.5 *	3.5 *
750	3.5 *	1.88	3.5 *	3.5 *	3.5 *
900	3.5 *	3.24	3.5 *	3.5 *	2.7
1,050	3.2	4.76	3.2	3.0	2.0
1,200	2.8	6.23	2.8	2.3	1.5
1,500	2.3	9.69	2.0	1.5	1.0
1,800	1.9	13.79	1.3	1.0	0.7
2,100	1.6	18.77	1.0	0.8	0.5

W501 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	3,430	13,420	13,250	13,000	12,720
18	3,390	13,030	12,720	12,300	11,880
24	3,350	12,580	12,160	11,590	10,740
30	3,310	12,120	11,590	10,520	9,340
36	3,230	11,680	10,740	9,340	7,870
42	3,150	11,010	9,820	8,110	6,430
48	3,040	10,290	8,850	6,900	5,080
60	2,760	8,730	6,900	4,680	3,250
72	2,370	7,140	5,080	3,250	2,260
84	2,000	5,630	3,730	2,390	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	15.3	59.7	59.0	57.9	56.7
450	15.1	58.0	56.7	54.8	53.0
600	14.9	56.1	54.2	51.8	48.1
750	14.7	54.1	51.8	47.2	42.0
900	14.4	52.1	48.1	42.0	35.6
1,050	14.1	49.3	44.1	36.7	29.3
1,200	13.6	46.2	39.9	31.4	23.3
1,500	12.4	39.4	31.4	21.5	14.9
1,800	10.7	32.4	23.3	14.9	10.4
2,100	9.1	25.8	17.1	11.0	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots 0.90



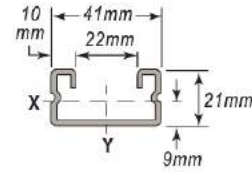
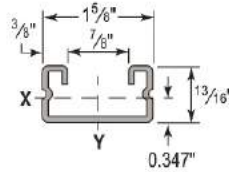
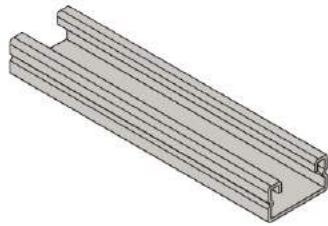
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W400 & W401 - 16 Gauge Channel

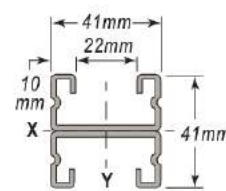
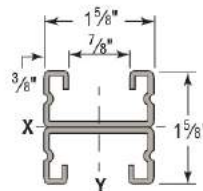
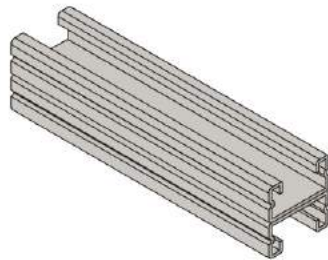
W400: $1\frac{5}{8}" \times 1\frac{3}{16}"$ (41mm x 21mm) & W401: $1\frac{5}{8}" \times 1\frac{5}{8}"$ (41mm x 41mm)

W400: $1\frac{5}{8}" \times 1\frac{3}{16}"$ (41mm x 21mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

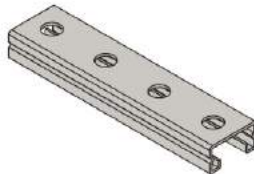
W401: $1\frac{5}{8}" \times 1\frac{5}{8}"$ (41mm x 41mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

Pierced Channel

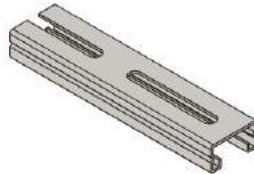
W400H



Channel With Holes

$\frac{3}{16}"$ Holes are punched on $1\frac{1}{2}"$ centers.

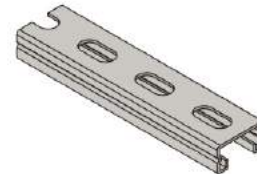
W400SL



Channel With Long Slots

$\frac{1}{2}" \times 3"$ Slots are punched on 4" centers.

W400SS



Channel With Short Slots

$\frac{3}{16}" \times 1\frac{1}{2}"$ Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Short Spring



Channel Nut Without Spring



Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut



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www.zsi-foster.com



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W400 Channel Loads

16 Gauge - 1⁵/₈" x 1³/₁₆" (41mm x 21mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W400	0.83	0.244	0.023	0.05	0.31	0.092	0.113	0.614
	(1.24)	(1.57)	(0.96)	(0.82)	(0.79)	(3.83)	(1.85)	(1.56)

W400 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	840	0.03	840	840	840
18	560	0.06	560	560	450
24	420	0.11	420	380	260
30	330	0.17	330	250	160
36	280	0.25	230	170	110
42	240	0.34	170	130	80
48	210	0.44	130	100	60
60	170	0.69	80	60	40
72	140	0.99	60	40	30
84	120	1.34	40	30	20

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	3.8	0.67	3.8	3.8	3.8
450	2.5	1.52	2.5	2.5	2.1
600	1.9	2.72	1.9	1.8	1.2
750	1.5	4.19	1.5	1.1	0.8
900	1.2	5.97	1.0	0.8	0.5
1,050	1.1	8.12	0.8	0.6	0.4
1,200	0.9	10.61	0.6	0.4	0.3
1,500	0.8	16.77	0.4	0.3	0.2
1,800	0.6	23.87	0.3	0.2	0.1
2,100	0.5	32.49	0.2	0.1	0.1

W400 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	1,780	5,390	5,250	5,040	4,800
18	1,720	5,070	4,800	4,420	4,030
24	1,650	4,680	4,290	3,780	3,310
30	1,570	4,260	3,780	3,210	2,520
36	1,470	3,840	3,310	2,520	1,780
42	1,340	3,460	2,800	1,880	1,310
48	1,180	3,080	2,250	1,440	1,000
60	890	2,180	1,440	920	**
72	690	1,520	1,000	**	**
84	**	1,110	**	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	7.9	24.0	23.4	22.5	21.4
450	7.7	22.6	21.4	19.8	18.1
600	7.4	20.9	19.2	17.0	14.9
750	7.0	19.1	17.0	14.5	11.5
900	6.6	17.3	14.9	11.5	8.2
1,050	6.0	15.6	12.7	8.8	6.0
1,200	5.3	14.0	10.3	6.6	4.6
1,500	4.0	10.0	6.6	4.2	**
1,800	3.2	6.9	4.6	**	**
2,100	**	5.1	**	**	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Roofing Supports

Gamma Pads

Technical Data



W401 Channel Loads

16 Gauge - 1⁵/₈" x 1⁵/₈" (41mm x 41mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W401	1.66	0.487	0.105	0.129	0.463	0.184	0.226	0.614
	(2.47)	(3.14)	(4.37)	(2.11)	(1.18)	(7.66)	(3.70)	(1.56)

W401 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	500 *	0.00	500 *	500 *	500 *
18	500 *	0.01	500 *	500 *	500 *
24	500 *	0.03	500 *	500 *	500 *
30	500 *	0.06	500 *	500 *	500 *
36	500 *	0.10	500 *	500 *	500 *
42	500 *	0.16	500 *	500 *	370
48	500 *	0.23	500 *	430	290
60	430	0.39	370	270	180
72	360	0.57	250	190	130
84	310	0.78	190	140	90

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	2.2 *	0.09	2.2 *	2.2 *	2.2 *
450	2.2 *	0.30	2.2 *	2.2 *	2.2 *
600	2.2 *	0.71	2.2 *	2.2 *	2.2 *
750	2.2 *	1.38	2.2 *	2.2 *	2.2 *
900	2.2 *	2.38	2.2 *	2.2 *	2.2 *
1,050	2.2 *	3.79	2.2 *	2.2 *	1.7
1,200	2.2 *	5.65	2.2 *	2.0	1.3
1,500	2.0	9.71	1.7	1.2	0.8
1,800	1.6	14.11	1.2	0.9	0.6
2,100	1.4	18.78	0.8	0.6	0.4

W401 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	2,920	11,090	10,960	10,750	10,520
18	2,890	10,780	10,520	10,140	9,740
24	2,850	10,390	10,000	9,470	8,960
30	2,800	9,970	9,470	8,810	7,870
36	2,760	9,540	8,960	7,870	6,700
42	2,690	9,120	8,260	6,900	5,530
48	2,600	8,630	7,490	5,920	4,440
60	2,350	7,390	5,920	4,090	2,840
72	2,030	6,110	4,440	2,840	1,970
84	1,710	4,880	3,260	2,090	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	13.0	49.4	48.8	47.9	46.9
450	12.9	48.0	46.9	45.2	43.5
600	12.7	46.4	44.7	42.3	40.1
750	12.5	44.5	42.3	39.5	35.4
900	12.3	42.6	40.1	35.4	30.3
1,050	12.0	40.7	37.1	31.1	25.2
1,200	11.6	38.7	33.7	26.9	20.3
1,500	10.5	33.3	26.9	18.8	13.0
1,800	9.2	27.7	20.3	13.0	9.1
2,100	7.7	22.3	15.0	9.6	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots..... 0.90



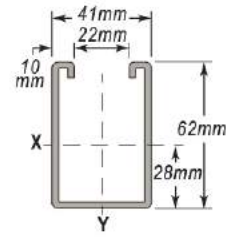
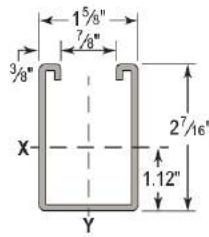
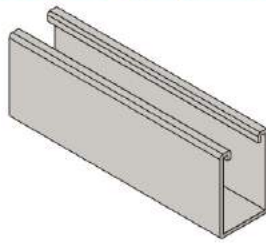
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W100 & W101 - 12 Gauge Channel



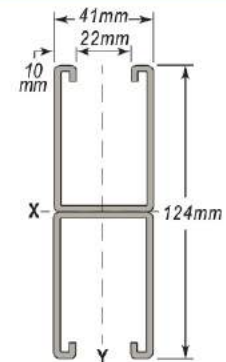
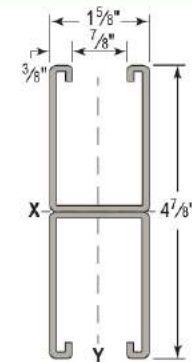
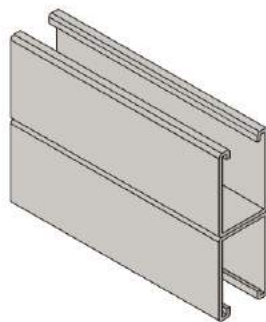
W100: 1⁵/₈" x 2⁷/₁₆" (41mm x 62mm) & W101: 1⁵/₈" x 4⁷/₈" (41mm x 124mm)

W100: 1⁵/₈" x 2⁷/₁₆" (41mm x 62mm)



Available in 10', 20' & Pre-Cut lengths see next page • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

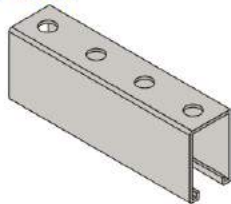
W101: 1⁵/₈" x 4⁷/₈" (41mm x 124mm)



Available in 10' & 20' lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

Pierced Channel

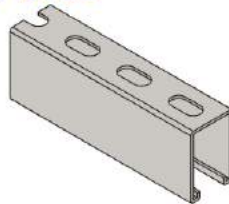
W100H



Channel With Holes

3/16" Holes are punched on 1-7/8" centers.

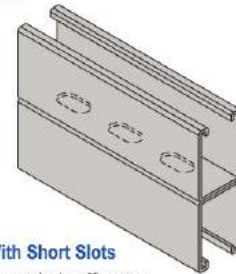
W100SS



Channel With Short Slots

3/16" x 1-7/8" Slots are punched on 2" centers.

W101SS



Channel With Short Slots

3/16" x 1-7/8" Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Long Spring



Channel Nut Without Spring



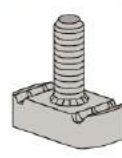
Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut



Stud Nut without Spring



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WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Roofing Supports

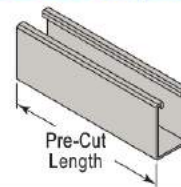
Gamma Pads

Technical Data



W100 Pre-Cut Channel

W100: 1⁵/₈" x 2⁷/₁₆" (41mm x 62mm) - Solid Channel - Pre-Cut Lengths



W100 - 1 ⁵ / ₈ " x 2 ⁷ / ₁₆ " - 12 Gauge Solid Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W100PG6IN	W100ST3046IN	W100ST3166IN
12" (0.31m)	W100PG12IN	W100ST30412IN	W100ST31612IN
18" (0.45m)	W100PG18IN	W100ST30418IN	W100ST31618IN
24" (0.61m)	W100PG24IN	W100ST30424IN	W100ST31624IN
30" (0.76m)	W100PG30IN	W100ST30430IN	W100ST31630IN
36" (0.91m)	W100PG36IN	W100ST30436IN	W100ST31636IN
42" (1.07m)	W100PG42IN	W100ST30442IN	W100ST31642IN
48" (1.22m)	W100PG48IN	W100ST30448IN	W100ST31648IN
54" (1.37m)	W100PG54IN	W100ST30454IN	W100ST31654IN
60" (1.52m)	W100PG60IN	W100ST30460IN	W100ST31660IN
72" (1.83m)	W100PG72IN	W100ST30472IN	W100ST31672IN
80" (2.03m)	W100PG80IN	W100ST30480IN	W100ST31680IN
96" (2.44m)	W100PG96IN	W100ST30496IN	W100ST31696IN
10' (3.05m)	W100PG10	W100ST30410	W100ST31610
20' (6.10m)	W100PG20	W100ST30420	W100ST31620

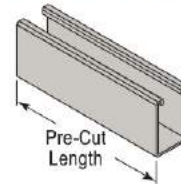
Note: Minimum order quantity is 100 pieces for any size under 10'.

W100SS: 1⁵/₈" x 2⁷/₁₆" (41mm x 62mm) - Channel with Short Slots - Pre-Cut Lengths



Channel With Short Slots

⁹/₁₆" x 1¹/₈" (14mm x 29mm) Slots
are punched on 2" (51mm) centers.



W100SS - 1 ⁵ / ₈ " x 2 ⁷ / ₁₆ " - 12 Gauge - Channel with Short Slots			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W100SSPG6IN	W100SSST3046IN	W100SSST3166IN
12" (0.31m)	W100SSPG12IN	W100SSST30412IN	W100SSST31612IN
18" (0.45m)	W100SSPG18IN	W100SSST30418IN	W100SSST31618IN
24" (0.61m)	W100SSPG24IN	W100SSST30424IN	W100SSST31624IN
30" (0.76m)	W100SSPG30IN	W100SSST30430IN	W100SSST31630IN
36" (0.91m)	W100SSPG36IN	W100SSST30436IN	W100SSST31636IN
42" (1.07m)	W100SSPG42IN	W100SSST30442IN	W100SSST31642IN
48" (1.22m)	W100SSPG48IN	W100SSST30448IN	W100SSST31648IN
54" (1.37m)	W100SSPG54IN	W100SSST30454IN	W100SSST31654IN
60" (1.52m)	W100SSPG60IN	W100SSST30460IN	W100SSST31660IN
72" (1.83m)	W100SSPG72IN	W100SSST30472IN	W100SSST31672IN
80" (2.03m)	W100SSPG80IN	W100SSST30480IN	W100SSST31680IN
96" (2.44m)	W100SSPG96IN	W100SSST30496IN	W100SSST31696IN
10' (3.05m)	W100SSPG10	W100SSST30410	W100SSST31610
20' (6.10m)	W100SSPG20	W100SSST30420	W100SSST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.

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WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W100 Channel Loads

12 Gauge - 1⁵/₈" x 2⁷/₁₆" (41mm x 62mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W100	2.49	0.732	0.530	0.400	0.851	0.337	0.415	0.679
	(3.71)	(4.72)	(22.06)	(6.55)	(2.16)	(14.03)	(6.80)	(1.72)

W100 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	6,700	0.01	6,700	6,700	6,700
24	3,350	0.04	3,350	3,350	3,350
36	2,230	0.09	2,230	2,230	2,230
48	1,670	0.15	1,670	1,670	1,450
60	1,340	0.24	1,340	1,340	930
72	1,120	0.35	1,120	960	640
84	960	0.47	940	710	470
96	840	0.62	720	540	360
108	740	0.78	570	430	290
120	670	0.96	460	350	230

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	30.3	0.24	30.3	30.3	30.3
600	15.1	0.95	15.1	15.1	15.1
900	10.1	2.14	10.1	10.1	10.1
1,200	7.6	3.79	7.6	7.6	6.6
1,500	6.0	5.93	6.0	6.0	4.3
1,800	5.0	8.51	5.0	4.4	2.9
2,100	4.3	11.60	4.3	3.2	2.2
2,400	3.8	15.18	3.3	2.5	1.6
2,700	3.4	19.32	2.6	2.0	1.3
3,000	3.0	23.71	2.1	1.6	1.1

W100 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	5,090	16,190	15,760	15,090	14,330
24	4,720	13,920	12,640	10,890	9,220
36	4,020	11,110	9,220	7,040	5,370
48	3,210	8,440	6,400	4,630	3,640
60	2,570	6,250	4,630	3,460	2,780
72	2,130	4,790	3,640	2,780	2,270
84	1,810	3,900	3,010	2,340	1,920
96	1,580	3,290	2,590	2,020	1,660
108	1,400	2,860	2,270	1,780	1,450
120	1,270	2,540	2,020	1,580	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	22.7	72.1	70.3	67.4	64.1
600	21.0	62.3	56.7	49.1	41.7
900	18.1	50.0	41.7	32.0	24.5
1,200	14.5	38.3	29.2	21.0	16.5
1,500	11.6	28.5	21.0	15.7	12.6
1,800	9.6	21.8	16.5	12.6	10.3
2,100	8.2	17.7	13.7	10.6	8.7
2,400	7.1	14.9	11.7	9.2	7.5
2,700	6.4	13.0	10.3	8.1	6.6
3,000	5.7	11.5	9.2	7.2	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W101 Channel Loads

12 Gauge - 1⁵/₈" x 4⁷/₈" (41mm x 124mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W101	4.98	1.463	2.867	1.176	1.400	0.674	0.829	0.679
	(7.41)	(9.44)	(119.33)	(19.27)	(3.56)	(28.05)	(13.58)	(1.72)

W101 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	3,710 *	0.00	3,710 *	3,710 *	3,710 *
24	3,710 *	0.01	3,710 *	3,710 *	3,710 *
36	3,710 *	0.03	3,710 *	3,710 *	3,710 *
48	3,710 *	0.06	3,710 *	3,710 *	3,710 *
60	3,710 *	0.12	3,710 *	3,710 *	3,710 *
72	3,290	0.19	3,290	3,290	3,290
84	2,820	0.26	2,820	2,820	2,560
96	2,470	0.34	2,470	2,470	1,960
108	2,190	0.42	2,190	2,190	1,550
120	1,970	0.52	1,970	1,880	1,250

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	16.5 *	0.02	16.5 *	16.5 *	16.5 *
600	16.5 *	0.19	16.5 *	16.5 *	16.5 *
900	16.5 *	0.65	16.5 *	16.5 *	16.5 *
1,200	16.5 *	1.53	16.5 *	16.5 *	16.5 *
1,500	16.5 *	2.99	16.5 *	16.5 *	16.5 *
1,800	14.9	4.65	14.9	14.9	14.9
2,100	12.7	6.32	12.7	12.7	11.7
2,400	11.1	8.25	11.1	11.1	9.0
2,700	9.9	10.47	9.9	9.9	7.1
3,000	8.9	12.89	8.9	8.6	5.7

W101 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	8,890	33,570	33,290	32,840	32,320
24	8,730	32,030	31,100	29,720	28,280
36	8,490	29,900	28,280	26,150	24,190
48	8,220	27,560	25,470	23,020	21,020
60	7,840	25,310	23,020	20,590	17,300
72	7,370	23,300	21,020	17,300	12,800
84	6,870	21,800	18,880	13,530	9,410
96	6,210	20,180	15,750	10,370	7,200
108	5,510	17,890	12,800	8,190	5,690
120	4,850	15,370	10,370	6,640	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	39.6	149.4	148.2	146.3	144.0
600	38.9	142.7	138.7	132.7	126.4
900	37.8	133.4	126.4	117.0	108.4
1,200	36.7	123.2	114.1	103.2	94.3
1,500	35.0	113.3	103.2	92.3	78.6
1,800	33.0	104.4	94.3	78.6	58.8
2,100	30.9	96.8	85.6	62.0	43.2
2,400	28.0	90.5	71.8	47.6	33.1
2,700	25.0	81.2	58.8	37.6	26.1
3,000	22.0	70.1	47.6	30.5	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced. Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots 0.90



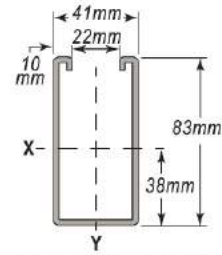
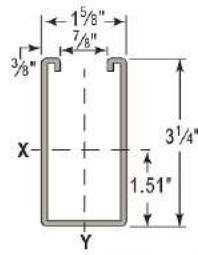
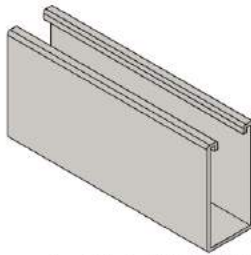
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W150 & W151 - 12 Gauge Channel



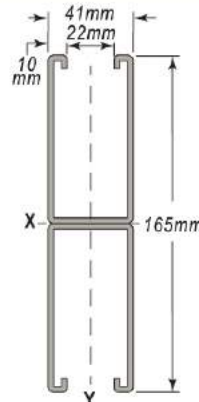
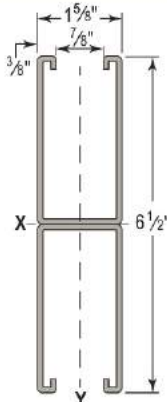
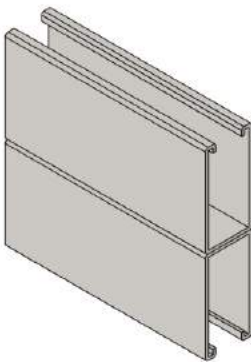
W150: 1⁵/₈" x 3¹/₄" (41mm x 83mm) & W151: 1⁵/₈" x 6¹/₂" (41mm x 165mm)

W150: 1⁵/₈" x 3¹/₄" (41mm x 83mm)



Available in 10', 20' & Pre-Cut lengths see next page • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

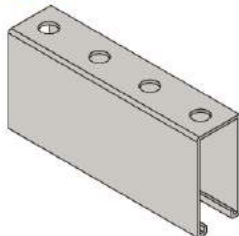
W151: 1⁵/₈" x 6¹/₂" (41mm x 165mm)



Available in 10' & 20' lengths • Finishes: PG, HG, GR, PL, Gold, ST304, & ST316

Pierced Channel

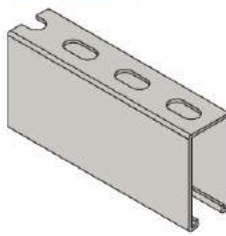
W150H



Channel With Holes

3/16" Holes are punched on 1-7/8" centers.

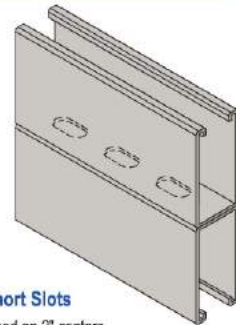
W150SS



Channel With Short Slots

3/16" x 1-1/8" Slots are punched on 2" centers.

W151SS



Channel With Short Slots

3/16" x 1-1/8" Slots are punched on 2" centers.

Related Channel Nuts (See Pages 81 - 82)

Channel Nut with Long Spring



Channel Nut Without Spring



Channel Nut with Top-Lock Spring



Rapid Strut Slide Nut



Stud Nut without Spring



ZSI-Foster Engineering Catalog

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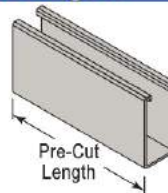
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Introduction
Channel
Channel Nuts & Hardware
General Fittings
Pipe & Conduit Supports
Electrical Fittings
Spring Steel
Loop & Ring Clamps
Belt Clamps & Z-Clamps
Concrete Inserts
Rooftop Supports
Gamma Pads
Technical Data



W150 Pre-Cut Channel

W150: 1⁵/₈" x 3¹/₄" (41mm x 83mm) - Solid Channel - Pre-Cut Lengths



W150 - 1 ⁵ / ₈ " x 3 ¹ / ₄ " - 12 Gauge Solid Channel			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W150PG6IN	W150ST3046IN	W150ST3166IN
12" (0.31m)	W150PG12IN	W150ST30412IN	W150ST31612IN
18" (0.45m)	W150PG18IN	W150ST30418IN	W150ST31618IN
24" (0.61m)	W150PG24IN	W150ST30424IN	W150ST31624IN
30" (0.76m)	W150PG30IN	W150ST30430IN	W150ST31630IN
36" (0.91m)	W150PG36IN	W150ST30436IN	W150ST31636IN
42" (1.07m)	W150PG42IN	W150ST30442IN	W150ST31642IN
48" (1.22m)	W150PG48IN	W150ST30448IN	W150ST31648IN
54" (1.37m)	W150PG54IN	W150ST30454IN	W150ST31654IN
60" (1.52m)	W150PG60IN	W150ST30460IN	W150ST31660IN
72" (1.83m)	W150PG72IN	W150ST30472IN	W150ST31672IN
80" (2.03m)	W150PG80IN	W150ST30480IN	W150ST31680IN
96" (2.44m)	W150PG96IN	W150ST30496IN	W150ST31696IN
10' (3.05m)	W150PG10	W150ST30410	W150ST31610
20' (6.10m)	W150PG20	W150ST30420	W150ST31620

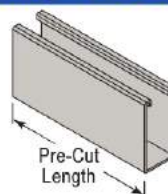
Note: Minimum order quantity is 100 pieces for any size under 10'.

W150SS: 1⁵/₈" x 3¹/₄" (41mm x 83mm) - Channel with Short Slots - Pre-Cut Lengths



Channel With Short Slots

⁹/₁₆" x 1¹/₈" (14mm x 29mm) Slots
are punched on 2" (51mm) centers.



W150SS - 1 ⁵ / ₈ " x 3 ¹ / ₄ " - 12 Gauge - Channel with Short Slots			
Pre-Cut Length	Steel - PG	ST304	ST316
6" (15.2cm)	W150SSPG6IN	W150SSST3046IN	W150SSST3166IN
12" (0.31m)	W150SSPG12IN	W150SSST30412IN	W150SSST31612IN
18" (0.45m)	W150SSPG18IN	W150SSST30418IN	W150SSST31618IN
24" (0.61m)	W150SSPG24IN	W150SSST30424IN	W150SSST31624IN
30" (0.76m)	W150SSPG30IN	W150SSST30430IN	W150SSST31630IN
36" (0.91m)	W150SSPG36IN	W150SSST30436IN	W150SSST31636IN
42" (1.07m)	W150SSPG42IN	W150SSST30442IN	W150SSST31642IN
48" (1.22m)	W150SSPG48IN	W150SSST30448IN	W150SSST31648IN
54" (1.37m)	W150SSPG54IN	W150SSST30454IN	W150SSST31654IN
60" (1.52m)	W150SSPG60IN	W150SSST30460IN	W150SSST31660IN
72" (1.83m)	W150SSPG72IN	W150SSST30472IN	W150SSST31672IN
80" (2.03m)	W150SSPG80IN	W150SSST30480IN	W150SSST31680IN
96" (2.44m)	W150SSPG96IN	W150SSST30496IN	W150SSST31696IN
10' (3.05m)	W150SSPG10	W150SSST30410	W150SSST31610
20' (6.10m)	W150SSPG20	W150SSST30420	W150SSST31620

Note: Minimum order quantity is 100 pieces for any size under 10'.

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www.zsi-foster.com



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W150 Channel Loads

12 Gauge - 1⁵/₈" x 3¹/₄" (41mm x 83mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W150	3.07	0.902	1.113	0.639	1.111	0.435	0.536	0.695
	(4.57)	(5.82)	(46.33)	(10.47)	(2.82)	(18.11)	(8.78)	(1.77)

W150 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	10,720	0.01	10,720	10,720	10,720
24	5,360	0.03	5,360	5,360	5,360
36	3,570	0.07	3,570	3,570	3,570
48	2,680	0.12	2,680	2,680	2,680
60	2,140	0.18	2,140	2,140	1,940
72	1,790	0.27	1,790	1,790	1,350
84	1,530	0.36	1,530	1,490	990
96	1,340	0.47	1,340	1,140	760
108	1,190	0.59	1,190	900	600
120	1,070	0.73	970	730	490

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	48.4	0.18	48.4	48.4	48.4
600	24.2	0.72	24.2	24.2	24.2
900	16.1	1.63	16.1	16.1	16.1
1,200	12.1	2.89	12.1	12.1	12.1
1,500	9.7	4.52	9.7	9.7	8.9
1,800	8.1	6.53	8.1	8.1	6.2
2,100	6.9	8.88	6.9	6.9	4.5
2,400	6.0	11.56	6.0	5.2	3.5
2,700	5.4	14.64	5.4	4.1	2.8
3,000	4.8	18.10	4.4	3.3	2.2

W150 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	6,230	19,910	19,360	18,480	17,490
24	5,730	16,950	15,250	12,890	10,630
36	4,740	13,190	10,830	7,850	5,660
48	3,590	9,570	6,870	4,800	3,660
60	2,740	6,690	4,800	3,460	2,710
72	2,160	4,990	3,660	2,710	2,170
84	1,760	3,960	2,970	2,250	1,830
96	1,500	3,280	2,500	1,930	1,580
108	1,310	2,800	2,170	1,700	1,400
120	1,170	2,460	1,930	1,520	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	27.8	88.7	86.3	82.6	78.2
600	25.6	75.9	68.5	58.2	48.2
900	21.3	59.5	48.2	35.0	25.8
1,200	16.2	43.5	31.4	21.9	16.7
1,500	12.5	30.6	21.9	15.7	12.3
1,800	9.8	22.7	16.7	12.3	9.8
2,100	8.0	18.0	13.5	10.2	8.3
2,400	6.8	14.9	11.3	8.7	7.2
2,700	5.9	12.7	9.8	7.7	6.3
3,000	5.3	11.1	8.7	6.9	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots	0.90
SL - Channel with Long Slots	0.90
H - Channel with Holes	0.95
KO - Knock-Out Channel	0.95



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W151 Channel Loads

12 Gauge - 1⁵/₈" x 6¹/₂" (41mm x 165mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. In. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W151	6.14	1.804	6.339	1.951	1.874	0.871	1.072	0.695
	(9.14)	(11.64)	(263.85)	(31.97)	(4.76)	(36.25)	(17.57)	(1.77)

W151 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	4,890 *	0.00	4,890 *	4,890 *	4,890 *
24	4,890 *	0.00	4,890 *	4,890 *	4,890 *
36	4,890 *	0.02	4,890 *	4,890 *	4,890 *
48	4,890 *	0.04	4,890 *	4,890 *	4,890 *
60	4,890 *	0.07	4,890 *	4,890 *	4,890 *
72	4,890 *	0.13	4,890 *	4,890 *	4,890 *
84	4,670	0.19	4,670	4,670	4,670
96	4,090	0.25	4,090	4,090	4,090
108	3,630	0.32	3,630	3,630	3,420
120	3,270	0.39	3,270	3,270	2,770

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	21.8 *	0.01	21.8 *	21.8 *	21.8 *
600	21.8 *	0.11	21.8 *	21.8 *	21.8 *
900	21.8 *	0.38	21.8 *	21.8 *	21.8 *
1,200	21.8 *	0.91	21.8 *	21.8 *	21.8 *
1,500	21.8 *	1.78	21.8 *	21.8 *	21.8 *
1,800	21.8 *	3.08	21.8 *	21.8 *	21.8 *
2,100	21.1	4.75	21.1	21.1	21.1
2,400	18.5	6.19	18.5	18.5	18.5
2,700	16.4	7.84	16.4	16.4	15.7
3,000	14.8	9.67	14.8	14.8	12.7

W151 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	11,040	41,400	41,060	40,490	39,830
24	10,820	39,460	38,240	36,400	34,410
36	10,490	36,840	34,410	31,330	28,370
48	10,080	33,380	30,320	26,520	23,250
60	9,400	30,070	26,520	22,520	19,410
72	8,650	26,970	23,250	19,410	16,540
84	7,930	24,210	20,560	17,050	12,160
96	7,280	21,830	18,390	13,400	9,310
108	6,660	19,820	16,540	10,590	7,350
120	5,800	18,150	13,400	8,580	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	49.1	184.2	182.8	180.3	177.5
600	48.2	175.9	170.6	162.6	153.9
900	46.8	163.7	153.9	140.4	127.4
1,200	45.0	149.4	136.0	119.2	104.7
1,500	42.1	134.9	119.2	101.4	87.5
1,800	38.8	121.2	104.7	87.5	75.1
2,100	35.6	109.0	92.7	76.9	55.8
2,400	32.7	98.4	82.9	61.5	42.7
2,700	30.1	89.4	75.1	48.6	33.8
3,000	26.4	81.8	61.5	39.4	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.

Beam Loading of Punched Channels

Load for punched channel is obtained by multiplying the loads shown by the following reduction factors:

SS - Channel with Short Slots 0.90



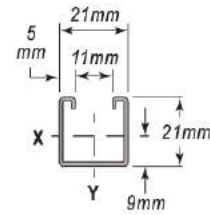
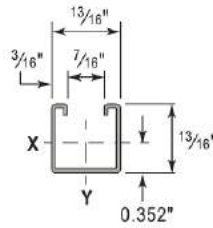
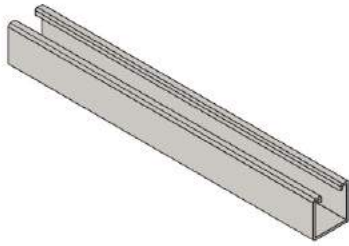
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W600 & W601 - 19 Gauge Channel



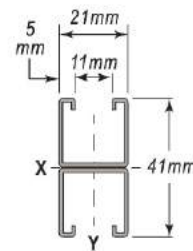
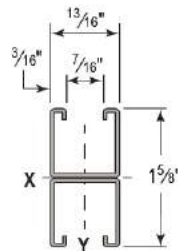
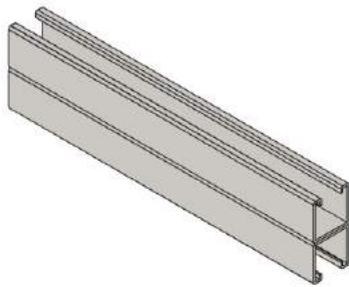
W600: $\frac{13}{16}" \times \frac{13}{16}"$ (21mm x 21mm) & **W601:** $\frac{13}{16}" \times 1\frac{5}{8}"$ (21mm x 41mm)

W600: $\frac{13}{16}" \times \frac{13}{16}"$ (21mm x 21mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR & PL

W601: $\frac{13}{16}" \times 1\frac{5}{8}"$ (21mm x 41mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR & PL

Related Channel Nuts (See Page 82)

Mini Nut with
Standard Spring





W600 Channel Loads

19 Gauge - $1\frac{3}{16}$ " x $1\frac{3}{16}$ " (21mm x 21mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. In. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W600	0.36	0.107	0.009	0.020	0.295	0.012	0.029	0.333
	(0.54)	(0.69)	(0.37)	(0.33)	(0.75)	(0.50)	(0.48)	(0.85)

W600 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	340	0.03	340	340	340
18	230	0.06	230	230	180
24	170	0.11	170	150	100
30	140	0.18	130	100	70
36	110	0.24	90	70	50
42	100	0.35	70	50	30
48	80	0.42	50	40	30
60	70	0.72	NR	NR	NR
72	60	1.06	NR	NR	NR
84	50	1.41	NR	NR	NR

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	1.5	0.68	1.5	1.5	1.5
450	1.0	1.54	1.0	1.0	0.8
600	0.8	2.70	0.8	0.7	0.4
750	0.6	4.34	0.6	0.4	0.3
900	0.5	5.90	0.4	0.3	0.2
1,050	0.4	8.52	0.3	0.2	0.1
1,200	0.4	11.44	0.2	0.2	0.1
1,500	0.3	17.38	NR	NR	NR
1,800	0.3	25.74	NR	NR	NR
2,100	0.2	34.06	NR	NR	NR

W600 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	700	2,050	1,880	1,630	1,400
18	600	1,660	1,400	1,100	860
24	490	1,300	1,010	740	590
30	400	990	740	560	450
36	340	770	590	450	370
42	290	630	490	380	310
48	260	540	420	330	270
60	210	410	330	**	**
72	180	340	270	**	**
84	**	280	**	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	3.1	9.2	8.4	7.3	6.3
450	2.7	7.5	6.3	5.0	3.9
600	2.2	5.9	4.6	3.4	2.7
750	1.8	4.5	3.4	2.5	2.0
900	1.5	3.5	2.7	2.0	1.7
1,050	1.3	2.8	2.2	1.7	1.4
1,200	1.2	2.4	1.9	1.5	1.2
1,500	0.9	1.9	1.5	**	**
1,800	0.8	1.5	1.2	**	**
2,100	**	1.3	**	**	**

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W601 Channel Loads

19 Gauge - $1\frac{3}{16}" \times 1\frac{5}{8}"$ (21mm x 41mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W600	0.36	0.107	0.009	0.020	0.295	0.012	0.029	0.333
	(0.54)	(0.69)	(0.37)	(0.33)	(0.75)	(0.50)	(0.48)	(0.85)

W601 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	280 *	0.00	280 *	280 *	280 *
18	280 *	0.02	280 *	280 *	280 *
24	280 *	0.04	280 *	280 *	280 *
30	280 *	0.07	280 *	280 *	280 *
36	280 *	0.13	280 *	280 *	220
42	270	0.20	270	240	160
48	230	0.25	230	180	120
60	190	0.40	160	120	80
72	160	0.58	110	80	50
84	130	0.75	80	60	40

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	1.2 *	0.11	1.2 *	1.2 *	1.2 *
450	1.2 *	0.39	1.2 *	1.2 *	1.2 *
600	1.2 *	0.92	1.2 *	1.2 *	1.2 *
750	1.2 *	1.79	1.2 *	1.2 *	1.2 *
900	1.2 *	3.10	1.2 *	1.2 *	1.0
1,050	1.2	4.74	1.2	1.1	0.8
1,200	1.1	6.29	1.1	0.8	0.6
1,500	0.8	9.73	0.7	0.5	0.4
1,800	0.7	14.16	0.5	0.4	0.3
2,100	0.6	19.67	0.4	0.3	0.2

W601 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	1,240	4,650	4,510	4,300	4,090
18	1,210	4,330	4,090	3,780	3,500
24	1,170	3,980	3,680	3,340	3,060
30	1,130	3,660	3,340	3,010	2,460
36	1,070	3,380	3,060	2,460	1,800
42	990	3,140	2,690	1,900	1,320
48	900	2,930	2,230	1,460	1,010
60	710	2,180	1,460	930	**
72	550	1,530	1,010	**	**
84	**	1,130	**	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	5.5	20.7	20.1	19.2	18.3
450	5.4	19.3	18.3	16.9	15.7
600	5.2	17.8	16.5	14.9	13.7
750	5.0	16.4	14.9	13.5	11.2
900	4.8	15.1	13.7	11.2	8.3
1,050	4.4	14.1	12.2	8.7	6.0
1,200	4.0	13.2	10.2	6.7	4.6
1,500	3.2	9.9	6.7	4.3	**
1,800	2.5	7.0	4.6	**	**
2,100	2.0	5.2	3.4	**	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.



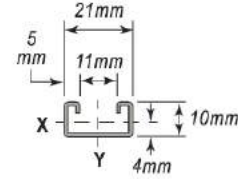
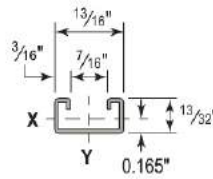
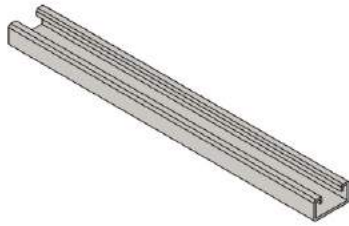
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W700 & W701 - 19 Gauge Channel

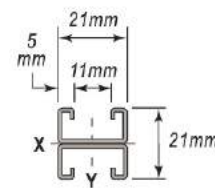
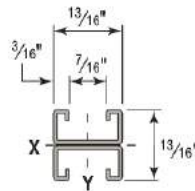
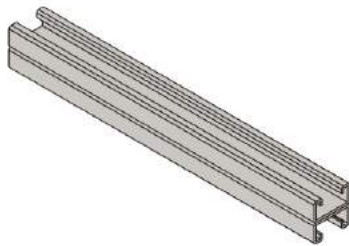
W700: $\frac{13}{16}" \times \frac{13}{32}"$ (21mm x 10mm) & **W701:** $\frac{13}{16}" \times \frac{13}{16}"$ (21mm x 21mm)

W700: $\frac{13}{16}" \times \frac{13}{32}"$ (21mm x 10mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR & PL

W701: $\frac{13}{16}" \times \frac{13}{16}"$ (21mm x 21mm)



Available in 10' & 20' Lengths • Finishes: PG, HG, GR & PL

Related Channel Nuts (See Page 82)

Mini Nut
with Short Spring



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

W700 Channel Loads

19 Gauge - $1\frac{3}{16}" \times 1\frac{3}{32}"$ (21mm x 10mm)



Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. in. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx in. (rx cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W700	0.25	0.074	0.002	0.007	0.149	0.007	0.017	0.307
	(0.37)	(0.48)	(0.08)	(0.11)	(0.38)	(0.29)	(0.28)	(0.78)

W700 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	110	0.05	110	110	70
18	80	0.12	70	50	30
24	60	0.22	40	30	20
30	50	0.35	20	20	NR
36	40	0.48	20	NR	NR
42	30	0.58	NR	NR	NR
48	30	0.86	NR	NR	NR
60	20	1.12	NR	NR	NR
72	20	1.94	NR	NR	NR
84	20	3.08	NR	NR	NR

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	0.5	1.30	0.5	0.5	0.4
450	0.4	2.93	0.3	0.2	0.1
600	0.3	5.22	0.2	0.1	0.1
750	0.2	8.49	0.1	0.1	NR
900	0.2	11.74	0.1	NR	NR
1,050	0.1	13.98	NR	NR	NR
1,200	0.1	20.86	NR	NR	NR
1,500	0.1	27.16	NR	NR	NR
1,800	0.1	46.94	NR	NR	NR
2,100	0.1	74.54	NR	NR	NR

W700 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	460	1,430	1,330	1,170	990
18	410	1,190	990	720	500
24	330	890	630	410	280
30	260	620	410	**	**
36	200	430	280	**	**
42	**	310	**	**	**
48	**	**	**	**	**
60	**	**	**	**	**
72	**	**	**	**	**
84	**	**	**	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	2.0	6.4	6.0	5.3	4.4
450	1.8	5.4	4.4	3.3	2.3
600	1.5	4.0	2.9	1.9	1.3
750	1.2	2.8	1.9	1.2	**
900	0.9	2.0	1.3	**	**
1,050	**	1.4	**	**	**
1,200	**	**	**	**	**
1,500	**	**	**	**	**
1,800	**	**	**	**	**
2,100	**	**	**	**	**

** $KL/r > 200$

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



W701 Channel Loads

19 Gauge - $1\frac{3}{16}" \times 1\frac{3}{16}"$ (21mm x 21mm)

Section Properties

Channel Part No.	Wt./Ft. Lbs. (Kg/M)	Area of Section Sq. In. (Sq. cm)	X-X Axis			Y-Y Axis		
			Ix in. ⁴ (Ix cm ⁴)	Sx in. ³ (Sx cm ³)	rx. in. (rx. cm)	Iy in. ⁴ (Iy cm ⁴)	Sy in. ³ (Sy cm ³)	ry in. (ry cm)
W701	0.51	0.149	0.007	0.018	0.222	0.014	0.034	0.307
	(0.76)	(0.96)	(0.29)	(0.29)	(0.56)	(0.58)	(0.56)	(0.78)

W701 - Allowable Beam Loads

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
In	Lbs	In	Lbs	Lbs	Lbs
12	140 *	0.01	140 *	140 *	140 *
18	140 *	0.05	140 *	140 *	140 *
24	140 *	0.12	140 *	120	80
30	120	0.20	100	80	50
36	100	0.28	70	50	40
42	90	0.40	50	40	30
48	80	0.53	40	30	NR
60	60	0.78	30	NR	NR
72	50	1.13	NR	NR	NR
84	40	1.43	NR	NR	NR

Span	Max. Uniform Load (W)	Deflection at Load (W)	Uniform Load at Deflection		
			Span /180	Span /240	Span /360
mm	kN	mm	kN	kN	kN
300	0.6 *	0.35	0.6 *	0.6 *	0.6 *
450	0.6 *	1.20	0.6 *	0.6 *	0.6 *
600	0.6 *	2.83	0.6 *	0.5	0.4
750	0.5	4.74	0.5	0.4	0.2
900	0.4	6.83	0.3	0.2	0.2
1,050	0.4	9.76	0.2	0.2	0.1
1,200	0.4	12.96	0.2	0.1	NR
1,500	0.3	18.98	0.1	NR	NR
1,800	0.2	27.33	NR	NR	NR
2,100	0.2	34.72	NR	NR	NR

W701 - Allowable Column Loads

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
In	Lbs	Lbs	Lbs	Lbs	Lbs
12	820	3,150	3,040	2,910	2,690
18	790	2,930	2,690	2,330	1,960
24	740	2,570	2,210	1,710	1,250
30	670	2,180	1,710	1,150	800
36	580	1,770	1,250	800	560
42	490	1,390	920	590	**
48	420	1,070	700	**	**
60	**	680	**	**	**
72	**	**	**	**	**
84	**	**	**	**	**

Unbraced Height	Max. Slot Face Load	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K = 1.0	K = 1.2
mm	kN	kN	kN	kN	kN
300	3.6	14.1	13.6	13.0	12.1
450	3.5	13.1	12.1	10.5	8.9
600	3.3	11.6	10.0	7.8	5.7
750	3.0	9.8	7.8	5.3	3.7
900	2.6	8.1	5.7	3.7	2.5
1,050	2.2	6.4	4.2	2.7	**
1,200	1.9	4.9	3.2	**	**
1,500	**	3.2	**	**	**
1,800	**	**	**	**	**
2,100	**	**	**	**	**

* Load limited by spot weld shear

** KL/r > 200

NR = Not Recommended

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced.

Refer to pages 20 -23 for other beam support conditions.

Refer to page 77 for load reduction factor for an unbraced beam length.



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Lateral Bracing Load Reduction Charts



Lateral Bracing Load Reduction Charts

SPAN (in)	W100	W101	W150	W151	W200	W201	W210	W211	W300	W301	W400
12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
24	0.99	1.00	0.98	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
36	0.88	1.00	0.85	1.00	0.93	1.00	0.88	1.00	0.96	1.00	0.94
48	0.77	0.98	0.70	0.96	0.87	1.00	0.77	0.98	0.91	1.00	0.88
60	0.66	0.92	0.54	0.90	0.82	0.96	0.66	0.93	0.87	0.98	0.82
72	0.57	0.87	0.44	0.83	0.77	0.92	0.57	0.87	0.84	0.95	0.78
84	0.50	0.81	0.37	0.75	0.74	0.88	0.50	0.81	0.81	0.91	0.74
96	0.45	0.75	0.33	0.68	0.70	0.85	0.45	0.76	0.78	0.88	0.71
108	0.42	0.69	0.29	0.60	0.67	0.81	0.41	0.70	0.76	0.85	0.68
120	0.39	0.64	0.27	0.53	0.65	0.77	0.38	0.64	0.74	0.82	0.65

SPAN (in)	W401	W500	W501	W600	W601	W700	W701	W800	W801	W900	W901
12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
24	1.00	1.00	1.00	0.80	0.99	0.95	1.00	1.00	1.00	1.00	1.00
36	1.00	0.98	1.00	0.63	0.89	0.91	0.93	1.00	1.00	1.00	1.00
48	0.98	0.94	0.99	0.52	0.79	0.87	0.87	1.00	0.94	1.00	1.00
60	0.93	0.91	0.95	0.45	0.70	0.83	0.80	1.00	0.88	0.98	0.99
72	0.88	0.88	0.92	0.40	0.60	0.80	0.73	0.97	0.83	0.97	0.97
84	0.83	0.86	0.88	0.37	0.51	0.76	0.67	0.94	0.77	0.95	0.94
96	0.78	0.83	0.84	0.34	0.44	0.73	0.60	0.91	0.72	0.94	0.92
108	0.74	0.81	0.80	0.31	0.39	0.70	0.54	0.89	0.67	0.92	0.89
120	0.69	0.79	0.77	0.30	0.35	0.66	0.49	0.86	0.61	0.91	0.87

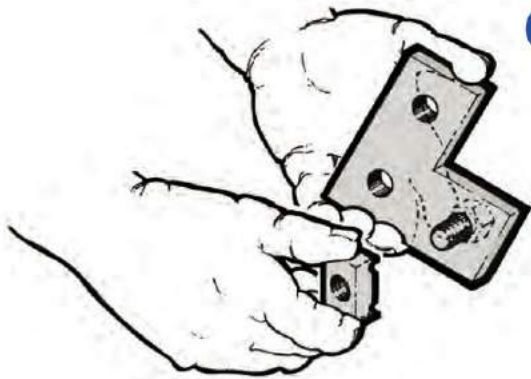
SPAN (mm)	W100	W101	W150	W151	W200	W201	W210	W211	W300	W301	W400
300	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
600	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
900	0.89	1.00	0.85	1.00	0.94	1.00	0.89	1.00	0.96	1.00	0.94
1,200	0.77	0.98	0.71	0.97	0.87	1.00	0.77	0.98	0.91	1.00	0.88
1,500	0.67	0.93	0.56	0.90	0.82	0.97	0.67	0.93	0.87	0.98	0.83
1,800	0.58	0.87	0.44	0.83	0.78	0.93	0.58	0.88	0.84	0.95	0.78
2,100	0.51	0.82	0.38	0.76	0.74	0.89	0.50	0.82	0.81	0.92	0.74
2,400	0.46	0.76	0.33	0.69	0.71	0.85	0.45	0.76	0.79	0.88	0.71
2,700	0.42	0.70	0.30	0.61	0.68	0.81	0.41	0.71	0.76	0.85	0.68
3,000	0.39	0.65	0.27	0.54	0.65	0.78	0.39	0.65	0.74	0.82	0.65

SPAN (mm)	W401	W500	W501	W600	W601	W700	W701	W800	W801	W900	W901
300	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
600	1.00	1.00	1.00	0.80	0.99	0.95	1.00	1.00	1.00	1.00	1.00
900	1.00	0.98	1.00	0.64	0.90	0.91	0.94	1.00	1.00	1.00	1.00
1,200	0.98	0.94	1.00	0.52	0.80	0.87	0.87	1.00	0.94	1.00	1.00
1,500	0.93	0.91	0.96	0.45	0.70	0.84	0.81	1.00	0.89	0.98	1.00
1,800	0.88	0.88	0.92	0.40	0.61	0.80	0.74	0.97	0.83	0.97	0.97
2,100	0.84	0.86	0.88	0.37	0.52	0.77	0.68	0.94	0.78	0.95	0.95
2,400	0.79	0.84	0.85	0.34	0.45	0.73	0.61	0.92	0.73	0.94	0.92
2,700	0.74	0.82	0.81	0.32	0.39	0.70	0.55	0.89	0.67	0.93	0.90
3,000	0.70	0.80	0.77	0.30	0.35	0.67	0.49	0.86	0.62	0.91	0.87





Channel Nut Without Spring Installation

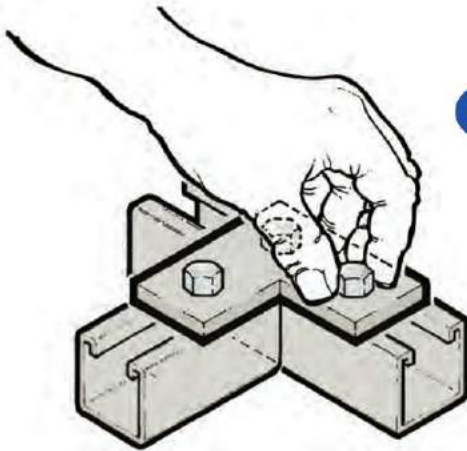
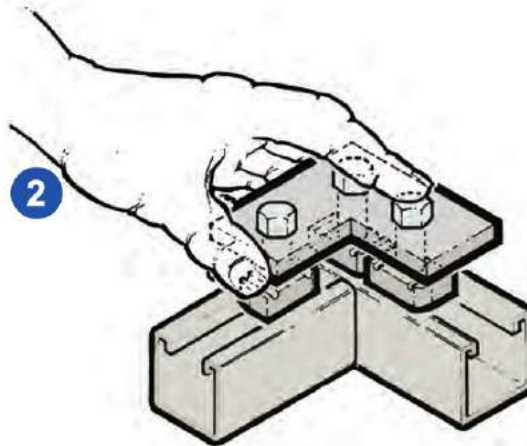


- 1** One at a time, bolts are inserted through the fitting's holes, held in place with a finger while an appropriate **Channel Nut without spring** is engaged to each bolt with one-and-a half turns, (just enough to keep them attached).

Use caution to select bolt lengths that will not bottom out in channel when fully tightened.

When the entire fitting (in at least one plane) is fitted with Channel Nuts and bolts, align Channel Nut direction (s) to correspond with channel arrangement; place fitting into position.

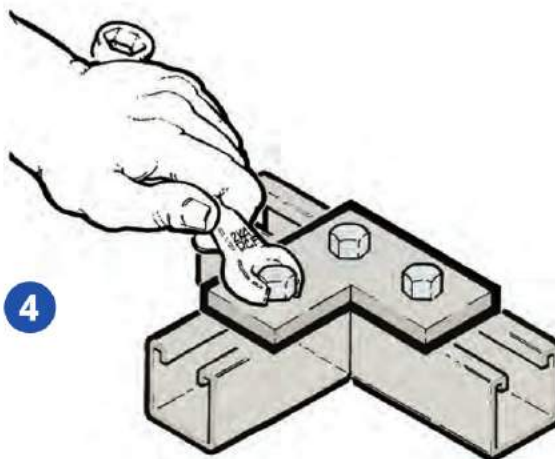
Channel Nuts without springs should hang below, clear of channel's in-turned edges prior to tightening the bolts.



- 3** All Channel Nut/bolts are finger tightened by pressing down on bolt head, and turning clock-wise. Inserting fingers into channel to align is not required.

Do not tighten by grasping bolt with fingers *under the head*. If the bolt is grasped in this fashion, this will lift Channel Nut, allowing it to turn and "look" falsely into place between channel's in-turned lips.

Adjust fitting to final position; check to make sure **Channel Nuts** are still installed correctly with pyramid enhanced grooves engaging the channel's in-turned edges. Finally, fasteners are wrench tightened.



Channel Nuts & Hardware



Channel Nuts with Spring

Pages 81 - 82



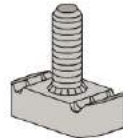
Channel Nuts without Spring

Pages 81 - 82



Stud Channel Nuts

Page 82



Channel Nut with Top-Lock Spring

Page 82



Rapid Strut Slide Nut

Page 82



Hardware Material Specifications		
Material	ASTM Designation	ASTM Description
Bar Stock: Channel Nuts	A 36	Merchant quality hot rolled carbon steel bars.
	A 29-03	Steel bars, carbon, hot rolled special quality.
Bar Stock	A 569	Merchant quality hot rolled carbon steel bars.
Hardware	A 563	Carbon and alloy steel nuts. Carbon steel externally threaded standard fasteners.
	A 307	
Channel Nuts	B783	Sintered 316 - "Domestic Nut"
Stainless Steel	A240	Bar Stock 316 - "Import Nut"
Aluminum Nuts	B221	Channel Nuts

Screws

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Nuts

Page 83



Washers

Page 83



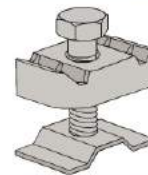
Threaded Rod & Coupler

Page 84



Seismic Rod Stiffener

Page 84



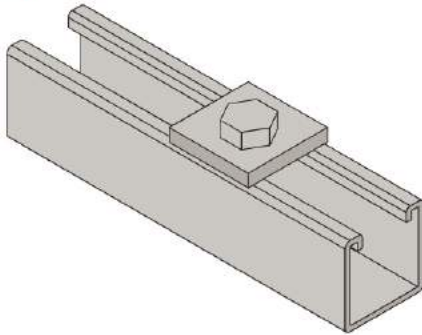
Hardware Finish Specifications		
Finish	Finish Code	Description
Electroplated	EG	Fittings and hardware supplied as "Electro-Galvanized" in accordance with ASTM B 633.
Mill-Galvanized (Pre-Galvanized)	PG	Galvanized steel used in the manufacture of channel sections conforms to ASTM A 653 GR33 G90. Uncoated edges resulted from slitting, punching and channel cut off are present.
Hot Dip Galvanized After Fabrication (HDGAF)	HG	Channel and fittings which are hot dip galvanized after fabrication conform to one of the following specifications: ASTM A 123, ASTM A153, or ASTM A386.
Special Coatings	PL, GOLD	Other commercially available finishes can be supplied per specification when required to protect applications.

Call ZSi-Foster at (800) 323-7053 or order now at zsi-foster.com



Channel Nuts

Standard Finish: Electro Galvanized (EG)



Slip And Pull-Out Load Data

Channel Part No.	Chan- nel Nut	Resistance To Slip (Lbs./Bolt) Safety Factor		Resistance To Pull-Out (Lbs./Bolt) Safety Factor	
		3	5	3	5
W200	W2-8	1,500	900	2,000	1,200
W210	W2-8	1,000	600	1,400	840
W300	W2-8	1,500	900	2,000	1,200
W500	W5-8	1,000	600	1,400	840

Apply Proper Torque

A Channel Nut installed within the last inch of Channel (center of bolt to extreme end of Channel) cannot develop full capacity.

REDUCE ULTIMATE DESIGN LOAD BY 50%.

When installing a Channel Nut near the end of a Channel section, especially within the last inch, remember to true the legs forming the continuous Channel slot before inserting and tightening the Channel Nut.

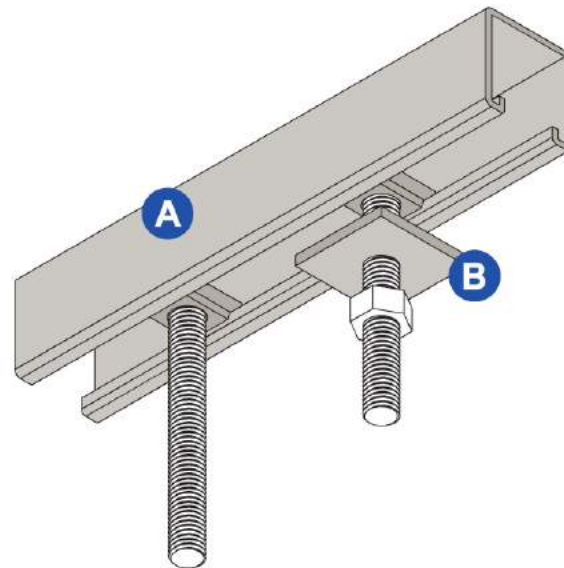
Channel Nuts or their matching threaded fastener that may have been contaminated with oil, wax, petroleum products or any friction reducing medium, will no longer develop a proper torque rating, and may be prone to loosening. To insure proper attachment load rating, properly clean and dry any such contaminated surfaces, paying specific attention to the threaded surfaces. If proper cleaning is not possible, replace the fasteners with uncontaminated stock.

Hanging a section of All Thread Rod directly from a Channel Nut within an overhead mounted section of Channel (without securing with a Fitting or Square Washer and a Hex or Jamb Nut) (Ref. A), does not allow the Channel Nut to function at its proper capacity and could result in the attachment slipping, twisting out or even jumping free of its confinement in a vibration situation. Always capture the Rod and Channel Nut at the face of the Channel as shown (Ref. B). Use proper torque value.

Bolt torque values are given to ensure the proper connection between components. It is important to understand that there is a direct, but not necessarily consistent, relationship between bolt torque and tension in the bolt. Too much tension in the bolt can cause it to break or crush the component parts. Too little tension in the bolt can prevent the connection from developing its full load capacity. The torque values given have been developed over many years of experience and testing.

Design Bolt Torque

Bolt Size	Foot Pounds
1/4" - 20	6
5/16" - 18	11
3/8" - 16	19
1/2" - 13	50
5/8" - 11	100
3/4" - 10	125



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Channel Nuts



Standard Finish: Electro Galvanized (EG)

Channel Nut with Long Spring

Use with W100 and W150



Part No.	Size	Thickness
W1-4	1/4" - 20	1/4" (6mm)
W1-6	3/8" - 16	3/8" (10mm)
W1-8	1/2" - 13	1/2" (13mm)
W1-10	5/8" - 11	7/16" (11mm)
W1-12	3/4" - 10	7/16" (11mm)

Channel Nut with Short Spring

Use with W400, W500, W800, and W900



Part No.	Size	Thickness
W5-0832	#8 - 32	1/4" (6mm)
W5-1032	#10 - 32	
W5-1024	#10 - 24	
W5-4	1/4" - 20	3/8" (10mm)
W5-5	5/16" - 18	
W5-6	3/8" - 16	
W5-8	1/2" - 13	
W5-10	5/8" - 11	

Mini Nut with Standard Spring

Use with W600



Part No.	Size	Thickness
W6-0836	#8 - 36	0.150" (4mm)
W6-0832	#8 - 32	
W6-1032	#10 - 32	
W6-1024	#10 - 24	
W6-4	1/4" - 20	

Channel Nut with Standard Spring

Use with W200, W210, and W300



Part No.	Size	Thickness
W2-0832	#8 - 32	1/4" (6mm)
W2-1032	#10 - 32	
W2-1024	#10 - 24	
W2-4	1/4" - 20	3/8" (10mm)
W2-5	5/16" - 18	
W2-6	3/8" - 16	
W2-7	7/16" - 14	1/2" (13mm)
W2-8	1/2" - 13	
W2-10	5/8" - 11	7/16" (11mm)
W2-12	3/4" - 10	
W2-14	7/8" - 9	

Channel Nut Without Spring

Use with W100, W150, W200, W210, W300, W400, W500, W800, and W900



Part No.	Use	Size	Thickness
W1-10WS	ccc	5/8" - 11	7/16" (11mm)
W2-0832WS		#8 - 32	1/4" (6mm)
W2-1032WS		#10 - 32	
W2-1024WS		#10 - 24	
W2-4WS		1/4" - 20	3/8" (10mm)
W2-5WS		5/16" - 18	
W2-6WS		3/8" - 16	
W2-7WS		7/16" - 14	1/2" (13mm)
W2-8WS	cc	1/2" - 13	
W2-10WS	cc	5/8" - 11	7/16" (11mm)
W2-12WS	cc	3/4" - 10	
W5-8WS	c	1/2" - 13	3/8" (10mm)
W5-10WS	c	5/8" - 11	

C = Use with W400 and W500
 CC = Not for Use with W400, W500, & W900
 CCC = Use with W100 and W150

Mini Nut with Short Spring

Use with W700



Part No.	Size	Thickness
W7-0836	#8 - 36	0.150" (4mm)
W7-0832	#8 - 32	
W7-1032	#10 - 32	
W7-1024	#10 - 24	
W7-4	1/4" - 20	

Channel Nut With Cone

Use with W100, W150, W200, W210, W300, W400, W500, W800 and W900



Part No.	Size	Thickness
W2-4CN	1/4" - 20	1/4" (6mm)
W2-6CN	3/8" - 16	3/8" (10mm)
W2-8CN	1/2" - 13	1/2" (13mm)



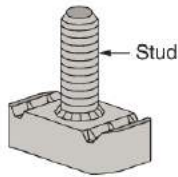


Channel Nuts

Standard Finish: Electro Galvanized (EG)

Stud Nut without Spring

Use with W200, W210, and W300



Part No.	Stud Size
W4-1SNWS	$\frac{1}{2}$ " - 20 x $\frac{7}{8}$ "
W4-2SNWS	$\frac{1}{4}$ " - 20 x 1- $\frac{1}{8}$ "
W4-3SNWS	$\frac{1}{4}$ " - 20 x 1- $\frac{3}{8}$ "
W6-1SNWS	$\frac{3}{8}$ " - 16 x $\frac{7}{8}$ "
W6-2SNWS	$\frac{3}{8}$ " - 16 x 1- $\frac{1}{8}$ "
W6-3SNWS	$\frac{3}{8}$ " - 16 x 1- $\frac{3}{8}$ "
W6-4SNWS	$\frac{3}{8}$ " - 16 x 1- $\frac{5}{8}$ "
W6-5SNWS	$\frac{3}{8}$ " - 16 x 1- $\frac{7}{8}$ "
W6-6SNWS	$\frac{3}{8}$ " - 16 x 2- $\frac{1}{8}$ "
W8-2SNWS	$\frac{1}{2}$ " - 13 x 1- $\frac{1}{8}$ "
W8-3SNWS	$\frac{1}{2}$ " - 13 x 1- $\frac{3}{8}$ "
W8-4SNWS	$\frac{1}{2}$ " - 13 x 1- $\frac{5}{8}$ "
W8-5SNWS	$\frac{1}{2}$ " - 13 x 1- $\frac{7}{8}$ "
W8-6SNWS	$\frac{1}{2}$ " - 13 x 2- $\frac{1}{8}$ "
W10-2SNWS	$\frac{5}{8}$ " - 11 x 1- $\frac{1}{8}$ "
W10-3SNWS	$\frac{5}{8}$ " - 11 x 1- $\frac{3}{8}$ "

For Applications In other Channels Consult Factory.

Channel Nut with Top-Lock Spring

Use with W100, W150, W200, W210, W300, W400, W500, W800, and W900

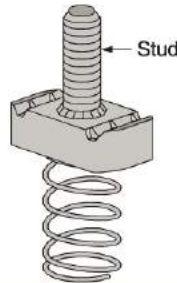


Part No.	Size	Thickness
W2-0832TL	#8 - 32	$\frac{1}{4}$ " (6mm)
W2-1032TL	#10 - 32	
W2-1024TL	#10 - 24	
W2-4TL	$\frac{1}{4}$ " - 20	$\frac{3}{8}$ " (10mm)
W2-5TL	$\frac{5}{16}$ " - 18	
W2-6TL	$\frac{3}{8}$ " - 16	
W2-8TL	$\frac{1}{2}$ " - 13	$\frac{1}{2}$ " (13mm)
W5-8TL	$\frac{1}{2}$ " - 13	$\frac{3}{8}$ " (10mm)

c = Not for use with W400 or W500

Stud Nut with Spring

Use with W200, W210, and W300

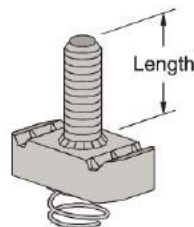


Part No.	Size
W4-1SN	$\frac{1}{2}$ " - 20 x $\frac{7}{8}$ "
W4-2SN	$\frac{1}{4}$ " - 20 x 1- $\frac{1}{8}$ "
W4-3SN	$\frac{1}{4}$ " - 20 x 1- $\frac{3}{8}$ "
W6-1SN	$\frac{3}{8}$ " - 16 x $\frac{7}{8}$ "
W6-2SN	$\frac{3}{8}$ " - 16 x 1- $\frac{1}{8}$ "
W6-3SN	$\frac{3}{8}$ " - 16 x 1- $\frac{3}{8}$ "
W6-4SN	$\frac{3}{8}$ " - 16 x 1- $\frac{5}{8}$ "
W6-5SN	$\frac{3}{8}$ " - 16 x 1- $\frac{7}{8}$ "
W6-6SN	$\frac{3}{8}$ " - 16 x 2- $\frac{1}{8}$ "
W8-2SN	$\frac{1}{2}$ " - 13 x 1- $\frac{1}{8}$ "
W8-3SN	$\frac{1}{2}$ " - 13 x 1- $\frac{3}{8}$ "
W8-4SN	$\frac{1}{2}$ " - 13 x 1- $\frac{5}{8}$ "
W8-5SN	$\frac{1}{2}$ " - 13 x 1- $\frac{7}{8}$ "
W8-6SN	$\frac{1}{2}$ " - 13 x 2- $\frac{1}{8}$ "
W10-2SN	$\frac{5}{8}$ " - 11 x 1- $\frac{1}{8}$ "
W10-3SN	$\frac{5}{8}$ " - 11 x 1- $\frac{3}{8}$ "

For Applications In other Channels Consult Factory.

Stud Nut with Short Spring

Use with W400, W500, W800, and W900



Part No.	Size
W5-3SN	$\frac{3}{8}$ " - 16 x 1- $\frac{3}{8}$ "

For Applications In other Channels Consult Factory.

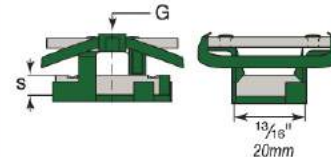
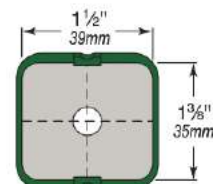
Rapid Strut Slide Nut

Use with W100, W150, W200, W210, W300, W400, W500, W800, and W900



Features and Benefits

- Ready-to-use pre-assembled for a quick installation, that retains assembly in place before final tightening
- Replaces channel nut and fitting with single piece
- Material: metal parts made of steel 1.0332; spring(s) made of POM (polyoxymethylene), green
- Conforms to MFMA Metal Framing Standards (Metal Framing Manufacturers Association)
- Zinc plated



Part No.	Size	Thickness
TLCSW1/4	$\frac{1}{4}$ " - 20	$\frac{1}{4}$ " (6mm)
TLCSW3/8	$\frac{3}{8}$ " - 16	
TLCSW1/2EG	$\frac{1}{2}$ " - 13	$\frac{3}{8}$ " (10mm)

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Hardware



Standard Finish: Electro Galvanized (EG)

W7400 - W7415

Hex Head Cap Screws



Part No.	Size UNC
W7400	1/4" x 1/2"
W7401	c 1/4" x 3/4"
W7402	c 1/4" x 1"
W7403	3/8" x 3/4"
W7404	3/8" x 1"
W7405	c 3/8" x 1-1/4"
W7406	3/8" x 1-1/2"
W7407	3/8" x 2"
W7408	3/8" x 2-1/4"
W7409	1/2" x 1-3/4"
W7410	1/2" x 1-1/4"
W7411	1/2" x 1-1/2"
W7412	1/2" x 1-3/4"
W7413	1/2" x 2"
W7414	1/2" x 2-1/4"
W7415	1/2" x 2-1/2"

c = Provided as slotted machine screw

W7420 - W7424

Flathead Machine Screws



Part No.	Size UNC
W7420	1/4" x 3/8"
W7421	3/16" x 1"
W7422	3/8" x 2"
W7423	3/8" x 2-1/4"
W7424	3/8" x 2-1/2"

W7470 - W7479

Roundhead Machine Screws



Part No.	Size UNC
W7470	1/4" x 3/4"
W7471	1/4" x 1"
W7472	1/4" x 1-1/4"
W7473	5/16" x 1"
W7474	5/16" x 1-1/4"
W7475	5/16" x 1-1/2"
W7476	3/8" x 1"
W7477	3/8" x 1-1/4"
W7478	3/8" x 1-1/2"
W7479	3/8" x 2-1/2"

W7490 - W7492

Kep Nuts



Part No.	Size UNC
W7490	1/4"
W7491	5/16"
W7492	3/8"

W7480 - W7483

Square Nuts



Part No.	Size UNC
W7480	1/4"
W7481	5/16"
W7482	3/8"
W7483	1/2"

W7460 - W7465

Hex Nuts



Part No.	Size UNC
W7460	1/4"
W7461	5/16"
W7462	3/8"
W7463	1/2"
W7464	5/8"
W7465	3/4"

W7430 - W7433

Lock Washers



Part No.	Size
W7430	1/4"
W7431	3/8"
W7432	1/2"
W7433	5/8"

W7440 - W7444

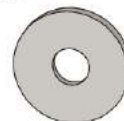
Flat Washers



Part No.	Size
W7440	1/4"
W7441	3/8"
W7442	1/2"
W7443	5/8"
W7444	3/4"

W7450 - W7452

Fender Washers



Part No.	Size
W7450	1/4" x 1-1/4"
W7451	3/8" x 1-1/2"
W7452	1/2" x 1-1/2"





Threaded Rod

Standard Finish: Electro Galvanized (EG)

W7124 - W7128

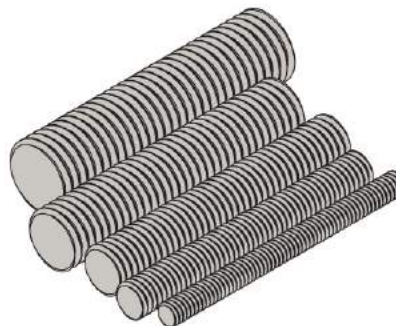
Threaded Rod

Standard Length 10' (3m)

Materials - ASTM A307 Grade A

Rod Loads based on MSS-SP-58

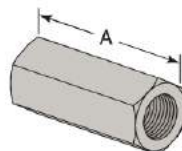
Threaded rod and rod couplers have unified and American coarse screw threads UNC.



Part No.	Nominal Rod Diameter In.	Rod Loads based on MSS-SP-58	
		Root Area of Thread	Max. Safe Load at Rod Temp of 650°F (343°C)
		Sq. In.	Pounds
W7124	1/4" - 20	0.03"	240
W7125	3/8" - 16	0.07"	730
W7126	1/2" - 13	0.13"	1,350
W7127	5/8" - 11	0.20"	2,160
W7128	3/4" - 10	0.30"	3,230

W7134 - W7138

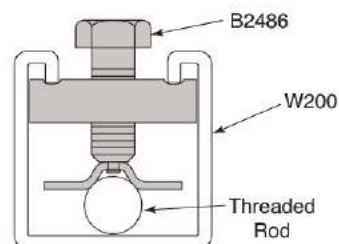
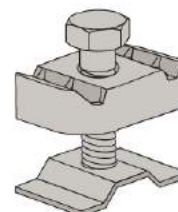
Rod Couplers



Part No.	Hole Size	A Length
W7134	1/4" - 20	7/8" (22mm)
W7134A	3/8" - 18	7/8" (22mm)
W7135	3/8" - 16	1-3/4" (44mm)
W7136	1/2" - 13	1-3/4" (44mm)
W7137	5/8" - 11	2-1/8" (54mm)
W7138	3/4" - 10	2-1/4" (57mm)

B2486

Seismic Rod Stiffener



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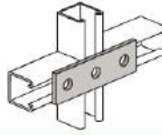
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

General Fittings



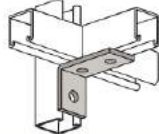
Flat Plate Fittings

Pages 86 - 87



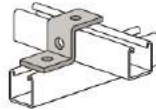
90° Angle Fittings

Pages 88 - 90



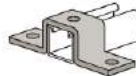
Zee Fittings

Page 91



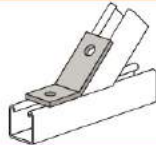
"U" Shape Fittings

Pages 91 - 93



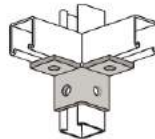
Bracing

Pages 94 - 95



Wing Fittings

Pages 95 - 96



Fittings Specifications		
Material	ASTM	ASTM Description
Hot Rolled Plate	A 575, A 1011, A 1018, A 576, A638	Steel, sheet and strip, carbon drawing quality, special killed, hot rolled.
Fitting: Steel	A 366, A 36	Steel carbon, cold rolled sheet, commercial quality structural steel.
Strip Steel: Pipe Clamps	A 569	Steel, sheet and strip, carbon drawing quality, special killed, hot rolled.
Stainless Steel (ST304 or ST316)	A 240 TYPE 304	Heat resisting chromium and chromium-nickel stainless steel plate, sheet, strip for pressure vessel.
	A 240 TYPE 316	
Aluminum (AL)	B 221	Aluminum alloy extruded bar, rod, wire, shape and tube.

Trolley

Page 97



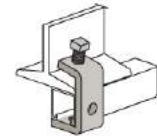
Brackets

Pages 98 - 108



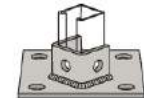
Beam Clamps

Pages 109 - 113



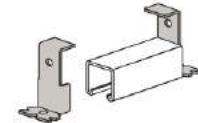
Post Bases

Pages 114 - 115



End Caps

Page 116



Fitting Finish Specifications		
Finish	Finish Code	Description
Paint-Green Powder Coating	GR	A dark green low gloss powder coating is applied and thoroughly baked after steel has been cleaned and phosphatized.
Electroplated	EG	Fittings and hardware supplied as "Electro-Galvanized" in accordance with ASTM B 633.
Mill-Galvanized (Pre-Galvanized)	PG	Galvanized steel used in the manufacture of channel sections conforms to ASTM A 653 GR33 G90. Uncoated edges resulted from slitting, punching and channel cut off are present.
Hot Dip Galvanized After Fabrication (HDGAF)	HG	Wesanco channel and fittings which are hot dip galvanized after fabrication conform to one of the following specifications. ASTM A 123, ASTM A153, or ASTM A386.
Special Coatings	PL, GOLD	Other commercially available finishes can be supplied per specification when required to protect applications.

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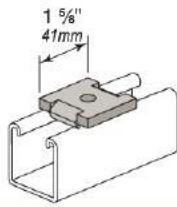


Flat Plate Fittings

Standard Finish: Electro Galvanized (EG)

W5002 to W5006

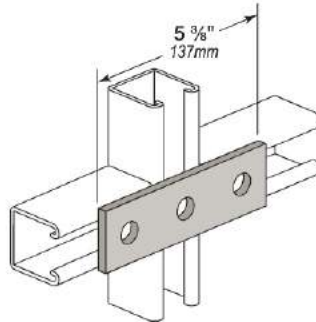
Anti-Rotation Square Washer



Part No.	Bolt	Hole
W5002	5/16"	11/32"
W5003	3/8"	7/16"
W5004	1/2"	9/16"
W5005	5/8"	11/16"
W5006	3/4"	13/16"

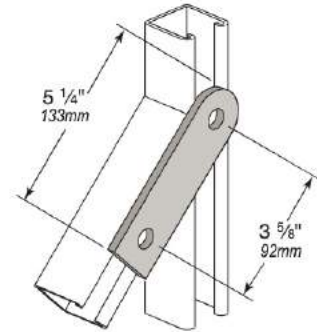
W5008

Three-Hole Splice Plate



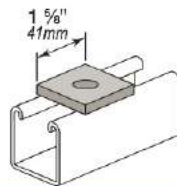
W5011

Two-Hole Swivel Plate



W5052 to W5056

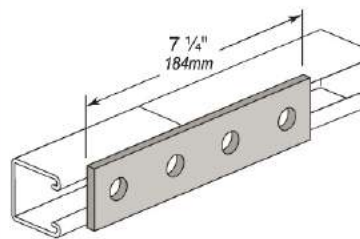
Square Washer



Part No.	Bolt	Hole
W5052	9/16"	11/32"
W5053	3/8"	7/16"
W5054	1/2"	9/16"
W5055	5/8"	11/16"
W5056	3/4"	13/16"

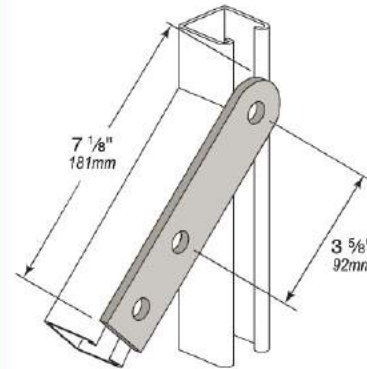
W5009

Four-Hole Splice Plate



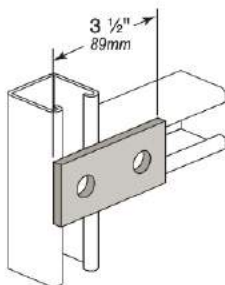
W5012

Three-Hole Swivel Plate



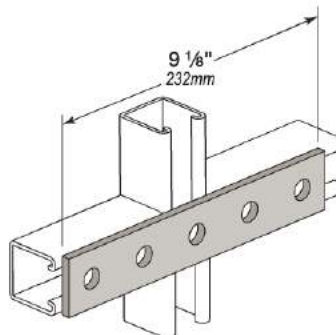
W5007

Two-Hole Splice Plate



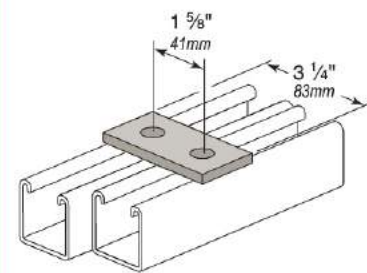
W5010

Five-Hole Splice Plate



W5013

Parallel Splice Plate



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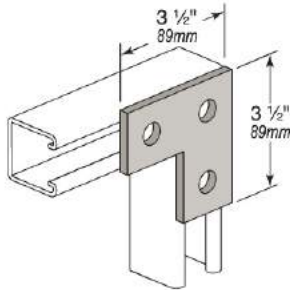
Flat Plate Fittings

Standard Finish: Electro Galvanized (EG)



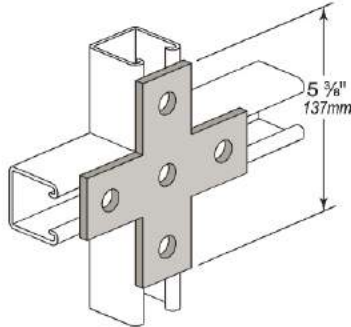
W5021

Three-Hole Flat Angle Plate



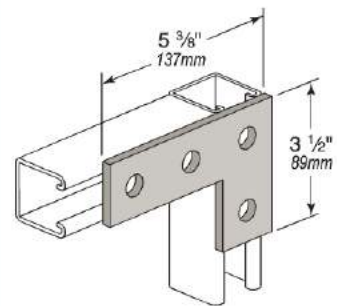
W5023

Five-Hole Cross Plate



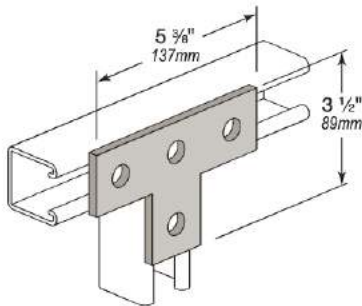
W5025

Four-Hole Extended Angle Flat Plate



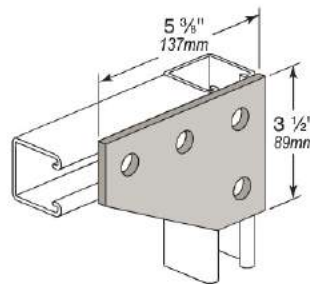
W5022

Four-Hole Tee Plate



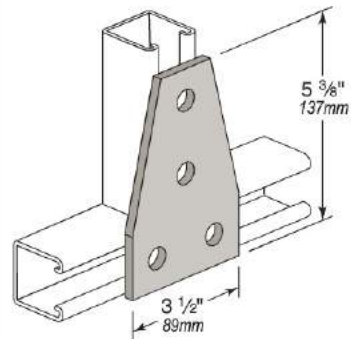
W5024

Four-Hole Corner Plate



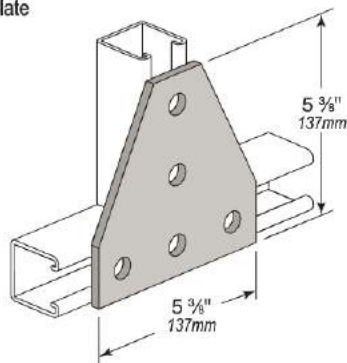
W5026

Four-Hole Gusset Plate



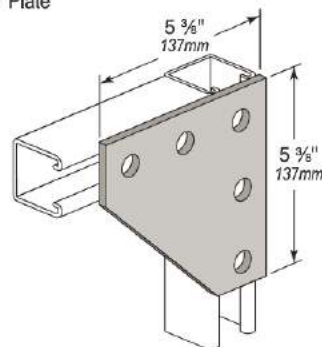
W5027

Five-Hole Gusset Plate



W5028

Five-Hole Corner Plate



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Gamma Pads
Technical Data

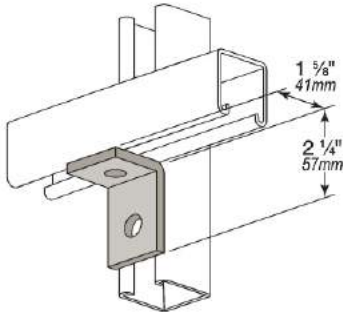


90° Fittings

Standard Finish: Electro Galvanized (EG)

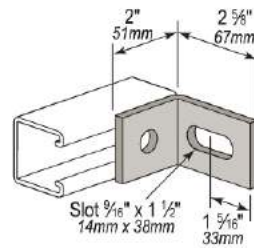
W5102

Two-Hole Rack Connector



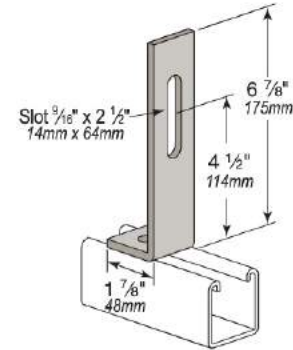
W5105

Two-Hole Horizontal Adjustment Angle



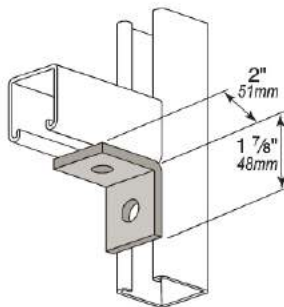
W5108

Two-Hole Adjustment Angle



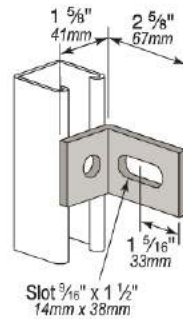
W5103

Two-Hole End Connector



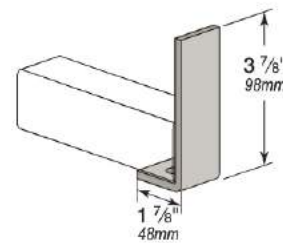
W5106

Two-Hole Vertical Adjustment Angle



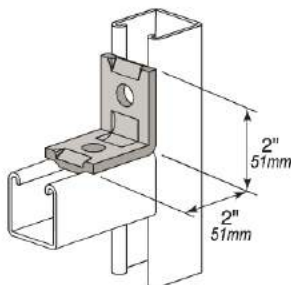
W5160

One-Hole Angle Fitting



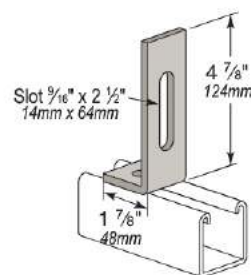
W5104

Two-Hole Angle (Indented)



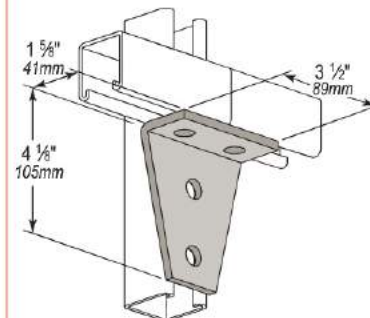
W5107

Two-Hole Adjustment Angle



W5109

Four-Hole Rack Splice Connector



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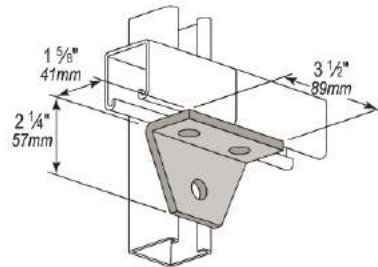
90° Angle Fittings

Standard Finish: Electro Galvanized (EG)



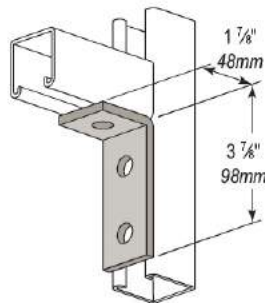
W5110

Three-Hole Rack Splice Connector



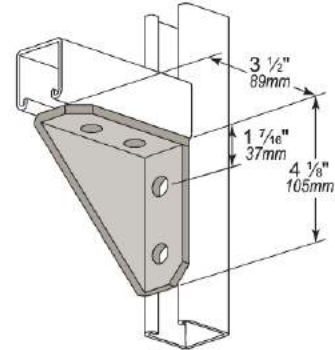
W5113

Three-Hole End Connector



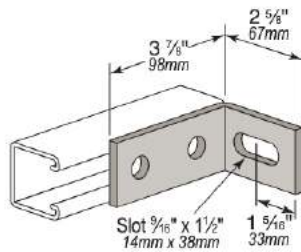
W5121 or W5122

Four-Hole Gusset Corner Angle



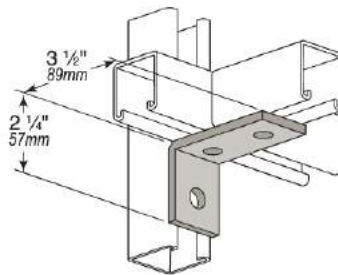
W5111

Three-Hole Adjustment Angle



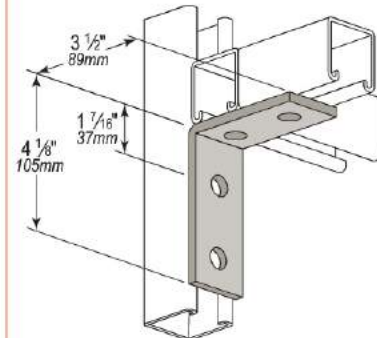
W5115

Three-Hole Rack Corner Angle



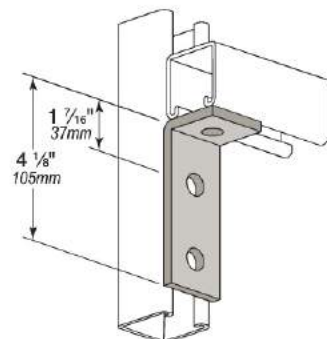
W5123

Four-Hole Rack Corner Angle



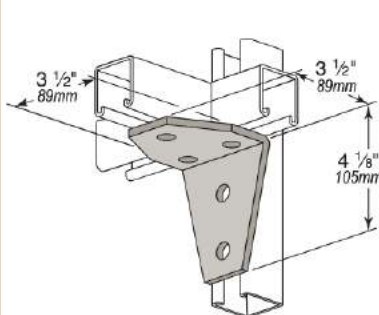
W5112

Three-Hole Rack Connector



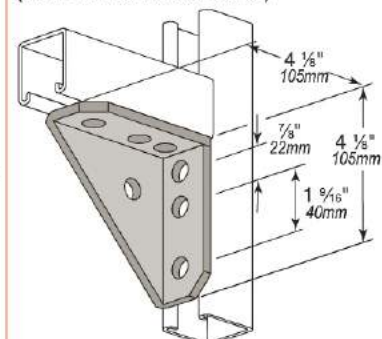
W5117

Five-Hole Corner Splice Connector



W5124 or W5124W

Universal Corner Angle
(W5124W has Welded Corner)



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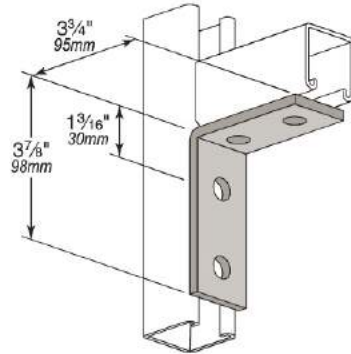


90° Angle Fittings

Standard Finish: Electro Galvanized (EG)

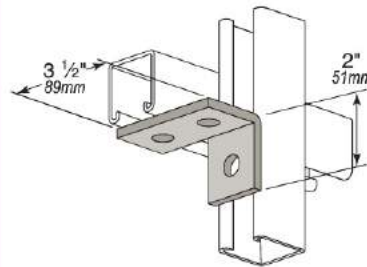
W5125

Four-Hole Corner Connector



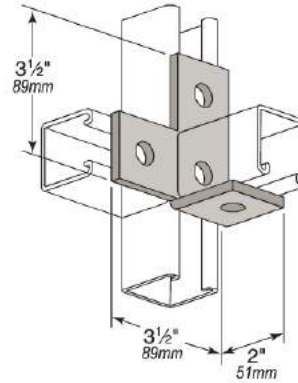
W5135

Three-Hole Left Hand Angle Connector



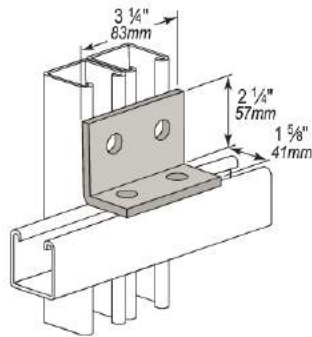
W5140

Four-Hole Left Hand Angle Connector



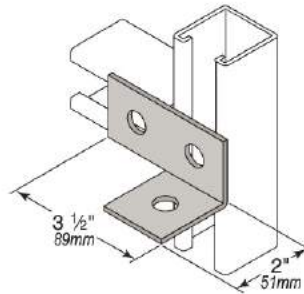
W5126

Four-Hole Connector



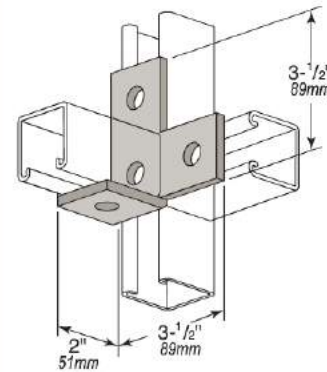
W5136

Three-Hole Right Hand Angle Connector



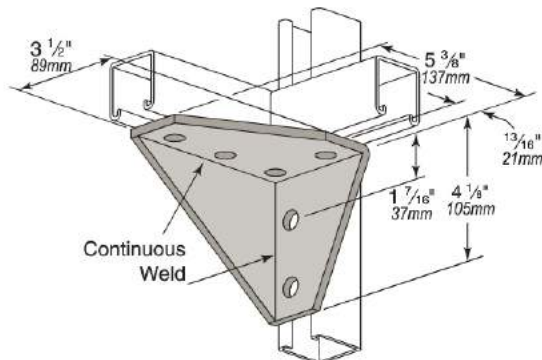
W5141

Four-Hole Right Hand Angle Connector



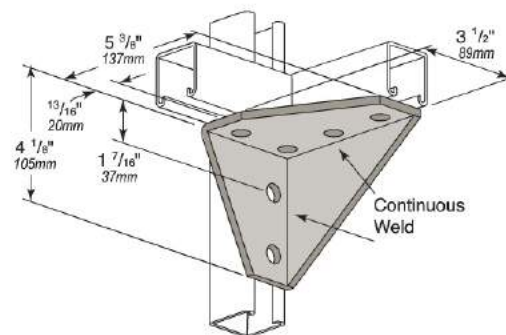
W5156

Six-Hole Left Hand Gusset Corner Angle



W5157

Six-Hole Right Hand Gusset Corner Angle



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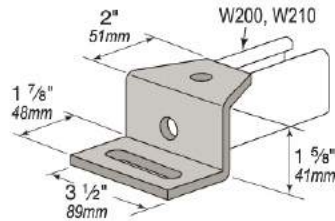
Zee & "U" Shape Fittings

Standard Finish: Electro Galvanized (EG)



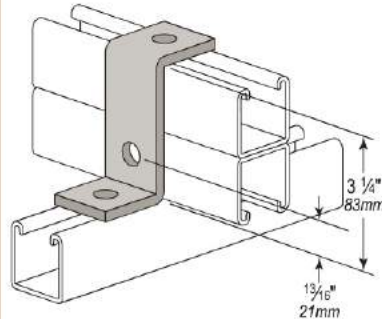
W5202

Slotted Adjustable Zee Connector



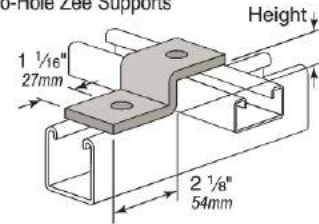
W5210

Three-Hole Zee Supports



W5209 thru W5218

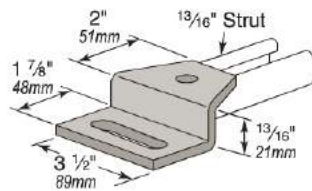
Two-Hole Zee Supports



Part No.	Use with	Channel Height
W5209	W101	4-7/8" (124mm)
W5211	W100	2-7/16" (62mm)
W5213	W300	1-3/4" (35mm)
W5215	W400, W500	1 3/16" (21mm)
W5218	W800	1" (25mm)

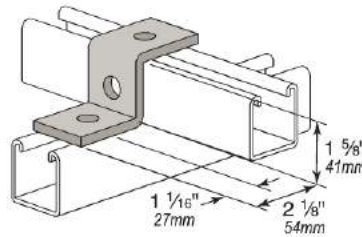
W5205

Slotted Adjustable Zee Connector



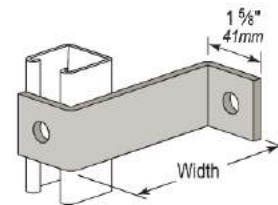
W5212

Three-Hole Zee Supports



W5224 thru W5228

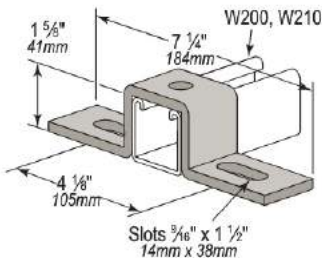
Two-Hole Zee Connectors



Part No.	Width
W5224	4" (102mm)
W5225	5" (127mm)
W5226	6" (152mm)
W5227	7" (178mm)
W5228	8" (203mm)

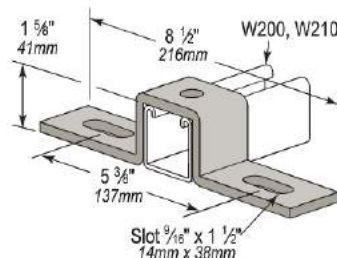
W5307

Slotted "U" Support



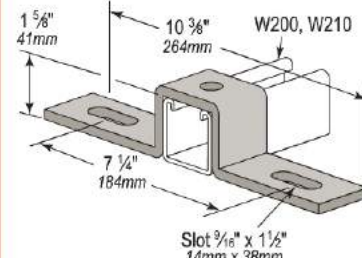
W5308

Slotted "U" Support



W5310

Slotted "U" Support



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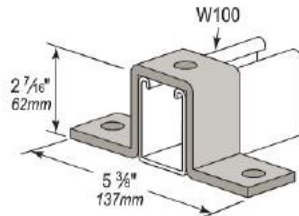


"U" Shape Fittings

Standard Finish: Electro Galvanized (EG)

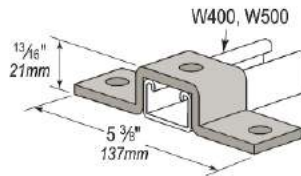
W5311

Three-Hole "U" Supports for W100



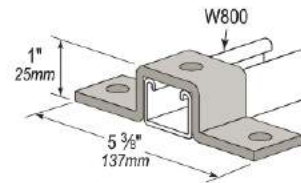
W5315

Three-Hole "U" Supports for W400 or W500



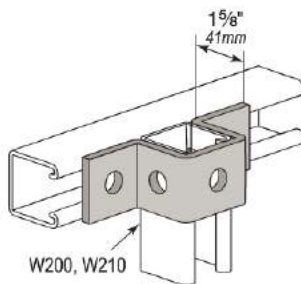
W5318

Three-Hole "U" Support for W800



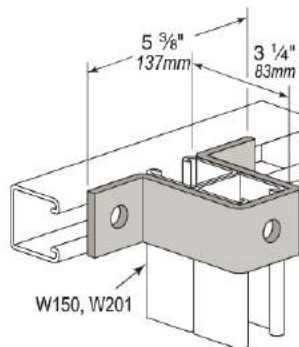
W5312

Five-Hole "U" Supports for W200 or W210



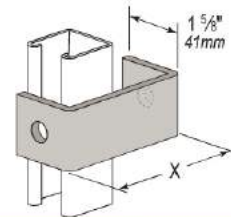
W5316

Three-Hole "U" Supports for W150 or W201



W5324 thru W5328

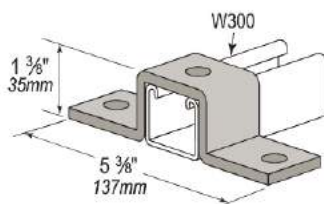
Two-Hole Clevis Connector



Part No.	X
W5324	4" (102mm)
W5325	5" (127mm)
W5326	6" (152mm)
W5327	7" (178mm)
W5328	8" (203mm)

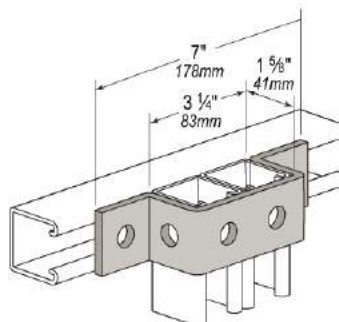
W5313

Three-Hole "U" Supports for W300



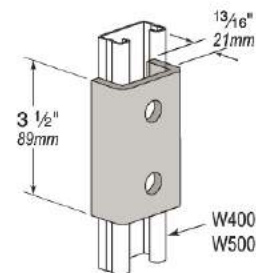
W5317

Six-Hole "U" Support (Double Channel)



W5342

Two-Hole Splice for W400 or W500



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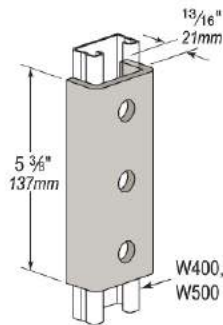
"U" Shape Fittings & Bracing

Standard Finish: Electro Galvanized (EG)



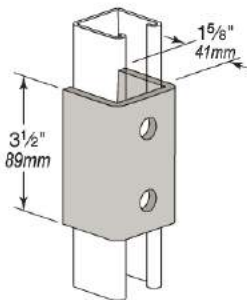
W5343

Three-Hole Splice for W400 or W500



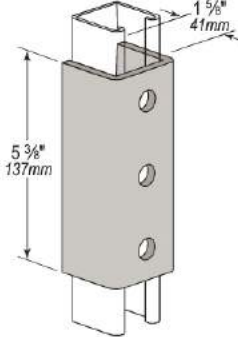
W5344

Two-Hole Splice for W200, W210, W401, or W501



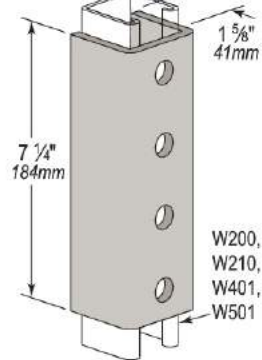
W5346

Three-Hole Splice for W200, W210, W401, or W501



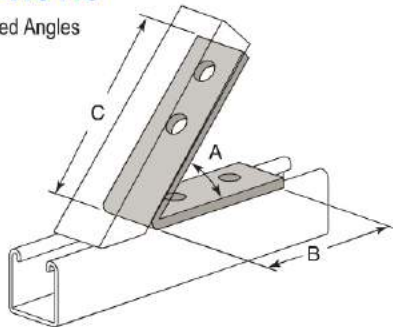
W5345

Four-Hole Splice for W200, W210, W401, or W501



W5413 & W5415

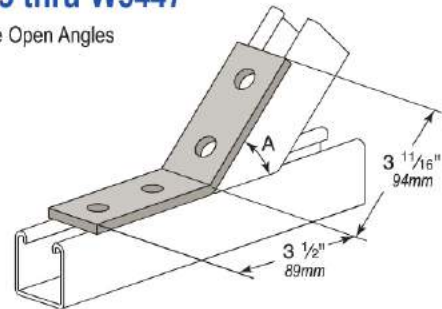
Four-Hole Closed Angles



Part No.	A	B	C
W5413	60°	4-27/32" (118mm)	4-5/8" (117mm)
W5415	45°	4-19/16" (125mm)	4-11/32" (110mm)

W5443 thru W5447

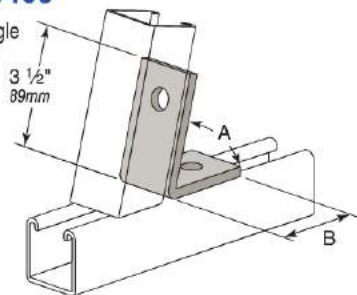
Four-Hole Open Angles



Part No.	A
W5443	60°
W5445	45°
W5447	30°

W5463 & W5465

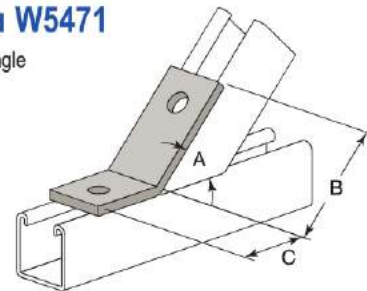
Two-Hole Closed Angle



Part No.	A	B
W5463	60°	2-25/32" (71mm)
W5465	45°	3-1/16" (78mm)

W5423 thru W5471

Two-Hole Open Angle



Part No.	A	B	C
W5423	60°	3-3/8" (86mm)	1-1/8" (48mm)
W5425	45°	3" (76mm)	2-3/16" (59mm)
W5427	30°	3-1/4" (83mm)	2-1/16" (52mm)
W5471	15°	3-5/16" (100mm)	2-1/16" (52mm)

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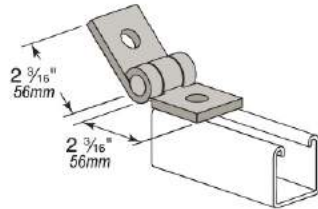


Bracing

Standard Finish: Electro Galvanized (EG)

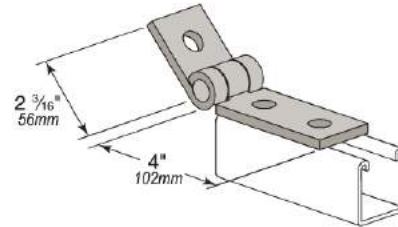
B5490

Two-Hole Adjustable Hinge Connection



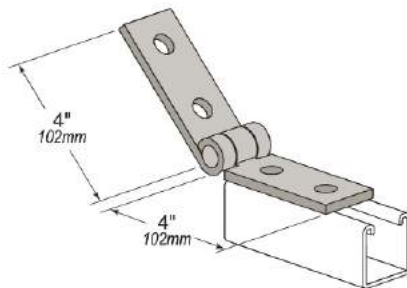
B5491

Three-Hole Adjustable Hinge Connection



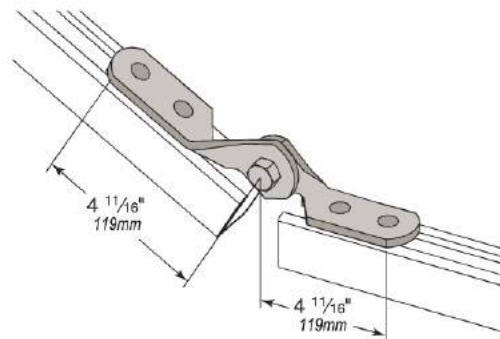
B5492

Four-Hole Adjustable Hinge Connection



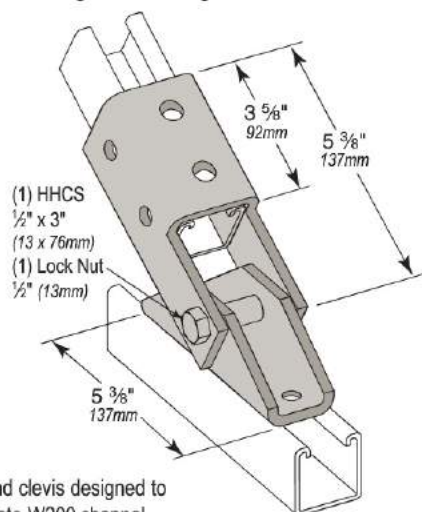
B5495

Four-Hole Adjustable Angle Fitting



W5480

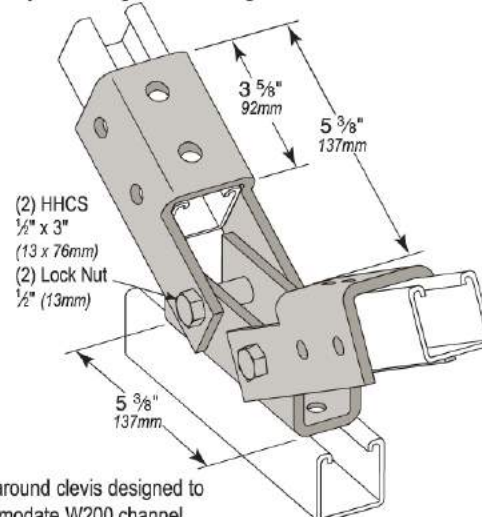
Single Adjustable Angle Brace Fitting



Wrap around clevis designed to accommodate W200 channel

W5485

Double Adjustable Angle Brace Fitting



Wrap around clevis designed to accommodate W200 channel

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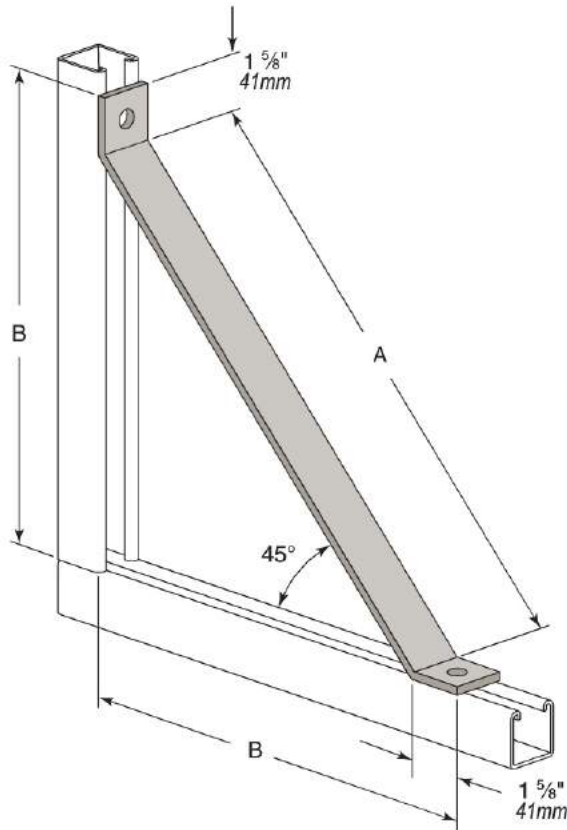
Bracing & Wing Fittings

Standard Finish: Electro Galvanized (EG)



W5472 thru W5475

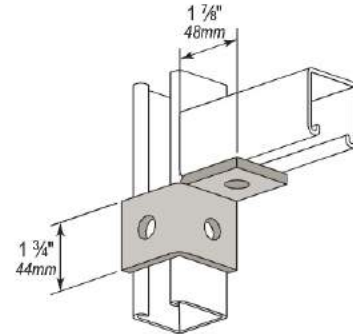
45° Angular Corner Brace



Part No.	A	B
W5472	12" (305mm)	10-1/8" (257mm)
W5473	16-3/8" (422mm)	13-3/8" (340mm)
W5474	18" (457mm)	14-3/8" (365mm)
W5475	24" (610mm)	18-3/8" (473mm)

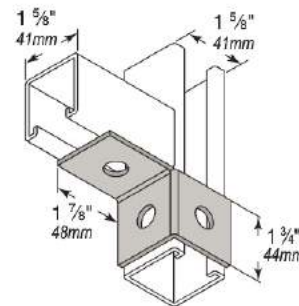
W5510

Three-Hole Right Corner Angle



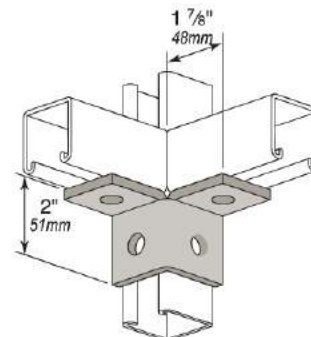
W5511

Three-Hole Left Corner Angle



W5512

Four-Hole 90 Degree Corner Angle



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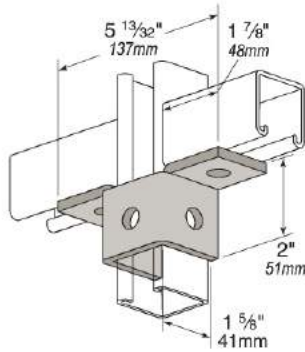


Wing Fittings

Standard Finish: Electro Galvanized (EG)

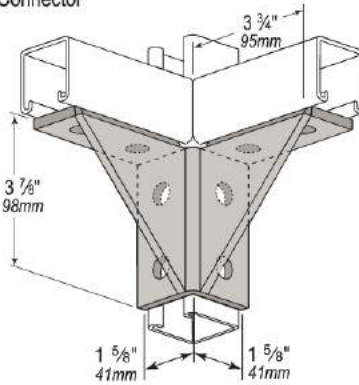
W5513

Five-Hole Two Side Angle Connector



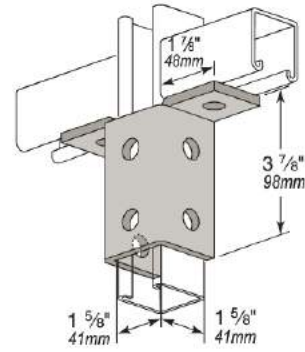
W5516

Eight-Hole Gusseted Corner Angle Connector



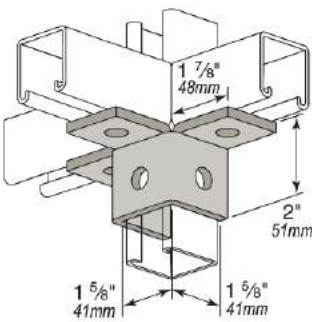
W5519

Eight-Hole Opposing Side Angle Connector



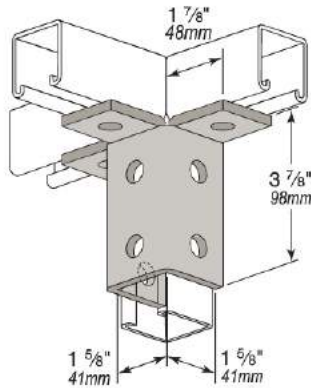
W5514

Six-Hole Three Side Corner Angle Connector



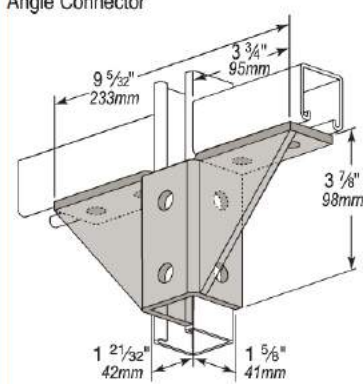
W5517

Nine-Hole Three Side Angle Connector



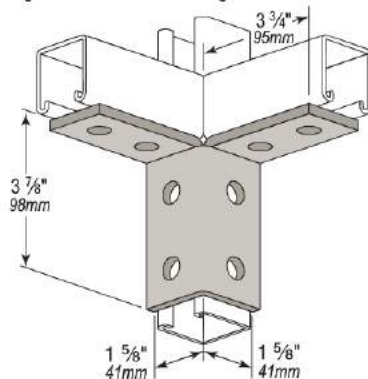
W5520

Ten-Hole Opposing Side Gusseted Angle Connector



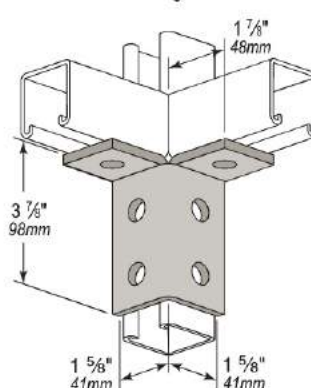
W5515

Eight-Hole 90° Corner Angle Connector



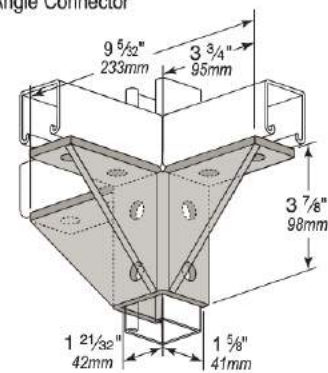
W5518

Six-Hole 90° Corner Angle Connector



W5521

Twelve-Hole Three Side Gusseted Angle Connector



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Trolleys

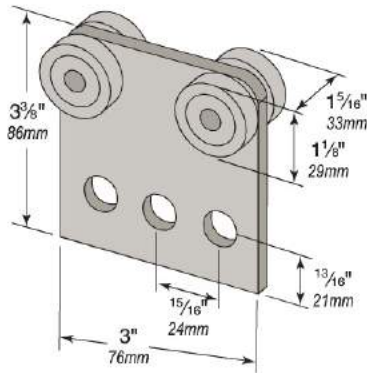


Standard Finish: Electro Galvanized (EG)

W6600

Four-Wheel Trolley

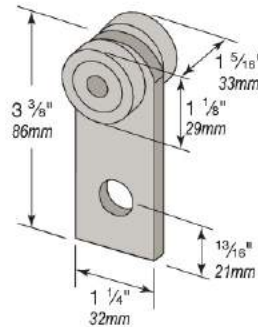
Allowable Load
600lbs (2.67 kN) max.



W6602

Two-Wheel Trolley

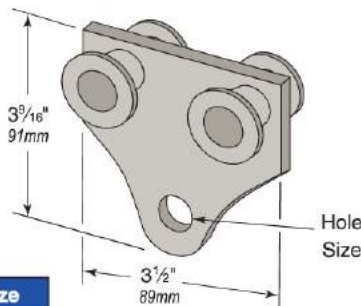
Allowable load
300lbs (2.00 kN) max.



W6601 & W6605

Four-Wheel Trolley

Allowable Load
600lbs (2.67 kN) max.

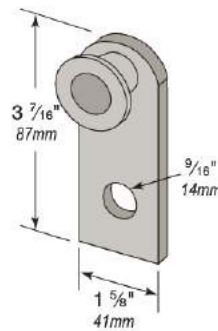


Part No.	Hole Size
W6601	1-7/8\" (29mm)
W6605	3/16\" (14mm)

W6606

Two-Wheel Trolley

Allowable load
300lbs (2.00 kN) max.

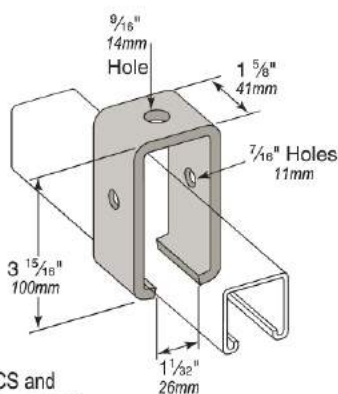


W6604

Trolley Beam

Intermediate Support

Allowable load
1,200Lbs. (5.14 kN)

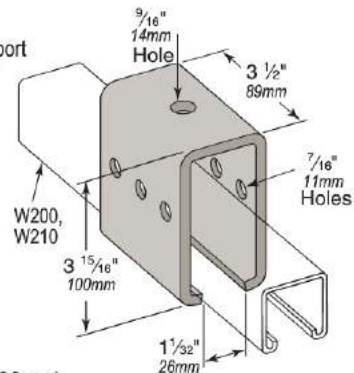


Requires 1/2\" x 2-3/4\" HHCS and
1/2\" Nut and Washer (not included).

W6603

Trolley Beam Joint Support

Allowable load
2,500Lbs. (11.12 kN)



Requires 1/2\" x 2-3/4\" HHCS and
1/2\" Nut and Washers (not included).

Trolley designed to fit W200 and W210 series channel constructed with wear resistant hardened wheels and frictionless needle bearings. Industrial applications include conveyor systems, and work stations requiring the attachment of power tools.

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Channel Brackets

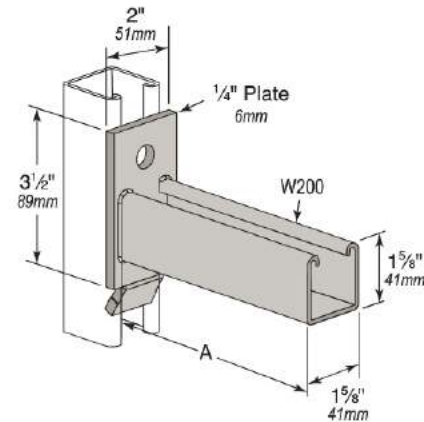
Standard Finish: Electro Galvanized (EG)

W5631 - W5634

One-Hole Anti-Rotation Channel Bracket, Slot Up

Part No.	A	Design Uniform Load Lbs. (kN)	
		W200	W210
W5631	6" (152mm)	1,200 (5.34 kN)	800 (3.56 kN)
W5632	12" (305mm)	600 (2.67 kN)	400 (1.78 kN)
W5633	18" (457mm)	400 (1.78 kN)	270 (1.20 kN)
W5634	24" (610mm)	300 (1.33 kN)	200 (0.89 kN)

Design Uniform Load when attached to listed upright column.
When installed in inverted position use 60% of loads shown.
Safety Factor: 2-1/2

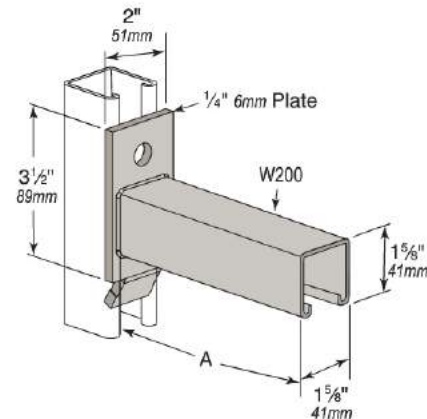


W5635 - W5638

One-Hole Anti-Rotation Channel Bracket, Slot Down

Part No.	A	Design Uniform Load Lbs. (kN)	
		W200	W210
W5635	6" (152mm)	1,200 (5.34 kN)	800 (3.56 kN)
W5636	12" (305mm)	600 (2.67 kN)	400 (1.78 kN)
W5637	18" (457mm)	400 (1.78 kN)	270 (1.20 kN)
W5638	24" (610mm)	300 (1.33 kN)	200 (0.89 kN)

Design Uniform Load when attached to listed upright column.
When installed in inverted position use 60% of loads shown.
Safety Factor: 2-1/2

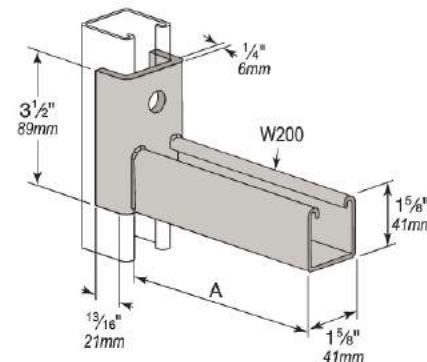


W5641 - W5642

One-Hole Wrap Around Channel Bracket, Slot Up

Part No.	A	Design Uniform Load Lbs. (kN)	
		W200	W210
W5641	6" (152mm)	1,600 (7.12 kN)	1,200 (5.34 kN)
W5642	12" (305mm)	800 (3.56 kN)	600 (2.67 kN)

Design Uniform Load when attached to listed upright column.
Do not install in inverted position.
Safety Factor: 2-1/2



Note: When brackets are used for mechanical supports, load capacities should conform to American Standard Code for Pressure Piping.

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Channel Brackets

Standard Finish: Electro Galvanized (EG)

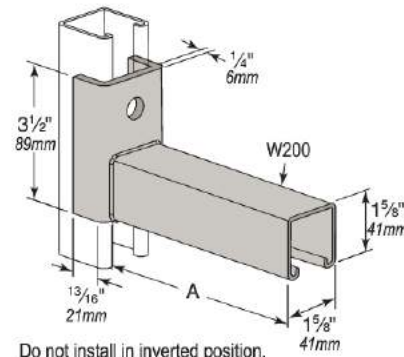


W5645 - W5646

One-Hole Wrap Around Channel Bracket, Slot Down

Part No.	A	Design Uniform Load Lbs. (kN)	
		W200	W210
W5645	6" (152mm)	1600 (7.12 kN)	1,200 (5.34 kN)
W5646	12" (305mm)	800 (3.56 kN)	600 (2.67 kN)

Design Uniform Load when attached to listed upright column.
Safety Factor: 2-½

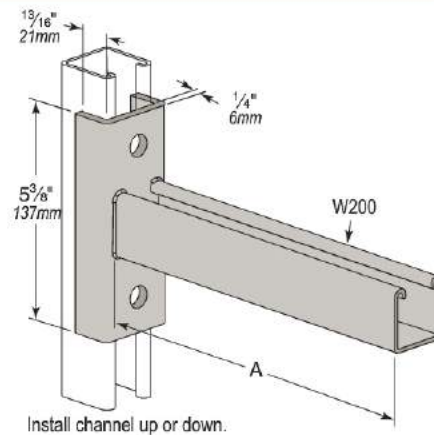


W5647 - W5648

Two-Hole Wrap Around Channel Bracket

Part No.	A	Design Uniform Load Lbs. (kN)	
		W200	W210
W5647	18" (457mm)	600 (2.67 kN)	450 (2.00 kN)
W5648	24" (610mm)	450 (2.00 kN)	330 (1.47 kN)

Design Uniform Load when attached to listed upright column.
Safety Factor: 2-½

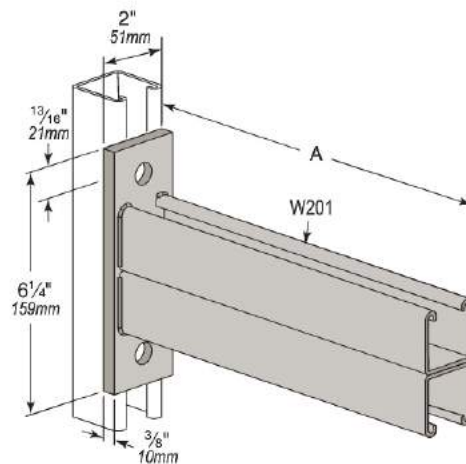


W5652 - W5656

Two-Hole Double Channel Bracket

Part No.	A	Design Uniform Load Lbs. (kN)	
		W200	W210
W5652	12" (305mm)	2,000 (8.90 kN)	1,400 (6.23 kN)
W5653	18" (457mm)	1,300 (5.78 kN)	900 (4.00 kN)
W5654	24" (610mm)	1,000 (4.45 kN)	700 (3.11 kN)
W5655	30" (762mm)	800 (3.56 kN)	560 (2.49 kN)
W5656	36" (914mm)	650 (2.89 kN)	450 (2.00 kN)

Design Uniform Load when attached to listed upright column.
Safety Factor: 2-½



Note: When brackets are used for mechanical supports, load capacities should conform to American Standard Code for Pressure Piping.

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Channel Brackets

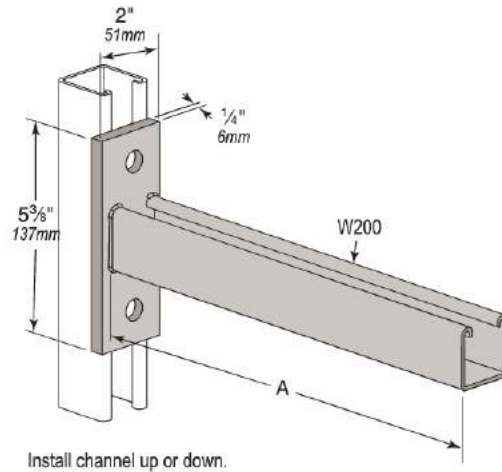
Standard Finish: Electro Galvanized (EG)

W5661 - W5664

Two-Hole Channel Bracket

Part No.	A	Design Uniform Load Lbs. (kN)
		W200
W5661	6" (152mm)	1600 (7.12 kN)
W5662	12" (305mm)	800 (3.56 kN)
W5663	18" (457mm)	550 (2.45 kN)
W5664	24" (610mm)	400 (1.78 kN)

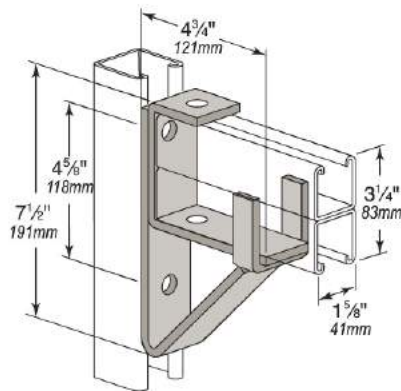
Design Uniform Load when attached to listed upright column.
Safety Factor: 2-1/2



W5650

Bracket Brace Adapter

For use with: W150, W201, or W211



Secure Bracket Arm To Brace Using W2-8 and W7409.
Do Not Use Thru Bolt In Bracket W5650.

Part No.	Design Moment In/Lbs (N·m)	
	W201	W211
W5650	12,400 (1401 N·m)	8,600 (971 N·m)

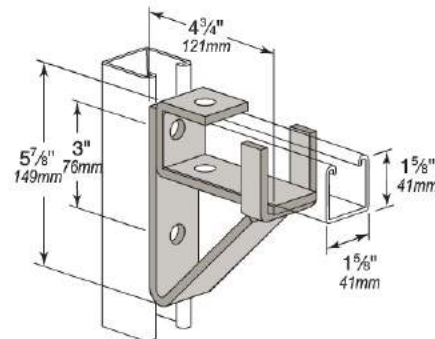
Safety Factor: 2-1/2

Safety Factor Applies to Bracket Brace Adapter/Listed Upright Only and not to Strength of Arm.

W5651

Bracket Brace Adapter

For use with: W200, W210, W401, or W501



Secure Bracket Arm To Brace Using W2-8 and W7409.
Do Not Use Thru Bolt In Bracket W5651.

Part No.	Design Moment In/Lbs (N·m)	
	W200	W210
W5651	6,000 (678 N·m)	4,200 (474 N·m)

Safety Factor: 2-1/2

Safety Factor Applies to Bracket Brace Adapter/Listed Upright Only and not to Strength of Arm.

Note: When brackets are used for mechanical supports, load capacities should conform to American Standard Code for Pressure Piping.

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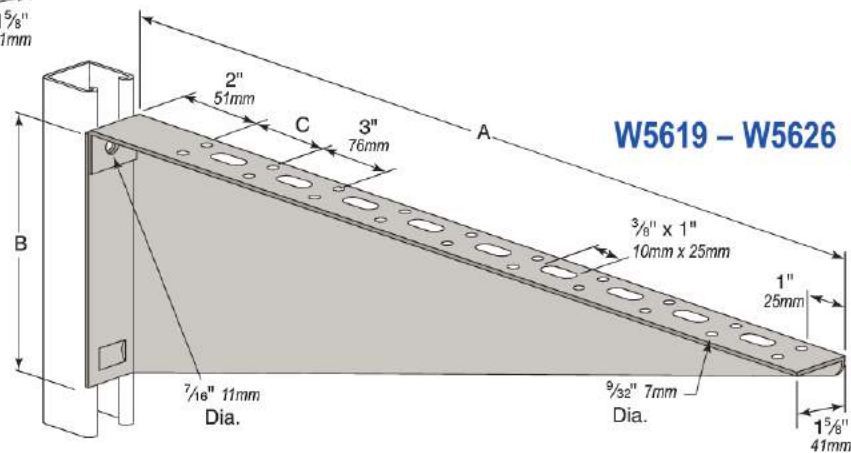
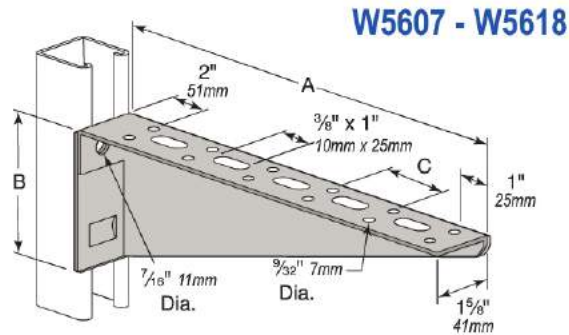
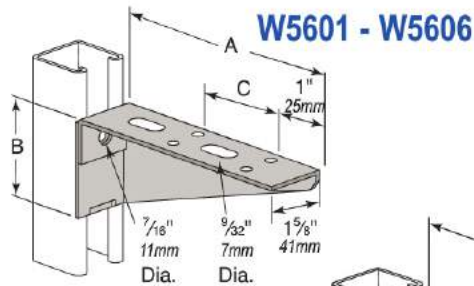
Shelf Brackets

Standard Finish: Electro Galvanized (EG)



Shelf Brackets

Shelf Bracket (Right Hand Illustrated)
Brackets are 12ga steel, electro-galvanized.
Furnished with $\frac{3}{8}$ " x 1" (10mm x 25mm) slotted holes
and $\frac{9}{32}$ " (7mm) round holes



Part No.		A	B	C	Design Uniform Load Lbs. (kN)	
Left Hand	Right Hand				W200	W210
W5601	W5602	6" (152mm)	1- ¹⁵ / ₁₆ " (49mm)	3" (76mm)	300 (1.33 kN)	250 (1.11 kN)
W5603	W5604	8" (203mm)	2- ⁷ / ₁₆ " (62mm)	5" (127mm)		
W5605	W5606	10" (254mm)	2- ¹⁵ / ₁₆ " (75mm)	7" (178mm)		
W5607	W5608	12" (305mm)	3- ⁷ / ₁₆ " (87mm)	3" (76mm)	300 (1.33 kN)	250 (1.11 kN)
W5609	W5610	14" (356mm)	3- ¹⁵ / ₁₆ " (100mm)	4" (102mm)		
W5611	W5612	16" (406mm)	4- ⁷ / ₁₆ " (113mm)	5" (127mm)		
W5613	W5614	18" (457mm)	4- ¹⁵ / ₁₆ " (125mm)	6" (152mm)		
W5615	W5616	20" (508mm)	5- ⁷ / ₁₆ " (138mm)	7" (178mm)		
W5617	W5618	22" (559mm)	5- ¹⁵ / ₁₆ " (151mm)	8" (203mm)		
W5619	W5620	24" (610mm)	6- ⁷ / ₁₆ " (164mm)	5" (127mm)	300 (1.33 kN)	250 (1.11 kN)
W5621	W5622	26" (660mm)	6- ¹⁵ / ₁₆ " (176mm)	5- ¹¹ / ₁₆ " (144mm)		
W5623	W5624	28" (711mm)	7- ⁷ / ₁₆ " (189mm)	6- ⁵ / ₁₆ " (160mm)		
W5625	W5626	30" (762mm)	7- ¹⁵ / ₁₆ " (202mm)	7" (178mm)		
Design Uniform Load when attached to listed upright column. Safety Factor: 2-1/2						

Note: When brackets are used for mechanical supports, load capacities should conform to American Standard Code for Pressure Piping.

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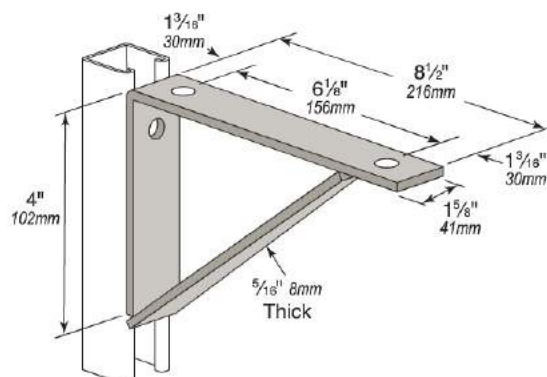
Girder Style Brackets

Standard Finish: Electro Galvanized (EG)

W5669

Girder Style Bracket

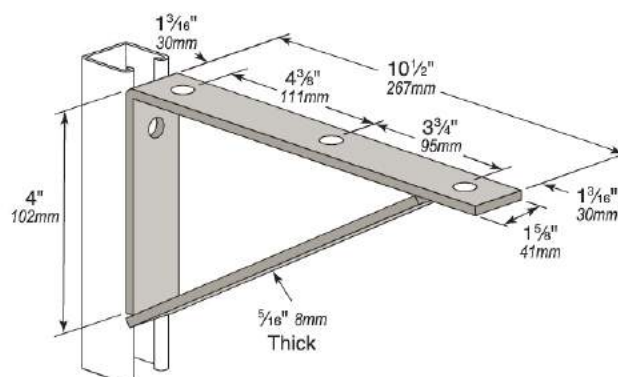
Part No.	Design Load Lbs. (kN)	
	W200 12 Gauge	W210 14 Gauge
W5669	800 (3.56 kN)	600 (2.67 kN)
Design Uniform Load when attached to listed upright column. Safety Factor: 2-1/2		



W5671

Girder Style Bracket

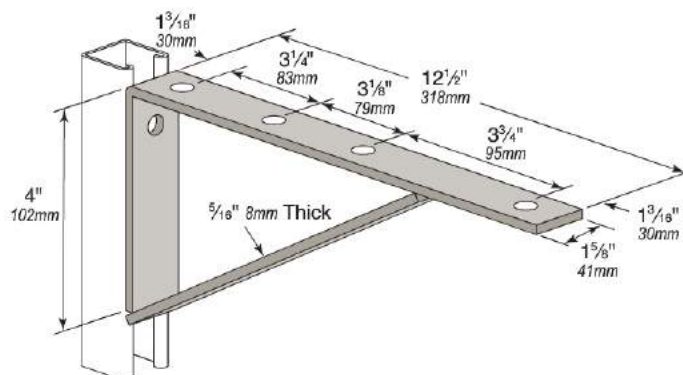
Part No.	Design Load Lbs. (kN)	
	W200 12 Gauge	W210 14 Gauge
W5671	800 (3.56 kN)	600 (2.67 kN)
Design Uniform Load when attached to listed upright column. Safety Factor: 2-1/2		



W5673

Girder Style Bracket

Part No.	Design Load Lbs. (kN)	
	W200 12 Gauge	W210 14 Gauge
W5673	900 (4.00 kN)	800 (3.56 kN)
Design Uniform Load when attached to listed upright column. Safety Factor: 2-1/2		



Note: When brackets are used for mechanical supports, load capacities should conform to American Standard Code for Pressure Piping.

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Girder Style and Utility Brackets

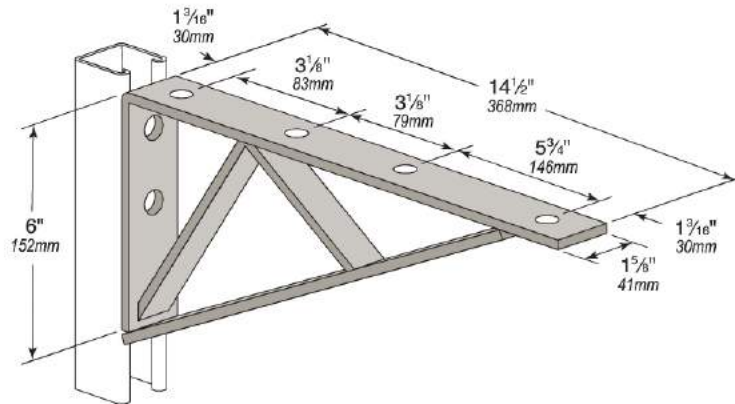
Standard Finish: Electro Galvanized (EG)



W5675

Girder Style Bracket

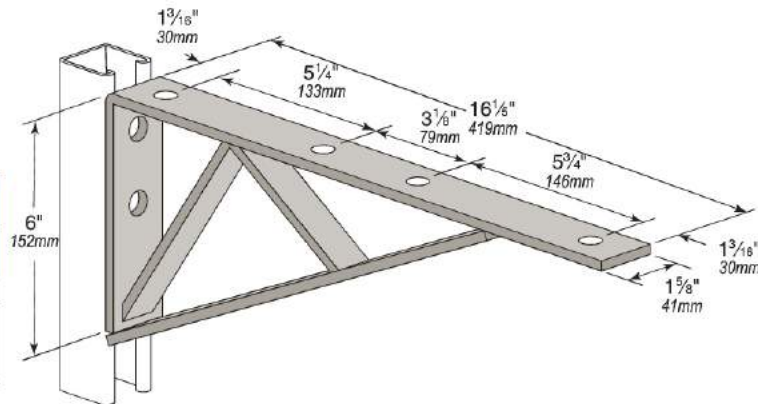
Part No.	Design Load Lbs. (kN)	
	W200 12 Gauge	W210 14 Gauge
W5675	900 (4.00 kN)	800 (3.56 kN)
Design Uniform Load when attached to listed upright column. Safety Factor: 2-½		



W5677

Girder Style Bracket

Part No.	Design Load Lbs. (kN)	
	W200 12 Gauge	W210 14 Gauge
W5677	1,200 (5.34 kN)	900 (4.00 kN)
Design Uniform Load when attached to listed upright column. Safety Factor: 2-½		

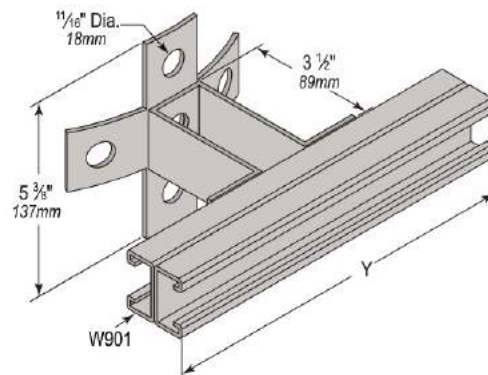


W1007-Y

Diamond Back Extended Riser Bracket with Horizontal Strut

Standard Finish: Hot Dipped Galvanized (HG)
(also available W1007 E-Y with (3) W6162-HG;
each clamp with Everdur hardware)

Part No.	Y
W1007-6	6" (152mm)
W1007-8	8" (203mm)
W1007-10	10" (254mm)
W1007-12	12" (305mm)
W1007-16	16" (406mm)
W1007-18	18" (457mm)
W1007-24	24" (610mm)



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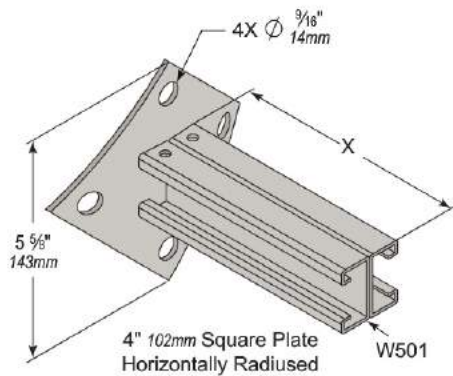


Utility Brackets

Standard Finish: Hot Dip Galvanized (HG)

W1010-X

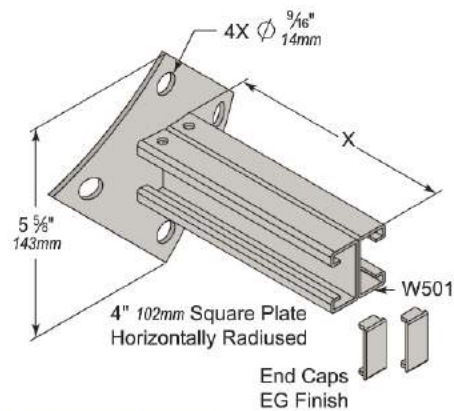
Diamond Back Extended Riser Bracket



Part No.	X
W1010-6	6" (152mm)
W1010-8	8" (203mm)
W1010-10	10" (254mm)
W1010-12	12" (305mm)
W1010-16	16" (406mm)
W1010-18	18" (457mm)
W1010-24	24" (610mm)

W1011-X

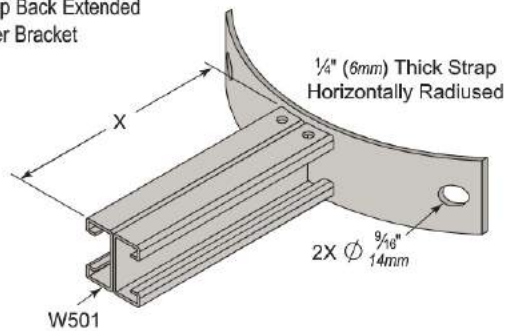
Diamond Back Extended Riser Bracket



Part No.	X
W1011-6	6" (152mm)
W1011-8	8" (203mm)
W1011-10	10" (254mm)
W1011-12	12" (305mm)
W1011-16	16" (406mm)
W1011-18	18" (457mm)
W1011-24	24" (610mm)

W1012-X

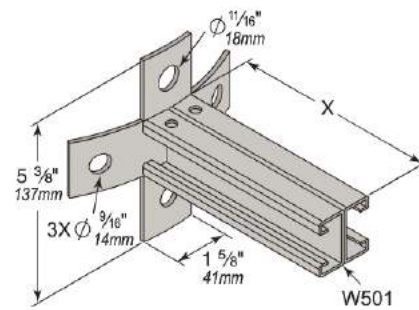
Strap Back Extended Riser Bracket



Part No.	X
W1012-6	6" (152mm)
W1012-8	8" (203mm)
W1012-10	10" (254mm)
W1012-12	12" (305mm)
W1012-16	16" (406mm)
W1012-18	18" (457mm)
W1012-24	24" (610mm)

W1015-X

Cross Back Extended Riser Bracket



Part No.	X
W1015-6	6" (152mm)
W1015-8	8" (203mm)
W1015-10	10" (254mm)
W1015-12	12" (305mm)
W1015-16	16" (406mm)
W1015-18	18" (457mm)
W1015-24	24" (610mm)

Typical: Weep Holes top and bottom (optional)

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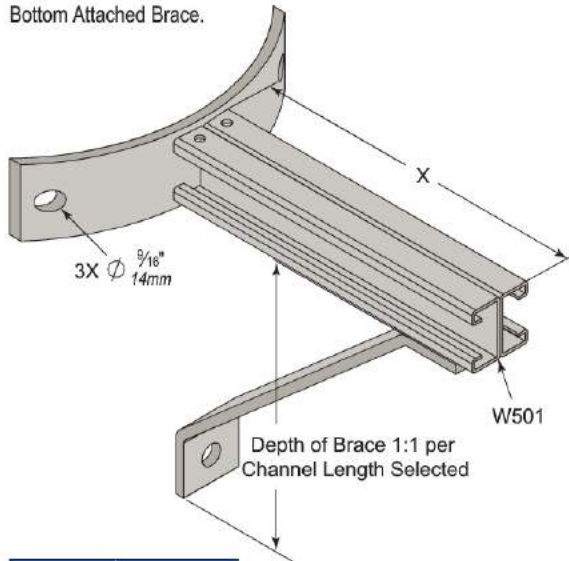
Utility Brackets

Standard Finish: Hot Dip Galvanized (HG)



W1013-X

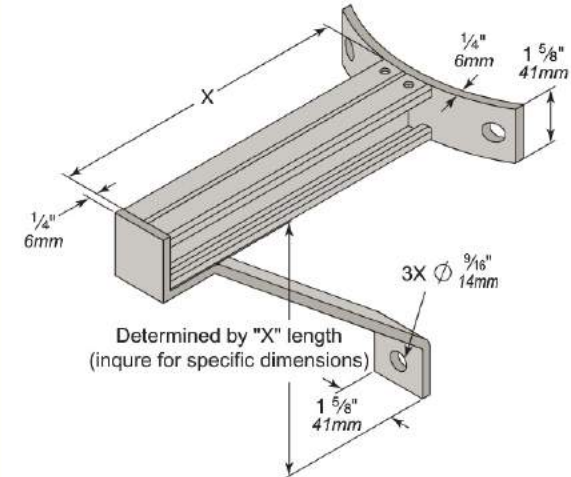
Strap Back Extended Riser Bracket with Bottom Attached Brace.



Part No.	X
W1013-6	6" (152mm)
W1013-8	8" (203mm)
W1013-10	10" (254mm)
W1013-12	12" (305mm)
W1013-16	16" (406mm)
W1013-18	18" (457mm)
W1013-24	24" (610mm)

W1016-X

Strap Back Extended Riser Bracket with End Wrap Brace



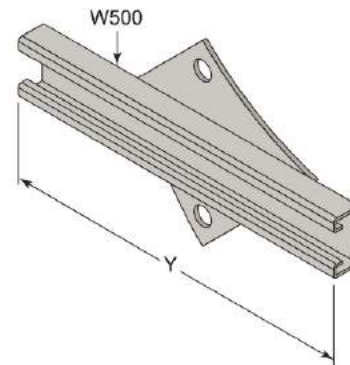
Part No.	X
W1016-6	6" (152mm)
W1016-8	8" (203mm)
W1016-10	10" (254mm)
W1016-12	12" (305mm)
W1016-16	16" (406mm)
W1016-18	18" (457mm)
W1016-24	24" (610mm)

W1019-Y

Low Profile Diamond Back with Horizontal Strut Riser.

Standard channel 4" square plate horizontally radiused (5-5/8" nominal corner to corner).
Welded top and bottom at apex of radiused back plate.

Part No.	X
W1019-6	6" (152mm)
W1019-8	8" (203mm)
W1019-10	10" (254mm)
W1019-12	12" (305mm)
W1019-16	16" (406mm)
W1019-18	18" (457mm)
W1019-24	24" (610mm)



Typical: Weep Holes top and bottom (optional)
Appropriate (hot dipped galvanized) end caps available on any unit (optional)

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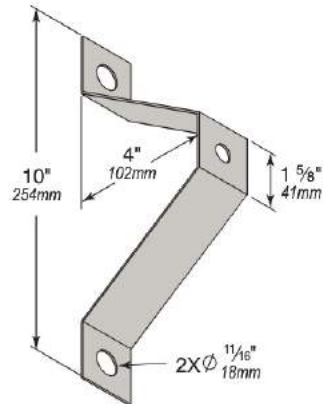
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Utility Brackets

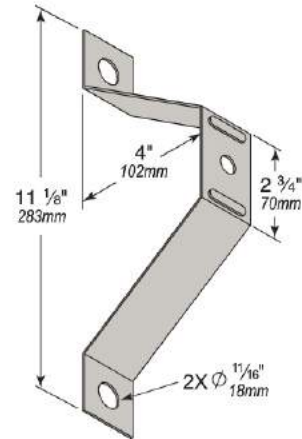
Standard Finish: Hot Dip Galvanized (HG)

W1017



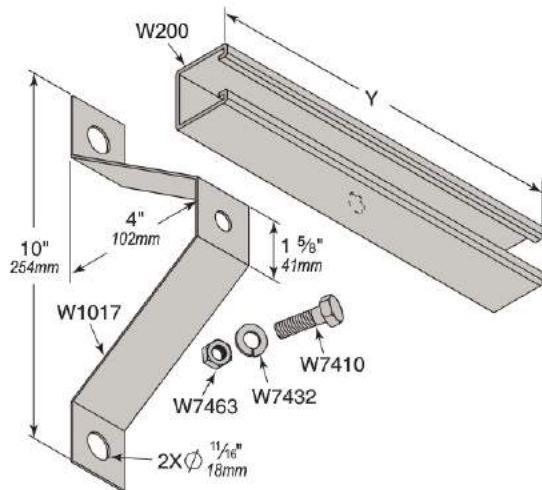
W1017AR

Anti-Rotation Bracket



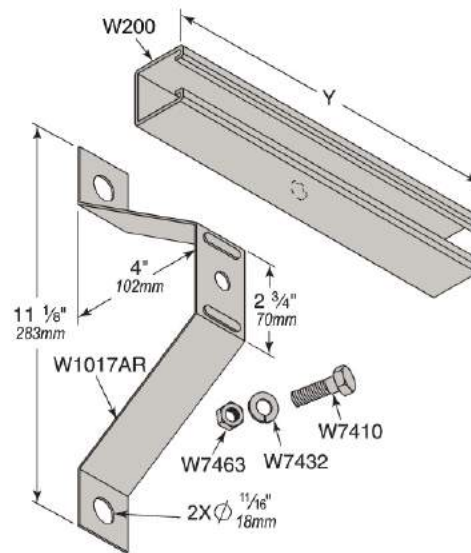
W1017A-Y

Bracket Assembly



W1017ARA-Y

Anti-Rotation Bracket Assembly



Part No.	Y
W1017A-6	6" (152mm)
W1017A-8	8" (203mm)
W1017A-10	10" (254mm)
W1017A-12	12" (305mm)
W1017A-16	16" (406mm)
W1017A-18	18" (457mm)
W1017A-24	24" (610mm)

Part No.	Y
W1017ARA-6	6" (152mm)
W1017ARA-8	8" (203mm)
W1017ARA-10	10" (254mm)
W1017ARA-12	12" (305mm)
W1017ARA-16	16" (406mm)
W1017ARA-18	18" (457mm)
W1017ARA-24	24" (610mm)

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Utility Brackets

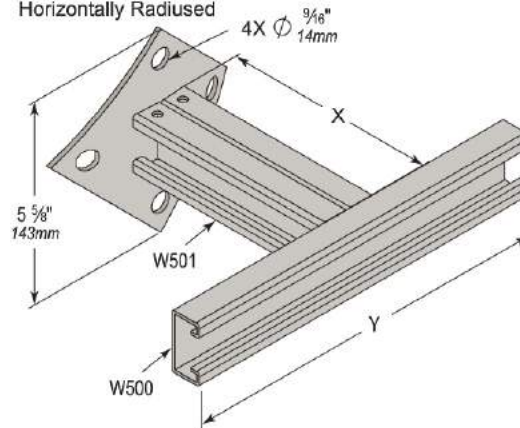
Standard Finish: Hot Dip Galvanized (HG)



W1021-X-Y

Extended Profile Diamond Back
with Horizontal Riser Strut

4" (102mm) Square Plate
Horizontally Radiused



Part No.	X	Y
W1021-6-6	6" (152mm)	6" (152mm)
W1021-6-8		8" (203mm)
W1021-6-10		10" (254mm)
W1021-6-12		12" (305mm)
W1021-6-16		16" (406mm)
W1021-6-18		18" (457mm)
W1021-6-24		24" (610mm)
W1021-8-6	8" (203mm)	6" (152mm)
W1021-8-8		8" (203mm)
W1021-8-10		10" (254mm)
W1021-8-12		12" (305mm)
W1021-8-16		16" (406mm)
W1021-8-18		18" (457mm)
W1021-8-24		24" (610mm)
W1021-10-6	10" (254mm)	6" (152mm)
W1021-10-8		8" (203mm)
W1021-10-10		10" (254mm)
W1021-10-12		12" (305mm)
W1021-10-16		16" (406mm)
W1021-10-18		18" (457mm)
W1021-10-24		24" (610mm)
W1021-12-6	12" (305mm)	6" (152mm)
W1021-12-8		8" (203mm)
W1021-12-10		10" (254mm)
W1021-12-12		12" (305mm)
W1021-12-16		16" (406mm)
W1021-12-18		18" (457mm)
W1021-12-24		24" (610mm)

Part No.	X	Y
W1021-16-6	16" (406mm)	6" (152mm)
W1021-16-8		8" (203mm)
W1021-16-10		10" (254mm)
W1021-16-12		12" (305mm)
W1021-16-16		16" (406mm)
W1021-16-18		18" (457mm)
W1021-16-24		24" (610mm)
W1021-18-6	18" (457mm)	6" (152mm)
W1021-18-8		8" (203mm)
W1021-18-10		10" (254mm)
W1021-18-12		12" (305mm)
W1021-18-16		16" (406mm)
W1021-18-18		18" (457mm)
W1021-18-24		24" (610mm)
W1021-24-6	24" (610mm)	6" (152mm)
W1021-24-8		8" (203mm)
W1021-24-10		10" (254mm)
W1021-24-12		12" (305mm)
W1021-24-16		16" (406mm)
W1021-24-18		18" (457mm)
W1021-24-24		24" (610mm)

Typical: Weep Holes top and bottom (optional)
Appropriate (hot dipped galvanized) end caps available on any unit (optional)

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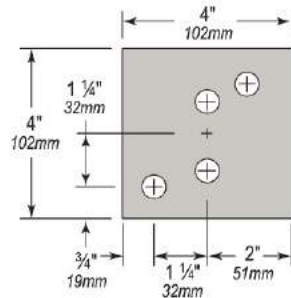


Utility Brackets

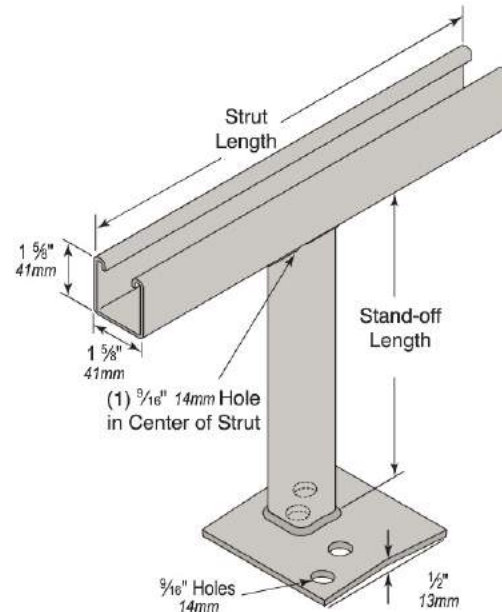
Standard Finish: Hot Dip Galvanized (HG)

W1022 Series

Square Tube Stand Off



Part No.	Stand-off Length	Strut Length
W1022-8-1/8 EG	8 1/8" (206mm)	12" (305mm)
W1022-8-1/8-M EG	8 1/8" (206mm)	16" (406mm)
W1022-10X12 EG	10" (254mm)	12" (305mm)
W1022-10X16 EG	10" (254mm)	16" (406mm)
W1022-12X12 EG	12" (305mm)	12" (305mm)



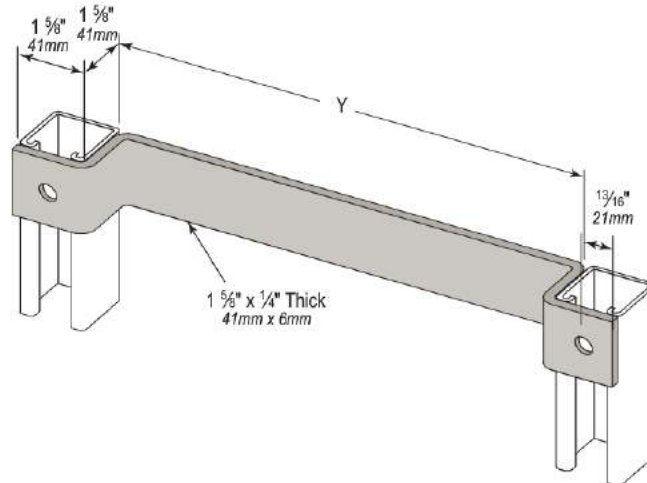
W1023-Y

Utility Vault Ladder Rung

Channel (handrail) type per design.
Note: use closure strip in all open channel (handrail) faces

Note: Use of W1017 stand off per design

Part No.	Y
W1023-6	6" (152mm)
W1023-8	8" (203mm)
W1023-10	10" (254mm)
W1023-12	12" (305mm)
W1023-16	16" (406mm)
W1023-18	18" (457mm)
W1023-24	24" (610mm)



Typical: Weep Holes top and bottom (optional)
Appropriate (hot dipped galvanized) end caps available on any unit (optional)

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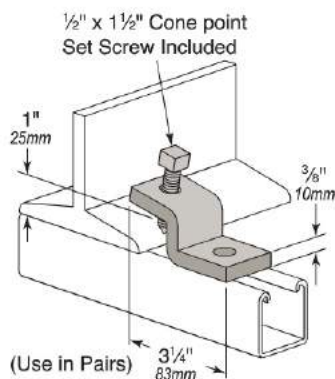
Beam Clamps

Standard Finish: Electro Galvanized (EG)



W5712

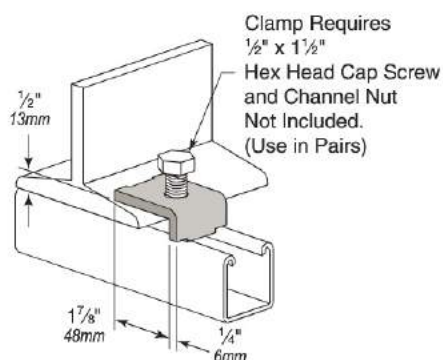
Off-Set Beam Clamp
Use in Pairs



Part No.	Design Load Lbs. (kN)	
	W200 1-5/8" x 1-5/8"	W500 1-5/8" x 13/16"
W5712	600 (2.67 kN)	500 (2.22 kN)

W5713

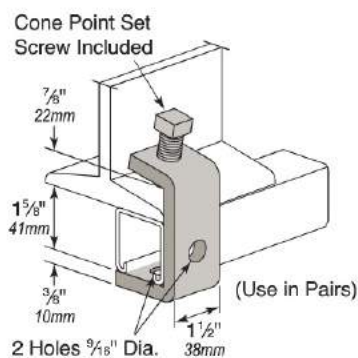
One-Hole Beam Clamp
Use in Pairs



Part No.	Design Load Lbs. (kN)	
	W200 1-5/8" x 1-5/8"	W500 1-5/8" x 13/16"
W5713	600 (2.67 kN)	500 (2.22 kN)

W5714

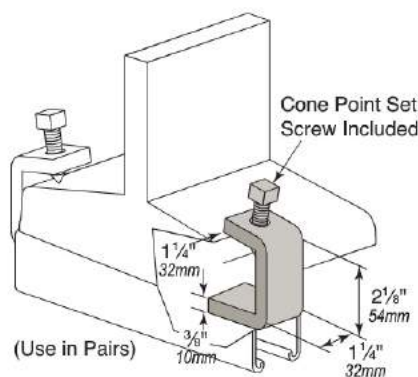
Two-Hole Beam Clamp
Use in Pairs



Part No.	Design Load Lbs. (kN)
W5714	500 (2.22 kN)

W5717

Channel Thick Flange Beam Clamp
Use in Pairs



Part No.	Design Load Lbs. (kN)
W5717	900 (4.00 kN)

Opposition type clamps to be used in pairs; position against flange(s) dimple beam at set screw (recommended).

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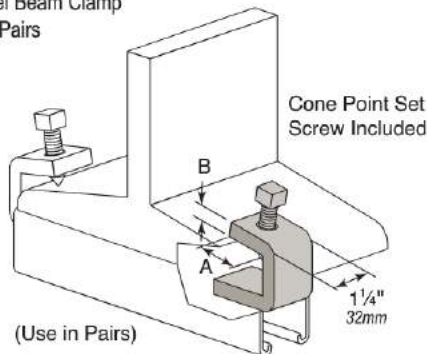


Beam Clamps

Standard Finish: Electro Galvanized (EG)

W5715 or W5716

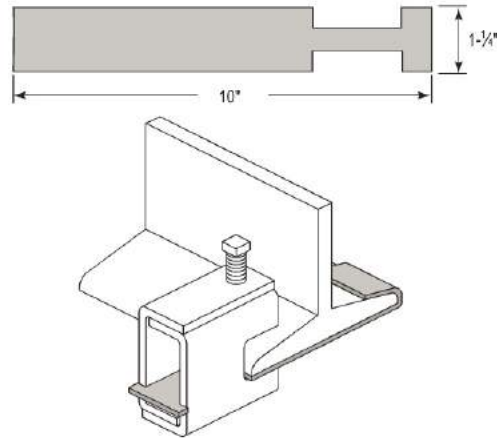
Channel Beam Clamp
Use in Pairs



Part No.	Duty	A	B	Design Load Lbs. (kN)
W5715	Light Duty	1-3/4" (44mm)	1/4" (6mm)	450 (2.00 kN)
W5716	Heavy Duty	1-1/2" (38mm)	3/8" (10mm)	1,000 (4.45 kN)

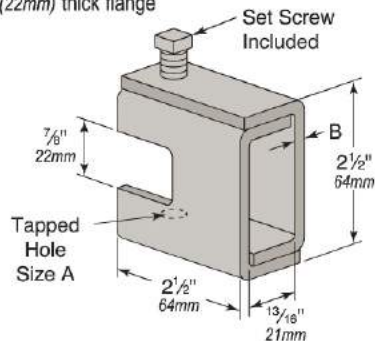
WBC0906

Beam Clamp Strap



W5721 to W5729

Beam Clamp
Up to 7/8" (22mm) thick flange

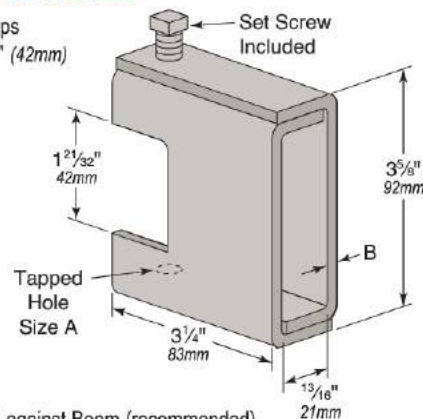


Bottom Rod against Beam (recommended)

Part No.	A	B	Set Screw	Allowable Load Lbs. (kN) (ea.)
W5721	1/4"-20	3/8" (3mm)	3/8" x 1-1/2"	650 (2.89 kN)
W5722	5/16"-18			
W5723	3/8"-16			
W5724	3/8"-16	3/16" (5mm)	1/2" x 1-1/2"	1,100 (4.89 kN)
W5725	1/2"-13			
W5726	1/2"-13	1/4" (6mm)	1/2" x 1-3/8"	1,600 (7.12 kN)
W5727	5/8"-11			
W5728	5/8"-11	5/16" (8mm)	5/8" x 1-1/2"	2,400 (10.68 kN)
W5729	3/4"-10			

W5731 to W5739

Beam Clamps
Up to 1-2 1/2" (42mm)
thick flange



Bottom Rod against Beam (recommended)

Part No.	A	B	Set Screw	Allowable Load Lbs. (kN) (ea.)
W5731	1/4"-20	1/8" (3mm)	3/8" x 2"	800 (3.56 kN)
W5732	5/16"-18			
W5733	3/8"-16			
W5734	3/8"-16	3/16" (5mm)	1/2" x 2"	1,300 (5.78 kN)
W5735	1/2"-13			
W5736	1/2"-13	1/4" (6mm)	1/2" x 2"	1,900 (8.45 kN)
W5737	5/8"-11			
W5738	5/8"-11	5/16" (8mm)	5/8" x 2"	2,800 (12.46 kN)
W5739	3/4"-10			

Opposition type clamps to be used in pairs; position against flange(s) dimple beam at set screw (recommended).

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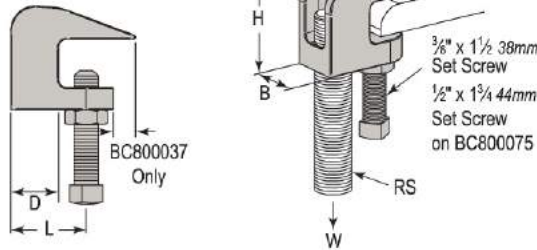
Beam Clamps

Material: Malleable Iron



BC80

Malleable Iron Universal Beam Clamp



Maximum flange thickness of $\frac{5}{8}$ " (16mm)

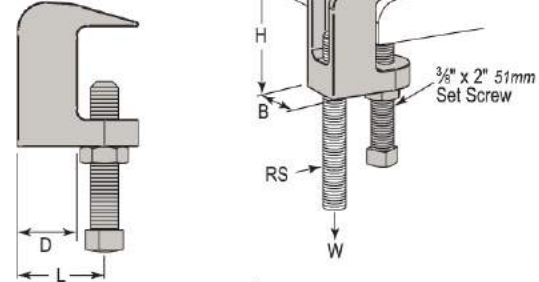
• Finish: Plain, Electrogalvanized

Catalog No.	Rod Size (RS)	Max Load W lbs (kN)	Max Pipe Size in	Dimensions in.			
				B	L	H	D
BC800037PL	$\frac{3}{8}$ " - 16	350 (1.56kN)	4"	$1\frac{1}{4}$ " (21mm)	$1\frac{1}{4}$ " (32mm)	$1\frac{5}{16}$ " (40mm)	
BC800037EG							
BC800050PL	$\frac{1}{2}$ " - 13	470 (2.09kN)	4"	1" (25mm)	$1\frac{3}{8}$ " (35mm)	$1\frac{5}{8}$ " (41mm)	$\frac{3}{4}$ " (15mm)
BC800050EG							
BC800062PL	$\frac{5}{8}$ " - 11	550 (2.45kN)	5"	$1\frac{1}{8}$ " (29mm)	$1\frac{1}{2}$ " (38mm)	$1\frac{3}{4}$ " (45mm)	
BC800062EG							
BC800075PL	$\frac{3}{4}$ " - 10	700 (3.11kN)	6"	$1\frac{3}{8}$ " (35mm)	$1\frac{3}{4}$ " (46mm)	$1\frac{1}{2}$ " (46mm)	$\frac{5}{8}$ " (16mm)
BC800075EG							

Note: Do not over tighten set screw

BC81

Wide Mouth Malleable Iron Universal Beam Clamp



Maximum flange thickness of $1\frac{1}{8}$ " (27mm)

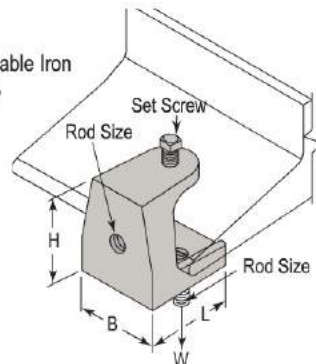
• Finish: Plain, Electrogalvanized

Part No.	Rod Size (RS)	Max Load W lbs (kN)	Max Pipe Size in	Dimensions in.			
				B	L	H	D
BC810037PL	$\frac{3}{8}$ " - 16	400 (1.78kN)	4"			$1\frac{1}{8}$ " (49mm)	$\frac{9}{16}$ " (14mm)
BC810037EG				$\frac{7}{8}$ " (22mm)	$1\frac{1}{4}$ " (32mm)		
BC810050PL	$\frac{1}{2}$ " - 13	500 (2.22kN)				$2\frac{3}{16}$ " (56mm)	$\frac{1}{2}$ " (13mm)
BC810050EG							
BC810062PL	$\frac{5}{8}$ " - 11	600 (2.67kN)	8"	$1\frac{1}{4}$ " (32mm)	$1\frac{7}{8}$ " (48mm)	$2\frac{1}{4}$ " (57mm)	
BC810062EG							$\frac{7}{8}$ " (22mm)
BC810075PL	$\frac{3}{4}$ " - 10	800 (3.56kN)		$1\frac{3}{8}$ " (35mm)	$2\frac{1}{8}$ " (52mm)	$2\frac{1}{2}$ " (64mm)	
BC810075EG							

Note: Do not over tighten set screw

BC90

Electro-galvanized Malleable Iron Rod Support Beam Clamp

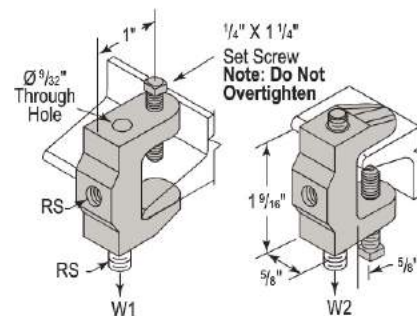


Maximum flange thickness of $\frac{1}{2}$ " (13mm)

Part No.	Rod Size	Set Screw Size	Dimensions in.			Max Load (W) lbs (kN)
			B	L	H	
BC9025EG	$\frac{1}{4}$ " - 20	$\frac{5}{16}$ " - 18	$1\frac{3}{16}$ " (33 mm)	$1\frac{3}{8}$ " (35 mm)	$1\frac{3}{8}$ " (35 mm)	335 (1.49kN)
BC9037EG	$\frac{3}{8}$ " - 16	$\frac{1}{2}$ " - 13	$2\frac{1}{16}$ " (52 mm)	$1\frac{7}{8}$ " (48 mm)	$1\frac{3}{4}$ " (44 mm)	525 (2.34kN)
BC9050EG	$\frac{1}{2}$ " - 13	$\frac{1}{2}$ " - 13	$2\frac{1}{2}$ " (64 mm)	$2\frac{3}{8}$ " (60 mm)	$2\frac{3}{8}$ " (56 mm)	750 (3.34kN)

BC91

Electro-galvanized Malleable Iron Universal Beam Clamps



Maximum flange thickness of $\frac{5}{8}$ " (16mm)

Part No.	Rod Size (RS)	Max Load W1 lbs (kN)	Max Load W2 lbs (kN)
BC91025EG	$\frac{1}{4}$ " - 20	100 (0.44kN)	250 (1.11kN)

Note: The threaded hole on the back side of the clamp is not load rated.

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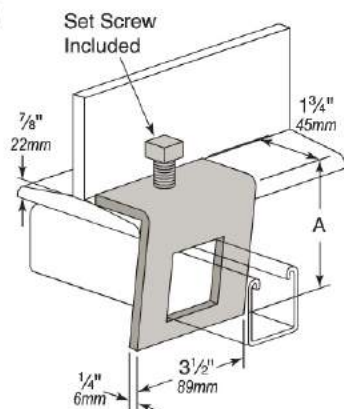


Beam Clamps

Standard Finish: Electro Galvanized (EG)

W5702 to W5705

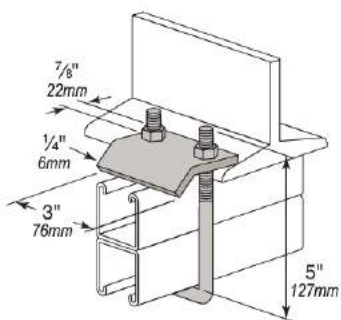
Beam Clamp
(Used In Pairs)



Part No.	A	Use With Channel	Allowable Loads Lbs. (kN)
W5702	3-1/2" (89mm)	W200, W210	480 (2.14 kN)
W5703	3-3/4" (83mm)	W300	
W5705	2-13/16" (68mm)	W500	

W5708

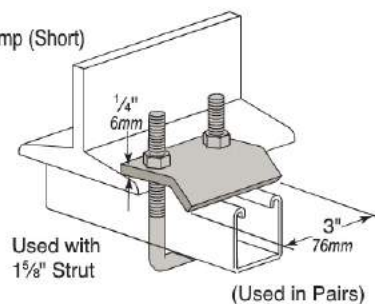
"U" Bolt Beam Clamp (Long)
(Used In Pairs)



Part No.	Use With Channel	Allowable Load Lbs. (kN)
W5708	W100, W150, W201	1,000 (4.45 kN)

W5709

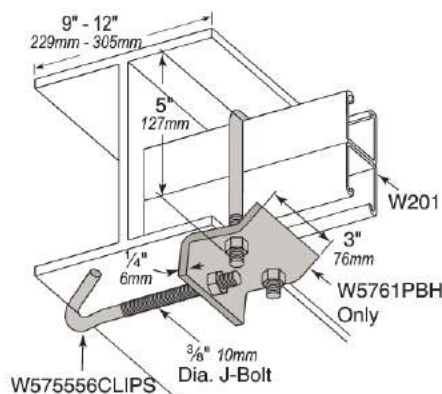
"U" Bolt Beam Clamp (Short)
(Used In Pairs)



Part No.	Use With Channel	Allowable Load Lbs. (kN)
W5709	W200, W210, W501, W300	1,000 (4.45 kN)

W5761 Series

U-Bolt Beam Clamp with J-Bolt



- 1" Max. Flange Thickness
- For use with 1-5/8" to 3-1/4" high channel (W150)
- Recommended Torques:
U-Bolt Nuts 150 in-lbs
J-Bolt Nut 60 in-lbs

Part No.	For Flange Width	Use With Channel
W5761	4' thru 5-7/8" (102 thru 149mm)	W150, W201
W5761-9	6' thru 9' (152 thru 229mm)	
W5761-12	9' thru 12' (229 thru 305mm)	

Uniform loads are based upon opposing style clamps **used in pairs**, installed against the flanges of the beam.
It is recommended that the beam be dimpled at set screw contact location(s)

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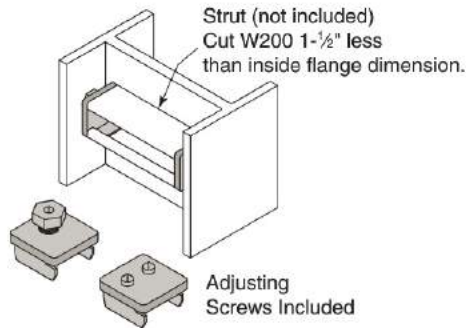
Beam Clamps



Standard Finish: Electro Galvanized (EG)

W5760

Flange To Flange Clamp



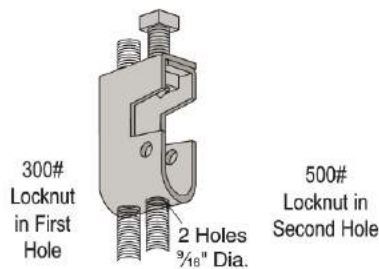
All Rods are shown with jamb nuts or
"Locking" provision as recommended

Part No.	Wt. Lbs/C	Allowable Load Lbs. (kN)
W5760	53 (24 Kg)	800 (3.56 kN)

Allowable load capacity for both horizontal and vertical loads

W5750

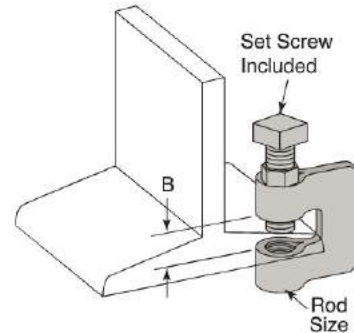
All Purpose Beam Clamp



Provides for hanging rod directly below set screw.
Alternate use provides 1/4", 3/8" or 1/2" rod to be extended from
the top to the bottom of the clamp on the end opposite the set
screw. 1/4" flat washer must be used with 1/4" rod.

W5741 - W5745

Beam Clamps

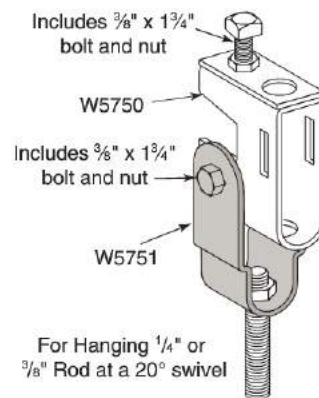


"Bottom Rod" Against
Beam (Recommended)

Part No.	Rod Size	B	Allowable Load Lbs. (kN) (ea.)
W5741	3/8"	3/4" (19mm)	400 (1.78 kN)
W5742	1/2"		500 (2.22 kN)
W5743	5/8"		550 (2.45 kN)
W5744	3/4"		600 (2.67 kN)
W5745	7/8"	1-1/16" (27mm)	900 (4.00 kN)

W5751

Swivel Hanger



Provides for hanging 1/4" or 3/8" rod with 20°
swivel or 1/2" rod without swivel.
1/4" flat washer must be used with 1/4" rod.

It is recommended that the beam be dimpled at set screw contact location(s)

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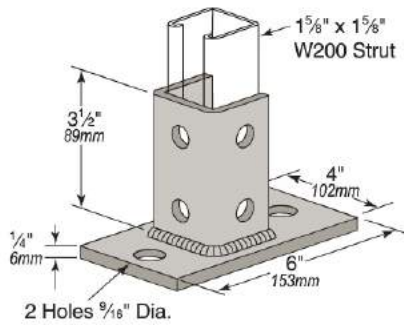


Post Bases

Standard Finish: Electro Galvanized (EG)

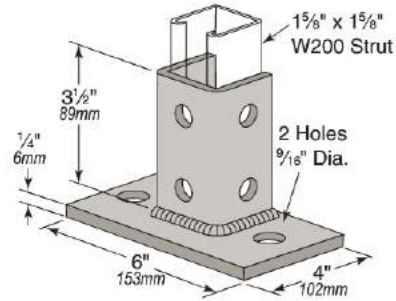
W5810

Rectangular Plate Eight-Hole Post Base
Single Channel Tall Clevis



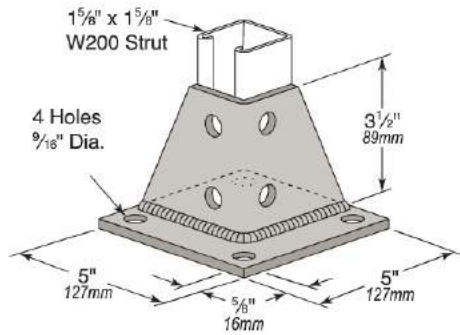
W5810FL

Rectangular Plate Eight-Hole Post Base
Single Channel Tall Clevis



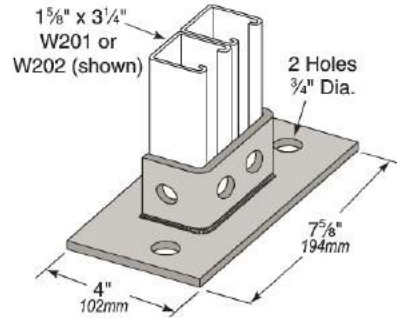
W5811

Eight-Hole Welded Corner Post Base



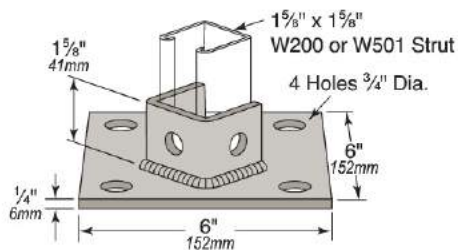
W5812

Rectangular Plate 6 Hole Post Base
Double Channel Short Clevis



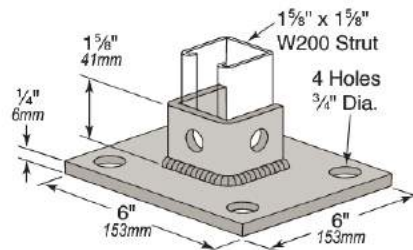
W5813

Seven-Hole Post Base Single Channel Short Clevis



W5813SQ

Seven-Hole Post Base Single Channel Short Clevis



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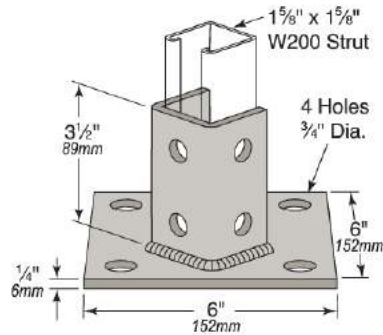
Post Bases



Standard Finish: Electro Galvanized (EG)

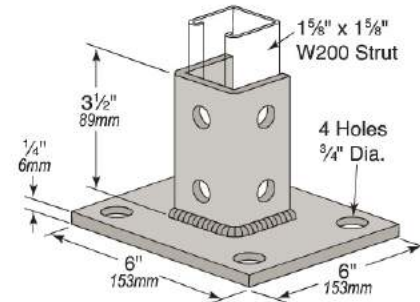
W5814

Ten-Hole Post Base Single Channel Tall Clevis



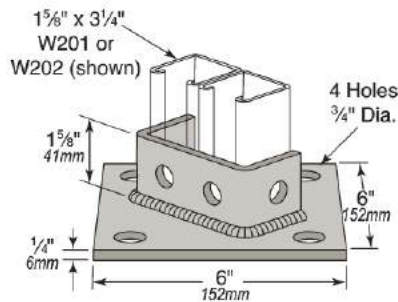
W5814SQ

Ten-Hole Post Base Single Channel Tall Clevis



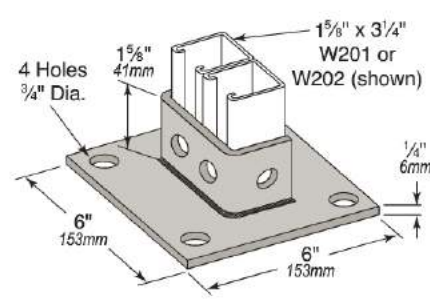
W5815

Eight-Hole Post Base Double Channel Short Clevis



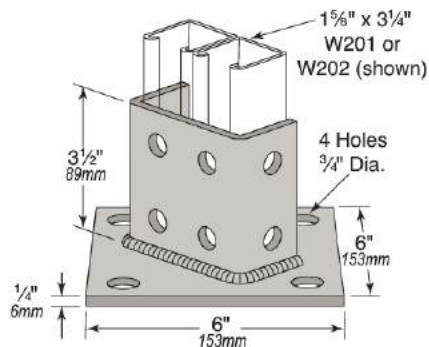
W5815SQ

Eight-Hole Post Base Double Channel Short Clevis



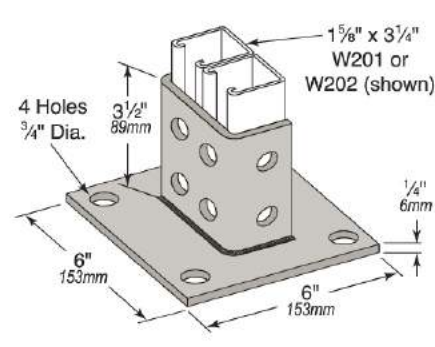
W5816

Twelve-Hole Post Base Double Channel Tall Clevis



W5816SQ

Twelve-Hole Post Base Double Channel Tall Clevis



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Gamma
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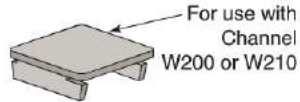


End Caps

Standard Finish: Electro Galvanized (EG)

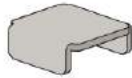
W5920

Wireway End Cap For W200 or W210 Channel



W5910 thru W5938

UL Listed End Caps

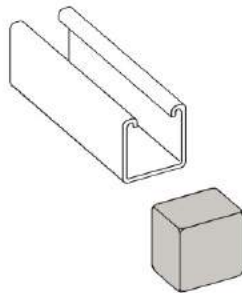


Part No.	Channel Usage
W5910	W100
W5930	W200
W5931	W210
W5933	W300
W5935	W500 & W900
W5938	W800

W5900 thru W5935

Cover Plastic End Caps

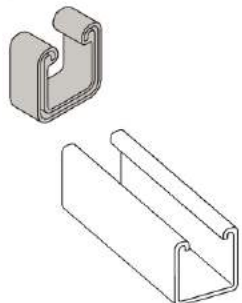
Part No. Cover	Channel Usage
W5900	W201
W5930	W200, W501
W5935	W500



W5900-M thru W5935-M

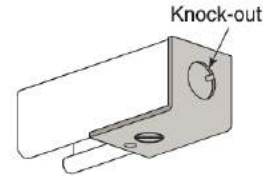
Form Fit Plastic End Caps

Part No. Form Fit	Channel Usage
W5900-M	W201
W5930-M	W200 & W210
W5935-M	W500



W5940 - W5943

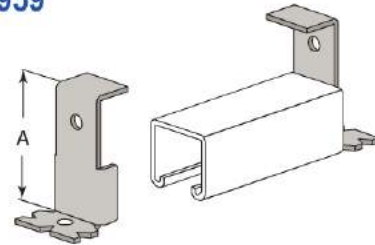
End Cap with knock-outs



Part No.	Knock-out Size	Channel Usage
W5940	1/2"	W200
W5941	3/4"	
W5942	1/2"	W300
W5943	3/4"	

W5952 - W5959

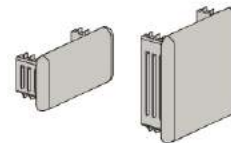
Anchor End Caps



Part No.	A Height	Channel Usage
W5952	3-1/8" (79mm)	W200
W5953	2-3/4" (70mm)	W300
W5958	2-3/8" (60mm)	W800
W5959	2-1/4" (57mm)	W900

B5920 & B5925

Polyurethane End Caps



Part No.	Color	Size	Channel Usage
B5920PLASTICRED	Red	1-5/8" (41mm)	W200, W210
B5925PLASTICRED		3/16" (21mm) & 1/8" (22mm)	W500, W900
B5920PLASTICWHT	White	1-5/8" (41mm)	W200, W210
B5925PLASTICWHT		3/16" (21mm) & 1/8" (22mm)	W500, W900

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Pipe, Tube, & Conduit Supports



Pipe Clamps, Cushioned & Insulated Clamps & Support Saddles



Pipe Clamp Specifications		
Material	ASTM	ASTM Description
Hot Rolled Plate	A 575	Steel, sheet and strip, carbon drawing quality, special killed, hot rolled.
Fitting (Steel)	A 366	Steel carbon, cold rolled sheet, commercial quality structural steel.
	A 366	
	A 36	
Strip Steel: Pipe Clamps	A 569	Steel, sheet and strip, carbon drawing quality, special killed, hot rolled.
Stainless Steel: (ST304 or ST316)	A 240 TYPE 304	Heat resisting chromium and chromium-nickel stainless steel plate, sheet, strip for pressure vessel.
	A 240 TYPE 316	
Aluminum: (AL)	B 221	Aluminum alloy extruded bar, rod, wire, shape and tube.

Pipe Clamp Finish Specifications		
Finish	Finish Code	Description
Paint-Green Powder Coating	GR	A dark green low gloss powder coating is applied and thoroughly baked after steel has been cleaned and phosphatized.
Electroplated	EG	Fittings and hardware supplied as "Electro-Galvanized" in accordance with ASTM B 633.
Mill-Galvanized (Pre-Galvanized)	PG	Galvanized steel used in the manufacture of channel sections conforms to ASTM A 653 GR33 G90. Uncoated edges resulted from slitting, punching and channel cut off are present.
Hot Dip Galvanized After Fabrication (HDGAF)	HG	Wesanco channel and fittings which are hot dip galvanized after fabrication conform to one of the following specifications. ASTM A 123, ASTM A153, or ASTM A386.
Special Coatings	PL, GOLD	Other commercially available finishes can be supplied per specification when required to protect applications. Plain, or Gold (Yellow Zinc Dichromate)

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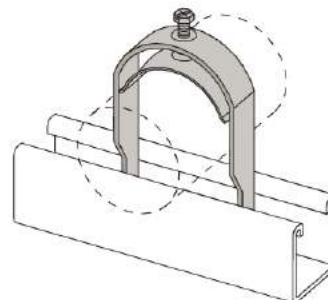
Strut Clamps

Standard Finish: Electro Galvanized (EG)

One-Piece Clamp

Rigid Conduit One Piece Pipe Clamp

Part No.	O.D. Size
BMU050	½" (13mm)
BMU075	¾" (19mm)
BMU100	1" (25mm)
BMU125	1-¼" (32mm)
BMU150	1-½" (38mm)
BMU200	2" (51mm)
BMU250	2-½" (64mm)
BMU300	3" (76mm)
BMU350	3-½" (89mm)
BMU400	4" (102mm)

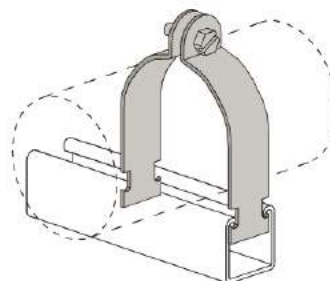


W6025A - W6038A

Thin Wall Conduit Series (E.M.T.)

Part No.	Nominal Size	O.D. Size	Gauge	Allowable Load Lbs. (kN) (ea.)	Slotted Indented Hex Cap Screw
W6025A	⅜" (10mm)	0.577"	16	400 (1.78 kN)	¼" x ¾"
W6026A	½" (13mm)	0.706"	16		¼" x ¾"
W6028A	¾" (19mm)	0.922"	16		¼" x ¾"
W6030A	1" (25mm)	1.163"	14	600 (2.67 kN)	¼" x ¾"
W6032A	1-¼" (32mm)	1.510"	14		¼" x ¾"
W6034A	1-½" (38mm)	1.740"	12	800 (3.56 kN)	⅝" x 1"
W6038A	2" (51mm)	2.197"	12		⅝" x 1"

Each clamp consists of two halves, one kept nut and one slotted hex head cap screw.

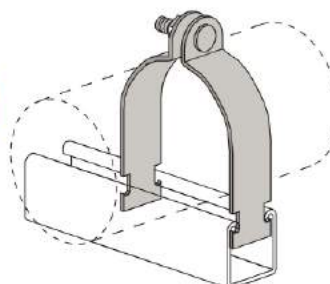


W6056AS - W6068AS

Universal Clamp Series With Welded Stud (E.M.T. Or Iron Pipe)

Part No.	EMT Size	EMT O.D.	Rigid Size	Rigid O.D.	Gauge	Allowable Load Lbs. (kN) (ea.)
W6056AS	½" (13mm)	0.706" (18mm)	½" (13mm)	0.840" (21mm)	16	400 (1.78 kN)
W6058AS	¾" (19mm)	0.922" (23mm)	¾" (19mm)	1.050" (27mm)	16	
W6060AS	1" (25mm)	1.163" (30mm)	1" (25mm)	1.315" (33mm)	14	600 (2.67 kN)
W6062AS	1-¼" (32mm)	1.510" (38mm)	1-¼" (32mm)	1.660" (42mm)	14	
W6064AS	1-½" (38mm)	1.740" (44mm)	1-½" (38mm)	1.900" (48mm)	14	800 (3.56 kN)
W6068AS	2" (51mm)	2.197" (56mm)	2" (51mm)	2.370" (60mm)	14	

Each clamp consists of: one kept nut and two halves; one with a secured stud.



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Strut Clamps

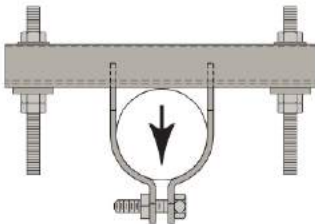
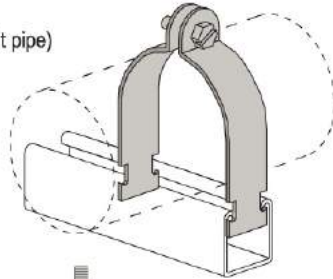
Standard Finish: Electro Galvanized (EG)



W6224A to W6282A

O.D. Tubing Series

(copper tubing, glass or ceramic tubes, and transit pipe)



Allowable Load (Safety Factor: 5)

Part No.	O.D. Size	Gauge	Allowable Load (ea.)	Slotted Indented Hex Screw
W6224A	1/4" (6mm)	16	400 (1.78 kN)	1/2" x 3/4"
W6225A	3/8" (10mm)			
W6226A	1/2" (13mm)			
W6227A	5/8" (16mm)			
W6228A	3/4" (19mm)			
W6229A	7/8" (22mm)			
W6230A	1" (25mm)	14	600 (2.67 kN)	1/2" x 3/4"
W6231A	1-1/8" (29mm)			
W6232A	1-1/4" (32mm)			
W6233A	1-3/8" (35mm)			
W6234A	1-1/2" (38mm)			
W6235A	1-5/8" (41mm)			
W6034A	1-3/4" (44mm)	12	800 (3.56 kN)	5/16" x 1"
W6237A	1-7/8" (48mm)			
W6238A	2" (51mm)			
W6239A	2-1/8" (54mm)			
W6240A	2-1/4" (57mm)			
W6138A	2-3/8" (60mm)			
W6242A	2-1/2" (64mm)			
W6243A	2-5/8" (67mm)			
W6244A	2-3/4" (70mm)			
W6142A	2-7/8" (73mm)			
W6246A	3" (76mm)			
W6247A	3-1/8" (79mm)			
W6248A	3-1/4" (83mm)			
W6249A	3-5/8" (86mm)			
W6146A	3-1/2" (89mm)			

Special Materials Pipe Clamps (Universal Clamps excluded)		
Material	Add Suffix to Part Number	Example
Steel Clamp Everdur Hardware	-E	W6130-E
Aluminum	AL	W6130 AL
Stainless steel type 304	st-304	W6130 st-304
Stainless steel type 316	st-316	W6130 st-316
For assembled clamps	-A	W6130-A
Stainless Uses: Slotted Ind. Hex Screw and Hex Nut		

Part No.	O.D. Size	Gauge	Allowable Load (ea.)	Slotted Indented Hex Screw
W6251A	3-5/8" (92mm)	11	1,000 (4.45 kN)	3/8" x 1-1/4"
W6252A	3-3/4" (95mm)			
W6253A	3-7/8" (98mm)			
W6150A	4" (102mm)			
W6255A	4-1/8" (105mm)			
W6256A	4-1/4" (108mm)			
W6257A	4-3/8" (111mm)			
W6154A	4-1/2" (114mm)			
W6259A	4-5/8" (118mm)			
W6260A	4-3/4" (121mm)			
W6261A	4-7/8" (124mm)			
W6262A	5" (127mm)			
W6263A	5-1/8" (130mm)			
W6264A	5-1/4" (133mm)			
W6265A	5-3/8" (137mm)			
W6266A	5-1/2" (140mm)			
W6267A	5-5/8" (143mm)			
W6268A	5-3/4" (146mm)			
W6269A	5-7/8" (149mm)			
W6270A	6" (152mm)			
W6271A	6-1/4" (159mm)			
W6271BA	6-3/8" (162mm)			
W6271CA	6-1/2" (165mm)			
W6275A	6-5/8" (168mm)			
W6271DA	6-3/4" (171mm)			
W6279A	6-7/8" (175mm)			
W6272A	7" (177mm)			
W6281A	7-1/8" (181mm)			
W6280A	7-3/8" (187mm)			
W6281BA	7-1/4" (200mm)			
W6274A	8" (203mm)			
W6276A	8-1/8" (206mm)			
W6276BA	8-3/8" (213mm)			
W6277A	8-1/2" (222mm)			
W6277CA	8-3/4" (216mm)			
W6278A	10" (254mm)			
W6282A	12" (305mm)			

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Strut Clamps & Pipe Straps

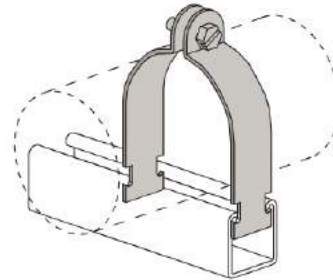
Standard Finish: Electro Galvanized (EG)

W6125A - W6178A

Rigid Steel Conduit Series (Iron Pipe)

Part No.	Nominal Size	O.D. Size	Gauge	Allowable Load Lbs. (kN) (ea.)	Slotted Indented Hex Cap Screw
W6125A	3/8" (10mm)	0.875"	16	400 (1.78 kN)	1/4" x 3/4"
W6126A	1/2" (13mm)	0.840"	16		1/4" x 3/4"
W6128A	3/4" (19mm)	1.050"	14	600 (2.67 kN)	1/4" x 3/4"
W6130A	1" (25mm)	1.315"	14		1/4" x 3/4"
W6132A	1-1/4" (32mm)	1.660"	14		1/4" x 1"
W6134A	1-1/2" (38mm)	1.900"	12	800 (3.56 kN)	5/16" x 1"
W6138A	2" (51mm)	2.375"	12		5/16" x 1"
W6142A	2-1/2" (64mm)	2.875"	12		5/16" x 1"
W6146A	3" (76mm)	3.500"	12	1,000 (4.45 kN)	5/16" x 1"
W6150A	3-1/2" (89mm)	4.000"	11		3/8" x 1-1/4"
W6154A	4" (102mm)	4.500"	11		3/8" x 1-1/4"
W6162A	5" (127mm)	5.563"	11		3/8" x 1-1/4"
W6170A	6" (152mm)	6.625"	10		3/8" x 1-1/4"
W6174A	8" (203mm)	8.625"	10		3/8" x 1-1/4"
W6176A	10" (254mm)	10.750"	10		3/8" x 1-1/4"
W6178A	12" (305mm)	12.750"	10		3/8" x 1-1/4"

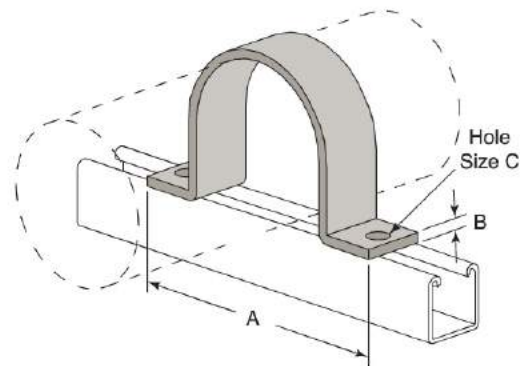
Each clamp consists of two halves, one kept nut and one slotted hex head cap screw.
Ref: page 240 for Special Materials Specification



W7826 - W7870

Standard Pipe Straps

Part No.	Pipe Size	A Length	B Material Thickness	C Hole Size
W7826	1/2"	3" (76mm)	1/8" (3.2mm)	9/32" (7.1mm)
W7828	3/4"	3-1/4" (83mm)		
W7830	1"	3-9/16" (90mm)		
W7832	1-1/4"	3-13/16" (97mm)		
W7834	1-1/2"	4-1/4" (103mm)	1/4" (6.4mm)	7/16" (11.1mm)
W7838	2"	5-13/16" (148mm)		
W7842	2-1/2"	6-1/4" (159mm)		
W7846	3"	7" (178mm)		
W7850	3-1/2"	7-7/8" (200mm)		
W7854	4"	8" (203mm)		
W7862	5"	9-1/8" (232mm)		
W7870	6"	10-5/8" (262mm)		



Requires machine screw and channel nuts (not included) order separately.

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J-Hanger & Tube Clamps

Standard Finish: Electro Galvanized (EG)



W4050 to W4400

J-Hanger

Finish: Electro Galvanized (standard) or Stainless Steel

Size Range: 1/2" thru 4" (13mm to 102mm) Pipe

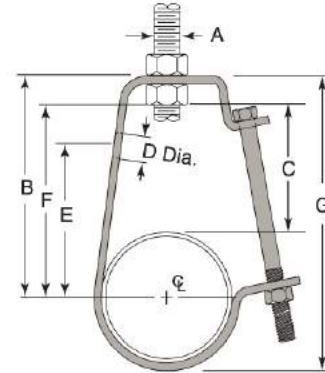
Material: Carbon Steel

Function: Can be suspended by hanger rod or attached to a wall. "T" slot in hanger permits side bolt to be installed after installation and setting of pipe.

Approvals: Conforms to Manufacturers Standardization Society SP-69, Type 5.

Maximum Temperature: 650° F (343°C)

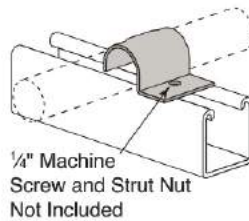
Finish: Carbon Steel



Part No.	Pipe Size	A Rod Size	B	C	D	E	F	Bolt Size	G	Stock Size	Max. Rec. Load Lbs. (kN)
W4050	1/2"	3/8"	2-3/8" (67 mm)	1-3/4" (44 mm)	7/16" (11 mm)	1-1/2" (38 mm)	1-15/16" (49 mm)	1/4"	3-5/32" (80 mm)	12 ga. x 3/4"	400 (1.78 kN)
W4075	3/4"		2-1/8" (73 mm)	1-7/8" (49 mm)		1-11/16" (43 mm)	2-1/8" (54 mm)		3-1/2" (89 mm)		
W4100	1"		2-15/16" (75 mm)	1-15/16" (49 mm)		1-13/16" (46 mm)	2-5/8" (59 mm)		3-11/16" (94 mm)		
W4125	1-1/4"		3-1/4" (83 mm)	2" (51 mm)		2-1/8" (52 mm)	2-3/8" (67 mm)		4-1/8" (105 mm)		
W4150	1-1/2"		3-9/16" (90 mm)	2-3/16" (56 mm)		2-7/16" (62 mm)	2-7/8" (73 mm)		4-5/8" (117 mm)		
W4200	2"	1/2"	3-11/16" (94 mm)	2-7/8" (54 mm)	3/16" (14 mm)	2-3/16" (65 mm)	3-1/8" (78 mm)	3/8"	5" (127 mm)	12 ga. x 1-1/4"	500 (2.22 kN)
W4250	2-1/2"		4-7/16" (113 mm)	2-7/16" (62 mm)		3-3/16" (81 mm)	3-3/8" (92 mm)		6" (152 mm)		
W4300	3"		4-13/16" (122 mm)	2-9/16" (65 mm)		3-7/16" (89 mm)	4-1/16" (103 mm)		6-21/64" (169 mm)		
W4350	3-1/2"		5-1/8" (130 mm)	2-5/8" (67 mm)		3-3/4" (95 mm)	4-3/8" (111 mm)		7-5/16" (186 mm)		
W4400	4"		6-1/8" (156 mm)	3-3/16" (81 mm)		4-5/8" (117 mm)	5-3/16" (132 mm)		8-9/16" (217 mm)		550 (2.45 kN)

W7724 - W7730

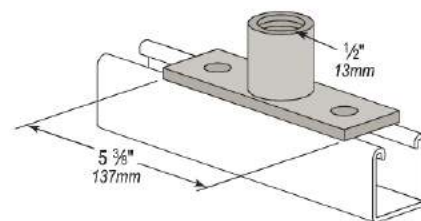
One-Hole Tubing Clamps



Part No.	O.D. Tube Size
W7724	1/4"
W7724A	5/16"
W7725	3/8"
W7726	1/2"
W7727	5/8"
W7728	3/4"
W7729	7/8"
W7730	1"

W2470-50

Pipe Coupling Fitting



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Concrete Inserts

Rooftop Supports

Gamma Pads

Technical Data



Cush-A-Nator®

Cush-A-Nator®



Cush-A-Nator
Standard
-50°F to 275°F

Cush-A-Nator
High Temp
-65°F to 340°F

Cush-A-Nator
High Intensity Temp
-65°F to 400°F



New Cush-A-Nator High Intensity Temp
has a service temperature of
-65°F to 400°F

The Cush-A-Nator® is designed to provide the user with a choice of the highest heat range resistance of any cushion on the market or simply the advanced features of a superior design.
The Cush-A-Nator is designed and manufactured in Michigan.



Features

A Thumb Drive

The Cush-A-Nator has the exclusive "Thumb Drive" that provides the installer a gripping point to easily open the cushion with the help of leverage tabs and a living hinge. Easy and effortlessly to install.

B Self-Alignment

Cushion can be opened and placed over the pipe or tube and rotated into place while on the channel and automatically aligned with the channel opening ready for clamping.

Cush-A-Nator® is manufactured under U.S. patents #9074715, #D702113, #D710190, and European Community patents #0013843410001, #0013843410002, and a United Kingdom patent pending.

C Pressure Control

The Cush-A-Nator cushion has a built in squeeze control as part of the cushion design. The side opening and the squeeze control tab provides evenly distributed pressure around the tube or pipe.

D Complete Clamping Unit

The Cush-A-Nator is the only strut mounted cushion that is mechanically connected to the supporting steel clamp because the bolt passes through the squeeze control tab forming the single unit connection. This design helps prevent the cushion from excess vibration by being attached directly to the clamp.

Installation examples shown on next page

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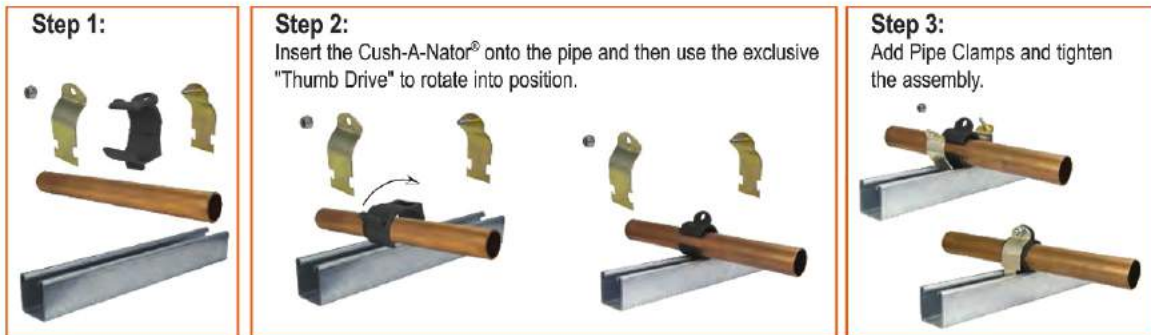


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Cush-A-Nator®



Cush-A-Nator® – New Installations



Cush-A-Nator® – Retrofit / Replacement Applications

A key feature of the Cush-A-Nator is this ability to place the cushion and rotate into position. **Perfect for retrofit applications!**

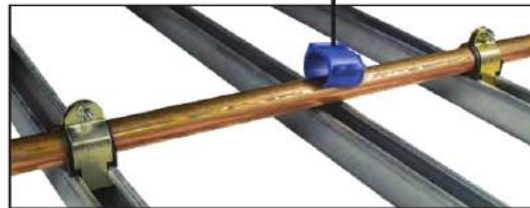
Retrofit - The Common Problem

Replacing a cushion within a long pipe run poses a problem. Clamps before and after the one to be replaced prohibit the pipe from being raised so that the new cushion can be installed correctly. All too often a work-around is used which compromises the connection.

Retrofit - The Perfect Solution

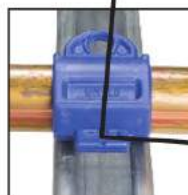
Step 1: Remove Bad Cushion.

Step 2: The Cush-A-Nator can be installed without raising the pipe. The unique "Thumb Drive" allows you to rotate the Cush-A-Nator into position.

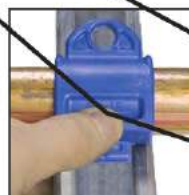


Step 3: Rotated into place while on the channel and the Self-Alignment tab automatically aligns with the channel opening ready for clamping.

Step 3: Add Pipe Clamps and tighten the assembly.



Rotate into Position



Thumb Drive



"Self-Alignment"

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Loop & Ring
Clamps

Belt Clamps
& Z-Clamps

Concrete
Inserts

Rooftop
Supports

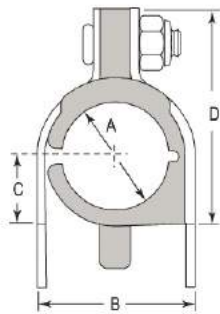
Gamma
Pads

Technical
Data



Cush-A-Nator®

Cush-A-Nator® Standard (CN) has an operating range of
-50°F to 275°F (-45°C to 135°C).



Cush-A-Nator® Standard (CN) Tube Part No.			O.D. Tube Size	Dimensions (inches)			
Steel	SS304	SS316		A	B	C	D
CN04	CN04SS	CN04S6	1/4"	0.25" (6mm)	0.62" (16mm)	0.27" (7mm)	0.98" (25mm)
CN06	CN06SS	CN06S6	3/8"	0.37" (9mm)	0.82" (21mm)	0.33" (8mm)	1.13" (29mm)
CN08	CN08SS	CN08S6	1/2"	0.50" (13mm)	0.94" (24mm)	0.40" (10mm)	1.34" (34mm)
CN10	CN10SS	CN10S6	5/8"	0.62" (16mm)	1.06" (27mm)	0.46" (12mm)	1.54" (39mm)
CN12	CN12SS	CN12S6	3/4"	0.75" (19mm)	1.20" (30mm)	0.52" (13mm)	1.66" (43mm)
CN14	CN14SS	CN14S6	7/8"	0.87" (22mm)	1.31" (33mm)	0.58" (15mm)	1.82" (46mm)
CN16	CN16SS	CN16S6	1"	1.00" (25mm)	1.44" (37mm)	0.65" (17mm)	1.95" (50mm)
CN18	CN18SS	CN18S6	1 1/8"	1.12" (28mm)	1.57" (40mm)	0.70" (18mm)	2.08" (53mm)
CN20	CN20SS	CN20S6	1 1/4"	1.25" (32mm)	1.70" (43mm)	0.77" (20mm)	2.21" (56mm)
CN32M	CN32MSS	CN32MS6	32mm	32mm	1.51" (38mm)	0.76" (19mm)	2.55" (65mm)
CN22	CN22SS	CN22S6	1 3/8"	1.37" (35mm)	1.82" (46mm)	0.83" (21mm)	2.34" (59mm)
CN24	CN24SS	CN24S6	1 1/2"	1.50" (38mm)	1.95" (50mm)	0.90" (23mm)	2.47" (63mm)
CN26	CN26SS	CN26S6	1 5/8"	1.62" (41mm)	2.07" (53mm)	0.96" (24mm)	2.60" (66mm)
CN28	CN28SS	CN28S6	1 3/4"	1.75" (45mm)	2.20" (56mm)	1.02" (26mm)	2.73" (69mm)
CN30	CN30SS	CN30S6	1 7/8"	1.87" (48mm)	2.32" (59mm)	1.09" (28mm)	2.86" (73mm)
CN32	CN32SS	CN32S6	2"	2.00" (51mm)	2.45" (62mm)	1.15" (29mm)	3.04" (77mm)
CN34	CN34SS	CN34S6	2 1/8"	2.12" (54mm)	2.57" (65mm)	1.27" (32mm)	3.23" (82mm)
CN36	CN36SS	CN36S6	2 1/4"	2.25" (57mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
CN38	CN38SS	CN38S6	2 3/8"	2.37" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
CN40	CN40SS	CN40S6	2 1/2"	2.50" (64mm)	2.94" (75mm)	1.46" (37mm)	3.78" (96mm)
CN42	CN42SS	CN42S6	2 5/8"	2.62" (66mm)	3.07" (78mm)	1.53" (39mm)	3.92" (100mm)
CN46	CN46SS	CN46S6	2 1/2"	2.87" (73mm)	3.32" (84mm)	1.66" (42mm)	4.17" (106mm)
CN75M	CN75MSS	CN75MS6	75mm	75mm	3.37" (86mm)	1.69" (43mm)	4.68" (119mm)
CN48	CN48SS	CN48S6	3"	3.00" (76mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
CN50	CN50SS	CN50S6	3 1/8"	3.12" (79mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
CN56	CN56SS	CN56S6	3 1/2"	3.50" (89mm)	3.95" (100mm)	1.97" (50mm)	4.79" (122mm)
CN90M	CN90MSS	CN90MS6	90mm	90mm	3.86" (98mm)	1.94" (49mm)	5.23" (133mm)
CN64	CN64SS	CN64S6	4"	4.00" (102mm)	4.45" (113mm)	2.28" (58mm)	5.11" (130mm)
CN66	CN66SS	CN66S6	4 1/8"	4.12" (105mm)	4.57" (116mm)	2.34" (59mm)	5.54" (141mm)
CN110M	CN110MSS	CN110MS6	110mm	110mm	4.99" (127mm)	2.81" (71mm)	6.38" (162mm)
CN72	CN72SS	CN72S6	4 1/2"	4.50" (114mm)	4.95" (126mm)	2.53" (64mm)	5.92" (150mm)
CN125M	CN125MSS	CN125MS6	125mm	125mm	5.61" (142mm)	2.81" (71mm)	7.00" (178mm)
CN96	CN96SS	CN96S6	6"	6.00" (152mm)	6.62" (168mm)	3.31" (84mm)	7.63" (194mm)
CN160M	CN160MSS	CN160MS6	160mm	160mm	6.62" (168mm)	3.31" (84mm)	7.63" (194mm)

Cush-A-Nator® Standard (CN) Pipe Part No.			Pipe Size	Dimensions (inches)			
Steel	SS304	SS316		A	B	C	D
CN14P	CN14PSS	CN14PS6	1/2"	0.840" (21mm)	1.29" (33mm)	0.58" (15mm)	1.82" (46mm)
CN17P	CN17PSS	CN17PS6	3/4"	1.050" (27mm)	1.57" (40mm)	0.70" (18mm)	2.08" (53mm)
CN21P	CN21PSS	CN21PS6	1"	1.315" (33mm)	1.76" (45mm)	0.81" (21mm)	2.34" (59mm)
CN30P	CN30PSS	CN30PS6	1 1/2"	1.900" (49mm)	2.32" (59mm)	1.09" (28mm)	2.86" (73mm)
CN38P	CN38PSS	CN38PS6	2"	2.375" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
CN46P	CN46PSS	CN46PS6	2 1/2"	2.875" (73mm)	3.32" (84mm)	1.66" (42mm)	4.17" (106mm)
CN56P	CN56PSS	CN56PS6	3"	3.500" (89mm)	3.95" (100mm)	1.97" (50mm)	4.79" (122mm)
CN64P	CN64PSS	CN64PS6	3 1/2"	4.000" (102mm)	4.45" (113mm)	2.28" (58mm)	5.11" (130mm)
CN72P	CN72PSS	CN72PS6	4"	4.500" (114mm)	4.95" (126mm)	2.53" (64mm)	5.92" (150mm)

Contact Factory for Additional Sizes

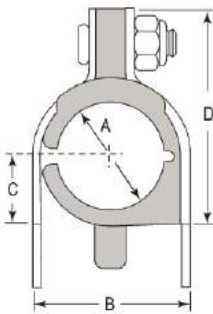
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Cush-A-Nator®



Cush-A-Nator® High Temp (HT) has service temperatures of -65°F to 340°F (-53°C to 170°C).

Cush-A-Nator® High Temp (HT) Tube Part No.			O.D. Tube Size	Dimensions (inches)			
Steel	SS304	SS316		A	B	C	D
HT04	HT04SS	HT04S6	1/4"	0.25" (6mm)	0.62" (16mm)	0.27" (7mm)	0.98" (25mm)
HT06	HT06SS	HT06S6	3/8"	0.37" (9mm)	0.82" (21mm)	0.33" (8mm)	1.13" (29mm)
HT08	HT08SS	HT08S6	1/2"	0.50" (13mm)	0.94" (24mm)	0.40" (10mm)	1.34" (34mm)
HT10	HT10SS	HT10S6	5/8"	0.62" (16mm)	1.06" (27mm)	0.46" (12mm)	1.54" (39mm)
HT12	HT12SS	HT12S6	3/4"	0.75" (19mm)	1.20" (30mm)	0.52" (13mm)	1.68" (43mm)
HT14	HT14SS	HT14S6	7/8"	0.87" (22mm)	1.31" (33mm)	0.58" (15mm)	1.82" (46mm)
HT16	HT16SS	HT16S6	1"	1.00" (25mm)	1.44" (37mm)	0.65" (17mm)	1.95" (50mm)
HT18	HT18SS	HT18S6	1 1/8"	1.12" (28mm)	1.57" (40mm)	0.70" (18mm)	2.08" (53mm)
HT20	HT20SS	HT20S6	1 1/4"	1.25" (32mm)	1.70" (43mm)	0.77" (20mm)	2.21" (56mm)
HT32M	HT32MSS	HT32MS6	32mm	32mm	1.51" (38mm)	0.76" (19mm)	2.55" (65mm)
HT22	HT22SS	HT22S6	1 3/8"	1.37" (35mm)	1.82" (46mm)	0.83" (21mm)	2.34" (59mm)
HT24	HT24SS	HT24S6	1 1/2"	1.50" (38mm)	1.95" (50mm)	0.90" (23mm)	2.47" (63mm)
HT26	HT26SS	HT26S6	1 5/8"	1.62" (41mm)	2.07" (53mm)	0.96" (24mm)	2.62" (66mm)
HT28	HT28SS	HT28S6	1 3/4"	1.75" (45mm)	2.20" (56mm)	1.02" (26mm)	2.73" (69mm)
HT30	HT30SS	HT30S6	1 7/8"	1.87" (48mm)	2.32" (59mm)	1.09" (28mm)	2.86" (73mm)
HT32	HT32SS	HT32S6	2"	2.00" (51mm)	2.45" (62mm)	1.15" (29mm)	3.04" (77mm)
HT34	HT34SS	HT34S6	2 1/8"	2.12" (54mm)	2.57" (65mm)	1.27" (32mm)	3.23" (82mm)
HT36	HT36SS	HT36S6	2 1/4"	2.25" (57mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
HT38	HT38SS	HT38S6	2 3/8"	2.37" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
HT40	HT40SS	HT40S6	2 1/2"	2.50" (64mm)	2.94" (75mm)	1.46" (37mm)	3.79" (96mm)
HT42	HT42SS	HT42S6	2 5/8"	2.62" (66mm)	3.07" (78mm)	1.53" (39mm)	3.92" (100mm)
HT46	HT46SS	HT46S6	2 1/2"	2.87" (73mm)	3.32" (84mm)	1.66" (42mm)	4.17" (106mm)
HT75M	HT75MSS	HT75MS6	75mm	75mm	3.37" (86mm)	1.69" (43mm)	4.68" (119mm)
HT48	HT48SS	HT48S6	3"	3.00" (76mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
HT50	HT50SS	HT50S6	3 1/8"	3.12" (79mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
HT56	HT56SS	HT56S6	3 1/2"	3.50" (89mm)	3.95" (100mm)	1.97" (50mm)	4.79" (122mm)
HT90M	HT90MSS	HT90MS6	90mm	90mm	3.86" (98mm)	1.94" (49mm)	5.23" (133mm)
HT64	HT64SS	HT64S6	4"	4.00" (102mm)	4.45" (113mm)	2.28" (58mm)	5.11" (130mm)
HT66	HT66SS	HT66S6	4 1/8"	4.12" (105mm)	4.57" (116mm)	2.34" (59mm)	5.54" (141mm)
HT110M	HT110MSS	HT110MS6	110mm	110mm	4.99" (127mm)	2.81" (71mm)	6.39" (162mm)
HT72	HT72SS	HT72S6	4 1/2"	4.50" (114mm)	4.95" (126mm)	2.53" (64mm)	5.92" (150mm)
HT125M	HT125MSS	HT125MS6	125mm	125mm	5.61" (142mm)	2.81" (71mm)	7.00" (178mm)
HT96	HT96SS	HT96S6	6"	6.00" (152mm)	6.62" (168mm)	3.31" (84mm)	7.63" (194mm)
HT160M	HT160MSS	HT160MS6	160mm	160mm	6.62" (168mm)	3.31" (84mm)	7.63" (194mm)

Cush-A-Nator® High Temp (HT) Pipe Part No.			Pipe Size	Dimensions (inches)			
Steel	SS304	SS316		A	B	C	D
HT14P	HT14PSS	HT14PS6	1/2"	0.840" (21mm)	1.29" (33mm)	0.58" (15mm)	1.82" (46mm)
HT17P	HT17PSS	HT17PS6	3/4"	1.050" (27mm)	1.57" (40mm)	0.70" (18mm)	2.08" (53mm)
HT21P	HT21PSS	HT21PS6	1"	1.315" (33mm)	1.76" (45mm)	0.81" (21mm)	2.34" (59mm)
HT30P	HT30PSS	HT30PS6	1 1/2"	1.900" (48mm)	2.32" (59mm)	1.09" (28mm)	2.86" (73mm)
HT38P	HT38PSS	HT38PS6	2"	2.375" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
HT46P	HT46PSS	HT46PS6	2 1/2"	2.875" (73mm)	3.32" (84mm)	1.66" (42mm)	4.17" (106mm)
HT56P	HT56PSS	HT56PS6	3"	3.500" (89mm)	3.95" (100mm)	1.97" (50mm)	4.79" (122mm)
HT64P	HT64PSS	HT64PS6	3 1/2"	4.000" (102mm)	4.45" (113mm)	2.28" (58mm)	5.11" (130mm)
HT72P	HT72PSS	HT72PS6	4"	4.500" (114mm)	4.95" (126mm)	2.53" (64mm)	5.92" (150mm)

Contact Factory for Additional Sizes

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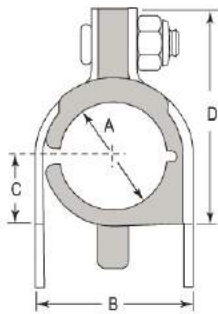


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Introduction
Channel
Channel Nuts & Hardware
General Fittings
Pipe & Conduit Supports
Electrical Fittings
Spring Steel
Loop & Ring Clamps
Belt Clamps & Z-Clamps
Concrete Inserts
Roofing Supports
Gamma Pads
Technical Data



Cush-A-Nator®



Cush-A-Nator® High Intensity Temp (HIT) has service temperatures of -65°F to 400°F (-53°C to 204°C).

Cush-A-Nator® High Intensity Temp (HIT) Tube Part No.			O.D. Tube Size	Dimensions (inches)			
Steel	SS304	SS316		A	B	C	D
HIT04	HIT04SS	HIT04S6	¼"	0.25" (6mm)	0.62" (16mm)	0.27" (7mm)	0.98" (25mm)
HIT06	HIT06SS	HIT06S6	⅜"	0.37" (9mm)	0.82" (21mm)	0.33" (8mm)	1.13" (29mm)
HIT08	HIT08SS	HIT08S6	½"	0.50" (13mm)	0.94" (24mm)	0.40" (10mm)	1.34" (34mm)
HIT10	HIT10SS	HIT10S6	⅝"	0.62" (16mm)	1.06" (27mm)	0.46" (12mm)	1.54" (39mm)
HIT12	HIT12SS	HIT12S6	¾"	0.75" (19mm)	1.20" (30mm)	0.52" (13mm)	1.68" (43mm)
HIT14	HIT14SS	HIT14S6	⅞"	0.87" (22mm)	1.31" (33mm)	0.58" (15mm)	1.82" (46mm)
HIT16	HIT16SS	HIT16S6	1"	1.00" (25mm)	1.44" (37mm)	0.65" (17mm)	1.95" (50mm)
HIT18	HIT18SS	HIT18S6	1⅛"	1.12" (28mm)	1.51" (40mm)	0.70" (18mm)	2.08" (53mm)
HIT20	HIT20SS	HIT20S6	1¼"	1.25" (32mm)	1.70" (43mm)	0.77" (20mm)	2.21" (56mm)
HIT32M	HIT32MSS	HIT32MS6	32mm	32mm	1.51" (38mm)	0.76" (19mm)	2.55" (65mm)
HIT22	HIT22SS	HIT22S6	1⅞"	1.37" (35mm)	1.82" (46mm)	0.83" (21mm)	2.34" (59mm)
HIT24	HIT24SS	HIT24S6	1½"	1.50" (38mm)	1.95" (50mm)	0.90" (23mm)	2.47" (63mm)
HIT26	HIT26SS	HIT26S6	1⅞"	1.62" (41mm)	2.07" (53mm)	0.96" (24mm)	2.60" (66mm)
HIT28	HIT28SS	HIT28S6	1¾"	1.75" (45mm)	2.20" (56mm)	1.02" (26mm)	2.73" (69mm)
HIT30	HIT30SS	HIT30S6	1⅞"	1.87" (48mm)	2.32" (59mm)	1.09" (28mm)	2.86" (73mm)
HIT32	HIT32SS	HIT32S6	2"	2.00" (51mm)	2.45" (62mm)	1.15" (29mm)	3.04" (77mm)
HIT34	HIT34SS	HIT34S6	2⅛"	2.12" (54mm)	2.57" (65mm)	1.27" (32mm)	3.23" (82mm)
HIT36	HIT36SS	HIT36S6	2¼"	2.25" (57mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
HIT38	HIT38SS	HIT38S6	2⅝"	2.37" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
HIT40	HIT40SS	HIT40S6	2½"	2.50" (64mm)	2.94" (75mm)	1.46" (37mm)	3.79" (96mm)
HIT42	HIT42SS	HIT42S6	2⅞"	2.62" (66mm)	3.07" (78mm)	1.53" (39mm)	3.92" (100mm)
HIT46	HIT46SS	HIT46S6	2⅞"	2.87" (73mm)	3.32" (84mm)	1.66" (42mm)	4.17" (106mm)
HIT75M	HIT75MSS	HIT75MS6	75mm	75mm	3.37" (86mm)	1.69" (43mm)	4.68" (119mm)
HIT48	HIT48SS	HIT48S6	3"	3.00" (76mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
HIT50	HIT50SS	HIT50S6	3⅞"	3.12" (79mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
HIT56	HIT56SS	HIT56S6	3½"	3.50" (89mm)	3.95" (100mm)	1.97" (50mm)	4.79" (122mm)
HIT90M	HIT90MSS	HIT90MS6	90mm	90mm	3.86" (98mm)	1.94" (49mm)	5.23" (133mm)
HIT64	HIT64SS	HIT64S6	4"	4.00" (102mm)	4.45" (113mm)	2.28" (58mm)	5.11" (130mm)
HIT66	HIT66SS	HIT66S6	4⅞"	4.12" (105mm)	4.57" (116mm)	2.34" (59mm)	5.54" (141mm)
HIT110M	HIT110MSS	HIT110MS6	110mm	110mm	4.99" (127mm)	2.81" (71mm)	6.38" (162mm)
HIT72	HIT72SS	HIT72S6	4½"	4.50" (114mm)	4.95" (126mm)	2.53" (64mm)	5.92" (150mm)
HIT125M	HIT125MSS	HIT125MS6	125mm	125mm	5.61" (142mm)	2.81" (71mm)	7.00" (178mm)
HIT96	HIT96SS	HIT96S6	6"	6.00" (152mm)	6.62" (168mm)	3.31" (84mm)	7.63" (194mm)
HIT160M	HIT160MSS	HIT160MS6	160mm	160mm	6.62" (168mm)	3.31" (84mm)	7.63" (194mm)

Cush-A-Nator® High Intensity Temp (HIT) Pipe Part No.			Pipe Size	Dimensions (inches)			
Steel	SS304	SS316		A	B	C	D
HIT14P	HIT14PSS	HIT14PS6	½"	0.840" (21mm)	1.29" (33mm)	0.58" (15mm)	1.82" (46mm)
HIT17P	HIT17PSS	HIT17PS6	¾"	1.050" (27mm)	1.57" (40mm)	0.70" (18mm)	2.08" (53mm)
HIT21P	HIT21PSS	HIT21PS6	1"	1.315" (33mm)	1.76" (45mm)	0.81" (21mm)	2.34" (59mm)
HIT30P	HIT30PSS	HIT30PS6	1½"	1.900" (48mm)	2.32" (59mm)	1.09" (28mm)	2.86" (73mm)
HIT38P	HIT38PSS	HIT38PS6	2"	2.375" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
HIT46P	HIT46PSS	HIT46PS6	2½"	2.875" (73mm)	3.32" (84mm)	1.66" (42mm)	4.17" (106mm)
HIT56P	HIT56PSS	HIT56PS6	3"	3.500" (89mm)	3.95" (100mm)	1.97" (50mm)	4.79" (122mm)
HIT64P	HIT64PSS	HIT64PS6	3½"	4.000" (102mm)	4.45" (113mm)	2.28" (58mm)	5.11" (130mm)
HIT72P	HIT72PSS	HIT72PS6	4"	4.500" (114mm)	4.95" (126mm)	2.53" (64mm)	5.92" (150mm)

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Cush-A-Clamp®



Cush-A-Clamp®



Gold Electro-Galvanized Steel



Stainless Steel



The "Living Hinge" allows the cushion to be spread apart for quick, easy installation.

CUSH-A-CLAMP — Channel mounted clamping systems are ideal for multiple line runs, while absorbing shock and vibration, reducing unwanted noise, and preventing galvanic corrosion. Cush-A-Clamp fits any standard 1-5/8" wide channel.

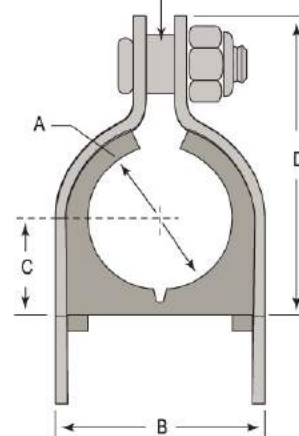
Assembly consisting of steel clamp with locknut and thermoplastic elastomer cushion. All parts are marked for easy identification and packaged for small lot or bulk use. When specified, Cush-A-Clamp assemblies up to 2", are available individually packaged.

THE CLAMP — Features a unique shoulder stud which is securely fastened to one clamp half. Steel clamps for tube sizes up to 1-3/8" have the "Controlled Squeeze™" design which eliminates over-tightening and rotation while a nylon-insert nut assures a positive lock. Clamps are available in steel (with electro-dichromate finish), and stainless steel type 304. (Contact factory for type 316).

THE CUSHION — Made from a thermoplastic elastomer, it's built tough to withstand the effects of most oils, chemicals and industrial cleaning compounds, in temperatures from -50°F to 275°F. Interlock edges and channel locator legs ensure that the cushion remains in place.

INSTALLATION — One man, one tool time savings. Retrofits can be added without disassembly. The "Living Hinge" allows the cushion to be spread apart for quick, easy installation on sizes from 1/4" through 1-3/4".

Controlled Squeeze Shoulder Bolt



Loading Values Mounted in Standard 12 Gage Channel					
Nut	Torque (in-lbs)	Products	Pullout (lbs)	Slip (lbs)	
				Along	Through
1/4"	40	004T008 - 022T026	1,000	100	100
5/16"	60	024T028 - 050N056	2,200	200	200
3/8"	150	053N050 - 106N114	3,600	600	350

Loads are the same for Stainless Steel Clamps (Example 024NS028)



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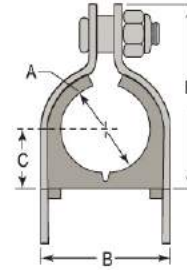
Cush-A-Clamp®



Gold Electro-Galvanized Steel



Stainless Steel



Steel Part No.	Stainless Steel Part No.	Dimension "A"			Dimensions (Inches)			
		*Copper and Steel Tubing	Copper Water Pipe (Nom.)	Nom. Pipe Size	A	B	C	D
004T008	004NS008	1/4"	-	-	0.25" (6mm)	0.62" (16mm)	0.27" (7mm)	0.98" (25mm)
006T010	006NS010	3/8"	1/4"	-	0.37" (9mm)	0.82" (21mm)	0.33" (8mm)	1.13" (29mm)
008T012	008NS012	1/2"	3/8"	-	0.50" (13mm)	0.94" (24mm)	0.40" (10mm)	1.34" (34mm)
009N012	009NS012	-	-	1/4"	0.54" (14mm)	0.98" (25mm)	0.43" (11mm)	1.34" (34mm)
010T014	010NS014	5/8"	1/2"	-	0.62" (16mm)	1.06" (27mm)	0.46" (12mm)	1.54" (39mm)
011N014	011NS014	-	-	3/8"	0.67" (17mm)	1.13" (29mm)	0.49" (12mm)	1.54" (39mm)
012T016	012NS016	3/4"	5/8"	-	0.75" (19mm)	1.20" (30mm)	0.52" (13mm)	1.68" (43mm)
014N018	014NS018	-	-	1/2"	0.84" (21mm)	1.29" (33mm)	0.58" (15mm)	1.82" (46mm)
014T018	014NS018	7/8"	3/4"	-	0.87" (22mm)	1.31" (33mm)	0.58" (15mm)	1.82" (46mm)
016T020	016NS020	1"	-	-	1.00" (25mm)	1.44" (37mm)	0.65" (17mm)	1.95" (50mm)
017N022	017NS022	-	-	3/4"	1.05" (27mm)	1.57" (40mm)	0.70" (18mm)	2.08" (53mm)
018T022	018NS022	1-1/8"	1"	-	1.12" (28mm)	1.57" (40mm)	0.70" (18mm)	2.08" (53mm)
020T024	020NS024	1-1/4"	-	-	1.25" (32mm)	1.70" (43mm)	0.77" (20mm)	2.21" (56mm)
021N026	021NS026	-	-	1"	1.31" (33mm)	1.76" (45mm)	0.81" (21mm)	2.34" (59mm)
022T026	022NS026	1-3/8"	1-1/4"	-	1.37" (35mm)	1.82" (46mm)	0.83" (21mm)	2.34" (59mm)
024N028	024NS028	1-1/2"	-	-	1.50" (38mm)	1.95" (50mm)	0.90" (23mm)	2.47" (63mm)
026N030	026NS030	1-5/8"	1-1/2"	-	1.62" (41mm)	2.07" (53mm)	0.96" (24mm)	2.60" (66mm)
027N032	027NS032	-	-	1-1/4"	1.66" (42mm)	2.17" (55mm)	0.99" (25mm)	2.73" (69mm)
028N032	028NS032	1-3/4"	-	-	1.75" (44mm)	2.2" (56mm)	1.02" (26mm)	2.73" (69mm)
030N034	030NS034	1-7/8"	-	1-1/2"	1.90" (48mm)	2.32" (59mm)	1.09" (28mm)	2.86" (73mm)
032N036	032NS036	2"	-	-	2.00" (51mm)	2.45" (62mm)	1.15" (29mm)	3.04" (77mm)
034N040	034NS040	2-1/8"	2"	-	2.12" (54mm)	2.57" (65mm)	1.27" (32mm)	3.23" (82mm)
038N042	038NS042	2-1/4"	-	-	2.37" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
038N044	038NS044	2-3/8"	-	2"	2.37" (60mm)	2.82" (72mm)	1.41" (36mm)	3.67" (93mm)
040N046	040NS046	2-1/2"	-	-	2.50" (64mm)	2.94" (75mm)	1.46" (37mm)	3.79" (96mm)
042N048	042NS048	2-5/8"	2-1/2"	-	2.62" (67mm)	3.07" (78mm)	1.53" (39mm)	3.92" (100mm)
046N052	046NS052	2-7/8"	-	2-1/2"	2.87" (73mm)	3.32" (84mm)	1.66" (42mm)	4.17" (106mm)
050N054	050NS054	3"	-	-	3.00" (76mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
050N056	050NS056	3-1/8"	3"	-	3.12" (79mm)	3.57" (91mm)	1.78" (45mm)	4.42" (112mm)
053N060	053NS060	3-5/16"	-	-	3.31" (84mm)	3.96" (101mm)	1.90" (48mm)	4.75" (121mm)
056N062	056NS062	3-1/2"	-	3"	3.50" (89mm)	3.95" (100mm)	1.97" (50mm)	4.79" (122mm)
058N064	058NS064	3-5/8"	3-1/2"	-	3.62" (92mm)	4.20" (107mm)	2.03" (52mm)	5.11" (130mm)
064N072	064NS072	4"	-	3-1/2"	4.00" (102mm)	4.45" (113mm)	2.28" (58mm)	5.11" (130mm)
066N074	066NS074	4-1/8"	4"	-	4.12" (105mm)	4.57" (116mm)	2.34" (59mm)	5.54" (141mm)
069N076	069NS076	4-5/16"	-	-	4.34" (110mm)	4.96" (126mm)	2.40" (61mm)	5.84" (148mm)
072N080	072NS080	4-1/2"	-	4"	4.50" (114mm)	4.95" (126mm)	2.53" (64mm)	5.92" (150mm)
082N090	082NS090	5-1/8"	5"	-	5.12" (130mm)	5.57" (141mm)	2.84" (72mm)	6.54" (166mm)
089N096	089NS096	-	-	5"	5.56" (141mm)	6.01" (153mm)	3.06" (78mm)	6.92" (176mm)
096N106	096NS106	6"	-	-	6.00" (152mm)	6.57" (167mm)	3.34" (85mm)	7.54" (192mm)
098N106	098NS106	6-1/8"	6"	-	6.12" (155mm)	6.57" (167mm)	3.34" (85mm)	7.54" (192mm)
106N114	106NS114	-	-	6"	6.62" (168mm)	7.07" (180mm)	3.59" (91mm)	8.23" (209mm)

*Tube O.D. is Cushion I.D. Design load deflection data available on request.

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Cush-A-Therm®



Airtight Crush-Resistant Insulation Clamp

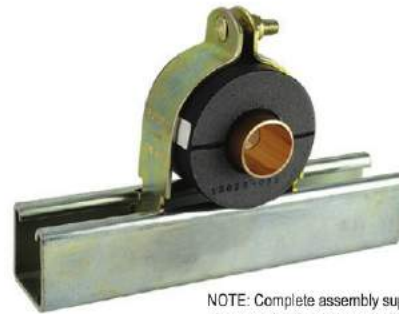


Cush-A-Therm Clamp is a perfect crush-resistant airtight seal for chilled refrigeration or mechanical pipe lines that require continuous insulation.

The rigid foam construction has an insulating tape inner lining which supports tube and absorbs vibration of operating pipe lines.

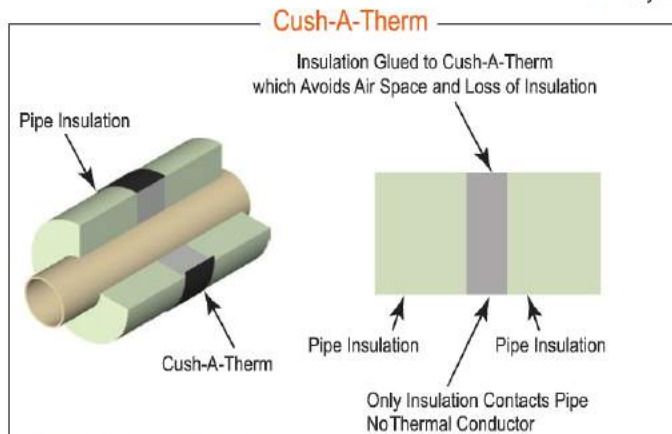
The outer cover consists of a special rubber coating which seals the cushion after installation in order to prevent condensation.

It's strong closed-cell structure is ideal for liquid cooling lines to prevent condensation, save energy, and maintain the vapor barrier.



NOTE: Complete assembly supplied with gold electro-galvanized channel clamp and hardware

- Temperature range: -70°F to +250°F (-56.7°C to +121°C)
- Flammability is Self-Extinguishing as tested under ASTM D 635
- Maintains thermal barrier protection
- Tested in Conformance with ASTM E84 (UL 723, NFPA 255) having results of 0 FSI (Flame Spread Index) and 50 SDI (Smoke Developed Index)
- Prevents condensation
- Properly supports pipe and tube
- Absorbs vibration
- Polyurethane foam laminated with a rubber lining



ASHRAE Insulation Recommendations

Cush-A-Therm is designed to meet the ASHRAE recommendations for insulation for mechanical systems which indicate that insulated pipe hangers should provide the following:

1. Complete sealing of pipe against water vapor ingress
2. No energy transfer of cold to supporting clamp to prevent condensation of water and possible growth of mold. If the support encasing the insulation is in contact with the pipe or tube and supported by a metallic clamp, which is not protected by insulation, below ambient temperatures will be transferred to the clamp causing energy transfer and condensation.
3. No interruption of the insulation envelope
4. Limit or avoid compression at support location

ASHRAE Section 23.13-23.14 further states "when the goal is avoiding compression of low-compressive-strength insulation products, it is recommended to use high-strength insulation inserts made of a product that offers the desired compressive strength and other necessary performance properties. Other higher-strength materials that are not thermal insulation material and interrupt the insulation envelope, or do not allow complete sealing of an insulation system against water vapor ingress are not recommended for supporting insulated piping on pipe hangers. Note that wood blocks have poor thermal conductivity and are not recommended, especially for cold pipe systems."

Insulated cold piping should receive special attention when exposed to ambient or unconditioned air. The Cush-A-Therm is a product that seals out air, and insulates the pipe/tube from the supporting clamp, and is therefore in compliance with the 2013 ASHRAE insulation recommendations.

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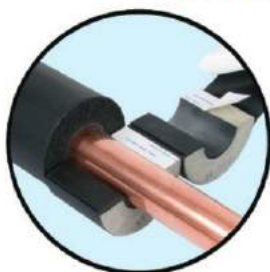
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Introduction
Channel
Channel Nuts & Hardware
General Fittings
Pipe & Conduit Supports
Electrical Fittings
Spring Steel
Loop & Ring Clamps
Belt Clamps & Z-Clamps
Concrete Inserts
Roofing Supports
Gamma Pads
Technical Data



Cush-A-Therm®

INSTALLATION IS AS EASY AS 1-2-3!



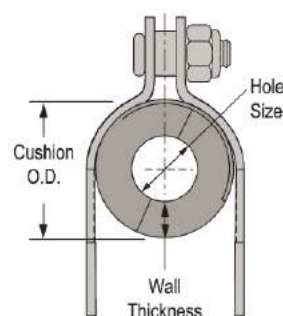
1. Insulation slides over pipes. Self adhesive surfaces provide seal.



2. Put in place and glue to insulation.



3. Wrap and seal with ProTape.



Dimensions (Inches)					Nominal 1/2" (13mm) Wall Thickness				Nominal 3/4" (19mm) Wall Thickness			
Hole Size	Copper I.D.	Pipe O.D.	IPS	Len.	Part No.			Cushion O.D.	Part No.			Cushion O.D.
					Steel	SS 304	SS 316		Steel	SS 304	SS 316	
1/4" (6mm)	-	1/4"	-	2.953" (75mm)	UX1412	UX1412SS	UX1412S6	1 1/4" (1.250") (32mm)	UX1434	UX1434SS	UX1434S6	1 3/4" (1.750") (45mm)
3/8" (10mm)	1/4"	3/8"	-		UX3812	UX3812SS	UX3812S6	1 5/8" (1.375") (35mm)	UX3834	UX3834SS	UX3834S6	1 7/8" (1.875") (48mm)
1/2" (13mm)	3/8"	1/2"	1/4"		UX1212	UX1212SS	UX1212S6	1 1/2" (1.500") (38mm)	UX1234	UX1234SS	UX1234S6	2" (2.000") (51mm)
5/8" (16mm)	1/2"	5/8"	3/8"	2.953" (75mm)	UX5812	UX5812SS	UX5812S6	1 5/8" (1.625") (41mm)	UX5834	UX5834SS	UX5834S6	2 1/8" (2.125") (54mm)
3/4" (19mm)	5/8"	3/4"	-		UX3412	UX3412SS	UX3412S6	1 3/4" (1.750") (45mm)	UX3434	UX3434SS	UX3434S6	2 1/4" (2.250") (57mm)
7/8" (22mm)	3/4"	7/8"	1/2"		UX7812	UX7812SS	UX7812S6	1 7/8" (1.875") (48mm)	UX7834	UX7834SS	UX7834S6	2 3/8" (2.375") (60mm)
1-1/8" (29mm)	1"	1 1/8"	3/4"	2.953" (75mm)	UX11812	UX11812SS	UX11812S6	2 1/8" (2.125") (54mm)	UX11834	UX11834SS	UX11834S6	2 5/8" (2.625") (67mm)
1-3/8" (35mm)	1 1/4"	1 3/8"	1"		UX13812	UX13812SS	UX13812S6	2 3/8" (2.375") (60mm)	UX13834	UX13834SS	UX13834S6	2 7/8" (2.875") (73mm)
1-5/8" (41mm)	1 1/2"	1 5/8"	1 1/4"		UX15812	UX15812SS	UX15812S6	2 5/8" (2.625") (67mm)	UX15834	UX15834SS	UX15834S6	3 1/8" (3.125") (79mm)
1-7/8" (48mm)	-	1 7/8"	-	2.953" (75mm)	UX17812	UX17812SS	UX17812S6	2 7/8" (2.875") (73mm)	UX17834	UX17834SS	UX17834S6	3 3/8" (3.375") (86mm)
2-1/8" (54mm)	2"	2 1/8"	-		UX21812	UX21812SS	UX21812S6	3 1/8" (3.125") (79mm)	UX21834	UX21834SS	UX21834S6	3 5/8" (3.625") (92mm)
2-3/8" (60mm)	2 1/4"	2 3/8"	2"		UX23812	UX23812SS	UX23812S6	3 3/8" (3.375") (86mm)	UX23834	UX23834SS	UX23834S6	3 7/8" (3.875") (98mm)
2-5/8" (67mm)	2 1/2"	2 5/8"	-	3.937" (100mm)	UX25812	UX25812SS	UX25812S6	3 5/8" (3.625") (92mm)	UX25834	UX25834SS	UX25834S6	4 1/8" (4.125") (105mm)
2-7/8" (73mm)	-	2 7/8"	2 1/2"		UX27812	UX27812SS	UX27812S6	3 7/8" (3.875") (98mm)	UX27834	UX27834SS	UX27834S6	4 3/8" (4.375") (111mm)
3-1/8" (79mm)	3"	3 1/8"	-		UX31812	UX31812SS	UX31812S6	4 1/8" (4.125") (105mm)	UX31834	UX31834SS	UX31834S6	4 5/8" (4.625") (118mm)
3-1/2" (89mm)	-	3 1/2"	3"	3.937" (100mm)	UX31212	UX31212SS	UX31212S6	4 1/2" (4.500") (114mm)	UX31234	UX31234SS	UX31234S6	5" (5.000") (127mm)
3-5/8" (92mm)	3 1/2"	3 5/8"	-		UX35812	UX35812SS	UX35812S6	4 3/8" (4.625") (118mm)	UX35834	UX35834SS	UX35834S6	5 1/8" (5.125") (130mm)
4-1/8" (105mm)	4"	4 1/8"	3 1/2"		UX41812	UX41812SS	UX41812S6	5 1/8" (5.125") (130mm)	UX41834	UX41834SS	UX41834S6	5 5/8" (5.625") (143mm)

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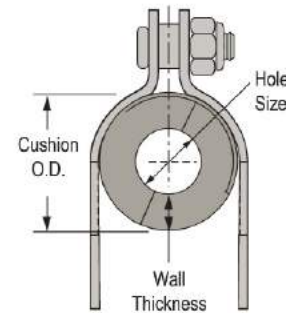
Cush-A-Therm®



NOTE: Complete assembly supplied with Stainless Steel channel clamp and hardware



NOTE: Complete assembly supplied with gold electro-galvanized channel clamp and hardware



Hole Size	Nominal 1" (25mm) Wall Thickness				Nominal 1-1/2" (38mm) Wall Thickness				Nominal 2" (51mm) Wall Thickness			
	Part No.			Cushion O.D.	Part No.			Cushion O.D.	Part No.			Cushion O.D.
	Steel	SS 304	SS 316		Steel	SS 304	SS 316		Steel	SS 304	SS 316	
1/4" (6mm)	UX1410	UX1410SS	UX1410S6	2 1/4" (2.250") (57mm)	UX1415	UX1415SS	UX1415S6	3 1/4" (3.250") (83mm)	-	-	-	-
3/8" (10mm)	UX3810	UX3810SS	UX3810S6	2 3/8" (2.375") (60mm)	UX3815	UX3815SS	UX3815S6	3 3/8" (3.375") (86mm)	-	-	-	-
1/2" (13mm)	UX1210	UX1210SS	UX1210S6	2 1/2" (2.500") (64mm)	UX1215	UX1215SS	UX1215S6	3 1/2" (3.500") (89mm)	-	-	-	-
5/8" (16mm)	UX5810	UX5810SS	UX5810S6	2 5/8" (2.625") (67mm)	UX5815	UX5815SS	UX5815S6	3 5/8" (3.625") (92mm)	UX5820	UX5820SS	UX5820S6	4 5/8" (4.625") (118mm)
3/4" (19mm)	UX3410	UX3410SS	UX3410S6	2 3/4" (2.750") (70mm)	UX3415	UX3415SS	UX3415S6	3 3/4" (3.750") (95mm)	UX3420	UX3420SS	UX3420S6	4 3/4" (4.750") (121mm)
7/8" (22mm)	UX7810	UX7810SS	UX7810S6	2 7/8" (2.875") (73mm)	UX7815	UX7815SS	UX7815S6	3 7/8" (3.875") (98mm)	UX7820	UX7820SS	UX7820S6	4 7/8" (4.875") (124mm)
1-1/8" (29mm)	UX11810	UX11810SS	UX11810S6	3 1/8" (3.125") (79mm)	UX11815	UX11815SS	UX11815S6	4 1/8" (4.125") (105mm)	UX11820	UX11820SS	UX11820S6	5 1/8" (5.125") (130mm)
1-3/8" (35mm)	UX13810	UX13810SS	UX13810S6	3 3/8" (3.375") (86mm)	UX13815	UX13815SS	UX13815S6	4 3/8" (4.375") (111mm)	UX13820	UX13820SS	UX13820S6	5 3/8" (5.375") (137mm)
1-5/8" (41mm)	UX15810	UX15810SS	UX15810S6	3 5/8" (3.625") (92mm)	UX15815	UX15815SS	UX15815S6	4 5/8" (4.625") (118mm)	UX15820	UX15820SS	UX15820S6	5 5/8" (5.625") (143mm)
1-7/8" (48mm)	UX17810	UX17810SS	UX17810S6	3 7/8" (3.875") (98mm)	UX17815	UX17815SS	UX17815S6	4 7/8" (4.875") (124mm)	UX17820	UX17820SS	UX17820S6	5 7/8" (5.875") (149mm)
2-1/8" (54mm)	UX21810	UX21810SS	UX21810S6	4 1/8" (4.125") (105mm)	UX21815	UX21815SS	UX21815S6	5 1/8" (5.125") (130mm)	UX21820	UX21820SS	UX21820S6	6 1/8" (6.125") (156mm)
2-3/8" (60mm)	UX23810	UX23810SS	UX23810S6	4 3/8" (4.375") (111mm)	UX23815	UX23815SS	UX23815S6	5 3/8" (5.375") (137mm)	UX23820	UX23820SS	UX23820S6	6 3/8" (6.375") (162mm)
2-5/8" (67mm)	UX25810	UX25810SS	UX25810S6	4 5/8" (4.625") (118mm)	UX25815	UX25815SS	UX25815S6	5 5/8" (5.625") (143mm)	UX25820	UX25820SS	UX25820S6	6 5/8" (6.625") (168mm)
2-7/8" (73mm)	UX27810	UX27810SS	UX27810S6	4 7/8" (4.875") (124mm)	UX27815	UX27815SS	UX27815S6	5 7/8" (5.875") (149mm)	UX27820	UX27820SS	UX27820S6	6 7/8" (6.875") (175mm)
3-1/8" (79mm)	UX31810	UX31810SS	UX31810S6	5 1/8" (5.125") (130mm)	UX31815	UX31815SS	UX31815S6	6 1/8" (6.125") (156mm)	UX31820	UX31820SS	UX31820S6	7 1/8" (7.125") (181mm)
3-1/2" (89mm)	UX31210	UX31210SS	UX31210S6	5 1/2" (5.500") (140mm)	UX31215	UX31215SS	UX31215S6	6 1/2" (6.500") (165mm)	UX31220	UX31220SS	UX31220S6	7 1/2" (7.500") (191mm)
3-5/8" (92mm)	UX35810	UX35810SS	UX35810S6	5 5/8" (5.625") (143mm)	UX35815	UX35815SS	UX35815S6	6 5/8" (6.625") (168mm)	UX35820	UX35820SS	UX35820S6	7 5/8" (7.625") (196mm)
4-1/8" (105mm)	UX41810	UX41810SS	UX41810S6	6 1/8" (6.125") (156mm)	UX41815	UX41815SS	UX41815S6	7 1/8" (7.125") (181mm)	UX41820	UX41820SS	UX41820S6	8 1/8" (8.125") (206mm)

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Introduction	Channel	Channel Nuts & Hardware	General Fittings	Pipe & Conduit Supports	Electrical Fittings	Spring Steel	Loop & Ring Clamps	Belt Clamps & Z-Clamps	Concrete Inserts	Roofing Supports	Gamma Pads	Technical Data
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Cal-Clamp Insulation

Cal-Clamp Crush Resistant Insulation



MODEL "HWP" & "HWT" - For Hot or Cold applications

- Works equally well on both hot and cold lines.
- Includes the strut clamps required for installation with strut.
- Special order insulation lengths, double sheet metal wrap, load bearing plates, and alternate sheet metal gauges are available upon request.



MODEL "CWP" & "CWT" - For applications requiring a wet lag insulation

- Insulations extends 1" beyond sheet metal.
- The minimum length for our "CWP" insert is 6" .
- Includes the strut clamps required for installation with strut.
- Special order insulation lengths, double sheet metal wrap, load bearing plates, and alternate sheet metal gauges are available upon request.

Maximum Allowable Load (lbs)	
Pipe Size	HW/CWP
1/2"	51
3/4"	62
1"	72
1-1/4"	92
1-1/2"	123
2"	164
2-1/2"	225
3"	276
4"	388
5"	500
6"	612
8"	827
10"	1102
12"	1326

Insulation Length Specification (in.)						
I.P.S. NOMINAL	Insulation Thickness					
	1" (25mm)	1½" (38mm)	2" (51mm)	2½" (64mm)	3" (76mm)	4" (102mm)
½" to 1½"	4" (102mm)				6" (152mm)	
2"	6" (152mm)					
2½" to 6"	6" (152mm)				9" (229mm)	
8" to 10"	9" (229mm)					
12" to 18"	12" (305mm)					

*CWP Model Inserts have a minimum length of 6" (152mm)

**Larger Sizes Available Upon Request

Material:

- Asbestos Free Calcium Silicate (Cellular Glass and Polyurethane also available upon request), treated for water resistance, encased in a 360 degree A-653 Galvanized Sheet Metal jacket (304SS and 316SS available upon request).
- Minimum 140 psi (9.65 bar) compressive strength. Working Temperature is 42°F to 1200°F. (5.6°C to 649°C) Lower temps upon request.

Sheet Metal Gauge ¹						
I.P.S. NOMINAL	Insulation Thickness					
	1" (25mm)	1½" (38mm)	2" (51mm)	2½" (64mm)	3" (76mm)	4" (102mm)
½" to 1-½"	24 ga.			20 ga.		
2" to 5"	20 ga.					
6"	20 ga.				16 ga.	
8" to 24"	16 ga.					

¹A double thickness of sheet metal is recommended on the lower half when used with rollers or when hanger span exceeds ten feet.



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Cal-Clamp Insulation



Hot or Cold Applications - Model HWP & HWT

Model "HWP" Pipe Sizes

For Hot or Cold applications. (Strut Clamp included)

Model HWP, Pipe Sizes, Insulation and Strut Clamps													
IPS	Pipe OD	1/2" (13mm)		1" (25mm)		1 1/2" (38mm)		2" (51mm)		2 1/2" (64mm)		3" (76mm)	
		Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.
3/4"	1.05" (27mm)	HWP3412	2.16" (55mm)	HWP3410	2.82" (72mm)	HWP3415	3.95" (100mm)	HWP3420	4.95" (126mm)	HWP3425	5.95" (151mm)	HWP3430	6.95" (177mm)
1"	1.315" (33mm)	HWP112	2.41" (61mm)	HWP110	3.45" (88mm)	HWP115	4.45" (113mm)	HWP120	5.51" (140mm)	HWP125	6.51" (165mm)	HWP130	7.51" (191mm)
1 1/4"	1.86" (42mm)	HWP11412	2.72" (69mm)	HWP11410	3.45" (88mm)	HWP11415	4.95" (126mm)	HWP11420	5.51" (140mm)	HWP11425	6.51" (165mm)	HWP11430	7.51" (191mm)
1 1/2"	1.99" (51mm)	HWP11212	2.99" (76mm)	HWP11210	3.95" (100mm)	HWP11215	4.95" (126mm)	HWP11220	6.57" (167mm)	HWP11225	7.57" (192mm)	HWP11230	8.57" (218mm)
2"	2.375" (60mm)	HWP212	3.42" (87mm)	HWP210	4.45" (113mm)	HWP215	5.51" (140mm)	HWP220	6.57" (167mm)	HWP225	7.57" (192mm)	HWP230	8.57" (218mm)
2 1/2"	2.875" (73mm)	HWP21212	3.93" (100mm)	HWP21210	4.95" (126mm)	HWP21215	6.57" (167mm)	HWP21220	7.57" (192mm)	HWP21225	8.57" (218mm)	HWP21230	9.57" (243mm)
3"	3.5" (89mm)	HWP312	4.56" (116mm)	HWP310	5.51" (140mm)	HWP315	6.57" (167mm)	HWP320	7.57" (192mm)	HWP325	8.57" (218mm)	HWP330	9.57" (243mm)
3 1/2"	4" (102mm)	HWP31212	5.07" (129mm)	HWP31210	6.57" (167mm)	HWP31215	7.57" (192mm)	HWP31220	8.57" (218mm)	HWP31225	9.57" (243mm)	HWP31230	10.7" (272mm)
4"	4.5" (114mm)	HWP412	5.57" (141mm)	HWP410	6.57" (167mm)	HWP415	7.57" (192mm)	HWP420	8.57" (218mm)	HWP425	9.57" (243mm)	HWP430	10.7" (272mm)
5"	5.563" (141mm)	HWP512	6.64" (169mm)	HWP510	7.57" (192mm)	HWP515	8.57" (218mm)	HWP520	9.57" (243mm)	HWP525	10.7" (272mm)	HWP530	11.7" (297mm)
6"	6.625" (168mm)	HWP612	7.7" (196mm)	HWP610	8.57" (218mm)	HWP615	9.57" (243mm)	HWP620	10.7" (272mm)	HWP625	11.7" (297mm)	HWP630	12.7" (323mm)
8"	8.625" (219mm)	HWP812	9.74" (247mm)	HWP810	10.7" (272mm)	HWP815	11.7" (300mm)	HWP820	12.7" (323mm)	HWP825	13.95" (354mm)	HWP830	14.95" (380mm)
10"	10.75" (273mm)	HWP1012	11.87" (301mm)	HWP1010	12.7" (323mm)	HWP1015	13.95" (354mm)	HWP1020	14.95" (380mm)	HWP1025	15.95" (405mm)	HWP1030	16.95" (431mm)
12"	12.75" (324mm)	HWP1212	13.88" (353mm)	HWP1210	14.95" (380mm)	HWP1215	15.95" (405mm)	HWP1220	16.95" (431mm)	HWP1225	17.95" (456mm)	HWP1230	18.95" (481mm)

Model "HWT" Tube Sizes

For Hot or Cold applications. (Strut Clamp included)

Model HWT, Copper Tube Sizes, Insulation and Strut Clamps													
Copper Tube	Tube OD	1/2" (13mm)		1" (25mm)		1 1/2" (38mm)		2" (51mm)		2 1/2" (64mm)		3" (76mm)	
		Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.
1/2"	5/8"	HWT5812	1.66" (42mm)	HWT5810	2.82" (72mm)	HWT5815	3.45" (88mm)	-	-	-	-	-	-
3/4"	7/8"	HWT7812	1.92" (49mm)	HWT7810	2.82" (72mm)	HWT7815	3.95" (100mm)	HWT7820	4.95" (126mm)	-	-	-	-
1"	1-1/8"	HWT11812	2.16" (55mm)	HWT11810	2.82" (72mm)	HWT11815	3.95" (100mm)	HWT11820	4.95" (126mm)	-	-	-	-
1 1/4"	1-3/8"	HWT13812	2.41" (61mm)	HWT13810	3.45" (88mm)	HWT13815	4.45" (113mm)	HWT13820	5.51" (140mm)	-	-	-	-
1 1/2"	1-5/8"	HWT15812	2.72" (69mm)	HWT15810	3.45" (88mm)	HWT15815	4.95" (126mm)	HWT15820	5.51" (140mm)	-	-	-	-
2"	2-1/8"	HWT21812	3.16" (80mm)	HWT21810	3.95" (100mm)	HWT21815	4.95" (126mm)	HWT21820	6.57" (167mm)	HWT21825	7.57" (192mm)	HWT21830	8.57" (218mm)
2 1/2"	2-5/8"	HWT25812	3.66" (93mm)	HWT25810	4.45" (113mm)	HWT25815	5.51" (140mm)	HWT25820	6.57" (167mm)	HWT25825	7.57" (192mm)	HWT25830	8.57" (218mm)
3"	3-1/8"	HWT31812	4.16" (106mm)	HWT31810	4.95" (126mm)	HWT31815	6.57" (167mm)	HWT31820	7.57" (192mm)	HWT31825	8.57" (218mm)	HWT31830	9.57" (243mm)
4"	4-1/8"	HWT41812	5.16" (131mm)	HWT41810	6.57" (167mm)	HWT41815	7.57" (192mm)	HWT41820	8.57" (218mm)	HWT41825	9.57" (243mm)	HWT41830	10.7" (272mm)
5"	5-1/8"	HWT51812	6.16" (156mm)	HWT51810	7.57" (192mm)	HWT51815	8.57" (218mm)	HWT51820	9.57" (243mm)	HWT51825	10.7" (272mm)	HWT51830	11.7" (297mm)
6"	6-1/8"	HWT61812	7.16" (182mm)	HWT61810	8.57" (218mm)	HWT61815	9.57" (243mm)	HWT61820	10.7" (272mm)	HWT61825	11.7" (297mm)	HWT61830	12.7" (323mm)

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Introduction	Channel	Channel Nuts & Hardware	General Fittings	Pipe & Conduit Supports	Electrical Fittings	Spring Steel	Loop & Ring Clamps	Beta Clamps & Z-Clamps	Concrete Inserts	Roofing Supports	Gamma Pads	Technical Data
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Cal-Clamp Insulation

Wet Lag Applications - Model CWP & CWT

Model "CWP" Pipe Sizes

For applications requiring a wet lag insulation. Insulations extends 1" beyond metal. (Strut Clamp included)

Model CWP, Pipe Sizes, Insulation and Strut Clamps													
IPS	Pipe OD	1/2" (13mm)		1" (25mm)		1 1/2" (38mm)		2" (51mm)		2 1/2" (64mm)		3" (76mm)	
		Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.
3/4"	1.05" (27mm)	CWP3412	2.18" (55mm)	CWP3410	2.82" (72mm)	CWP3415	3.95" (100mm)	CWP3420	4.95" (126mm)	-	-	-	-
1"	1.315" (33mm)	CWP1112	2.41" (61mm)	CWP1110	3.45" (88mm)	CWP1115	4.45" (113mm)	CWP1120	5.51" (140mm)	-	-	-	-
1 1/4"	1.66" (42mm)	CWP11412	2.72" (69mm)	CWP11410	3.45" (88mm)	CWP11415	4.95" (126mm)	CWP11420	5.51" (140mm)	-	-	-	-
1 1/2"	1.99" (51mm)	CWP11212	2.99" (76mm)	CWP11210	3.95" (100mm)	CWP11215	4.95" (126mm)	CWP11220	6.57" (167mm)	CWP11225	7.57" (192mm)	CWP11230	8.57" (218mm)
2"	2.375" (60mm)	CWP212	3.42" (87mm)	CWP210	4.45" (113mm)	CWP215	5.51" (140mm)	CWP220	6.57" (167mm)	CWP225	7.57" (192mm)	CWP230	8.57" (218mm)
2 1/2"	2.875" (73mm)	CWP21212	3.93" (100mm)	CWP21210	4.95" (126mm)	CWP21215	6.57" (167mm)	CWP21220	7.57" (192mm)	CWP21225	8.57" (218mm)	CWP21230	9.57" (243mm)
3"	3.5" (89mm)	CWP312	4.56" (116mm)	CWP310	5.51" (140mm)	CWP315	6.57" (167mm)	CWP320	7.57" (192mm)	CWP325	8.57" (218mm)	CWP330	9.57" (243mm)
3 1/2"	4" (102mm)	CWP31212	5.07" (129mm)	CWP31210	6.57" (167mm)	CWP31215	7.57" (192mm)	CWP31220	8.57" (218mm)	CWP31225	9.57" (243mm)	CWP31230	10.7" (272mm)
4"	4.5" (114mm)	CWP412	5.57" (141mm)	CWP410	6.57" (167mm)	CWP415	7.57" (192mm)	CWP420	8.57" (218mm)	CWP425	9.57" (243mm)	CWP430	10.7" (272mm)
5"	5.563" (141mm)	CWP512	6.64" (169mm)	CWP510	7.57" (192mm)	CWP515	8.57" (218mm)	CWP520	9.57" (243mm)	CWP525	10.7" (272mm)	CWP530	11.7" (297mm)
6"	6.625" (168mm)	CWP612	7.71" (196mm)	CWP610	8.57" (218mm)	CWP615	9.57" (243mm)	CWP620	10.7" (272mm)	CWP625	11.7" (297mm)	CWP630	12.7" (323mm)
8"	8.625" (219mm)	CWP812	9.74" (247mm)	CWP810	10.7" (272mm)	CWP815	11.7" (297mm)	CWP820	12.7" (323mm)	CWP825	13.95" (354mm)	CWP830	14.95" (380mm)
10"	10.75" (273mm)	CWP1012	11.87" (301mm)	CWP1010	12.7" (323mm)	CWP1015	13.95" (354mm)	CWP1020	14.95" (380mm)	CWP1025	15.95" (405mm)	CWP1030	16.95" (431mm)
12"	12.75" (324mm)	CWP1212	13.88" (353mm)	CWP1210	14.95" (380mm)	CWP1215	15.95" (405mm)	CWP1220	16.95" (431mm)	CWP1225	17.95" (456mm)	CWP1230	18.95" (481mm)

Model "CWT" Tube Sizes

For applications requiring a wet lag insulation. Insulations extends 1" beyond metal. (Strut Clamp included)

Model CWT, Copper Tube Sizes, Insulation and Strut Clamps													
Copper Tube	Tube OD	½" (13mm)		1" (25mm)		1½" (38mm)		2" (51mm)		2½" (64mm)		3" (76mm)	
		Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.	Part No.	Insul. O.D.
½"	⅝"	CWT5812	1.66" (42mm)	CWT5810	2.82" (72mm)	CWT5815	3.45" (88mm)	-	-	-	-	-	-
¾"	⅞"	CWT7812	1.92" (49mm)	CWT7810	2.82" (72mm)	CWT7815	3.95" (100mm)	CWT7820	4.95" (126mm)	-	-	-	-
1"	1⅛"	CWT11812	2.16" (55mm)	CWT11810	2.82" (72mm)	CWT11815	3.95" (100mm)	CWT11820	4.95" (126mm)	-	-	-	-
1¼"	1⅜"	CWT13812	2.41" (61mm)	CWT13810	3.45" (88mm)	CWT13815	4.45" (113mm)	CWT13820	5.51" (140mm)	-	-	-	-
1½"	1⅝"	CWT15812	2.72" (69mm)	CWT15810	3.45" (88mm)	CWT15815	4.95" (126mm)	CWT15820	5.51" (140mm)	-	-	-	-
2"	2⅛"	CWT21812	3.16" (80mm)	CWT21810	3.95" (100mm)	CWT21815	4.95" (126mm)	CWT21820	6.57" (167mm)	CWT21825	7.57" (192mm)	CWT21830	8.57" (218mm)
2½"	2⅝"	CWT25812	3.66" (93mm)	CWT25810	4.45" (113mm)	CWT25815	5.51" (140mm)	CWT25820	6.57" (167mm)	CWT25825	7.57" (192mm)	CWT25830	8.57" (218mm)
3"	3⅛"	CWT31812	4.16" (106mm)	CWT31810	4.95" (126mm)	CWT31815	6.57" (167mm)	CWT31820	7.57" (192mm)	CWT31825	8.57" (218mm)	CWT31830	9.57" (243mm)
4"	4⅛"	CWT41812	5.16" (131mm)	CWT41810	6.57" (167mm)	CWT41815	7.57" (192mm)	CWT41820	8.57" (218mm)	CWT41825	9.57" (243mm)	CWT41830	10.7" (272mm)
5"	5⅛"	CWT51812	6.16" (156mm)	CWT51810	7.57" (192mm)	CWT51815	8.57" (218mm)	CWT51820	9.57" (243mm)	CWT51825	10.7" (272mm)	CWT51830	11.7" (297mm)
6"	6⅛"	CWT61812	7.16" (182mm)	CWT61810	8.57" (218mm)	CWT61815	9.57" (243mm)	CWT61820	10.7" (272mm)	CWT61825	11.7" (297mm)	CWT61830	12.7" (323mm)

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www.zsi-foster.com



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Cush-A-Glide™



Cush-a-Glide™

Cush-A-Glide is designed for fast installation of copper tube or pipe, and can be easily installed in seconds with fasteners of your choice. Just spread the clamp apart placing it over the top of a tube or pipe and fasten one side. Push in the opposite side to the desired tightness, allowing for expansion and contraction, then fasten the other side.

- Allows for expansion and contraction of copper tube and pipe
- Excellent alternative to stainless or galvanized clamps
- Fits tightly and securely against mounting surfaces
- Made from trusted high quality TPE material
- One piece molded split ring design
- Suitable for indoor or outdoor applications
- Temperature range of -50°F to 275°F (-45°C to 135°C)
- Will not rust and prevents and eliminates galvanic corrosion
- Made in the USA



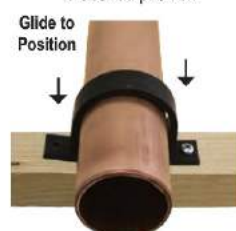
Step 1: Spread open Cush-a-Glide, and place it over tube, pipe, or hose



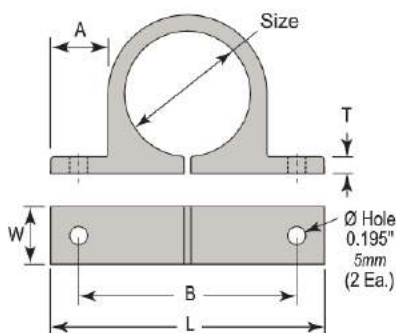
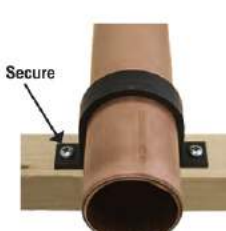
Step 2: Secure one side of Cush-a-Glide with a fastener of your choice



Step 3: Simply glide tube or pipe through the Cush-a-Glide to desired position



Step 4: Fasten second side of the Cush-a-Glide



Part No.	Pipe, Hose or Tube Size	Size	Dimensions – inches							
			A	B	L	T Thickness	W			
CAGB04	¼"	0.245" (6mm)	0.500" (13mm)	1.000" (25mm)	1.465" (37mm)	0.110" (3mm)	0.375" (10mm)			
CAGB06	⅜"	0.370" (9mm)		1.125" (29mm)	1.590" (40mm)					
CAGB08	½"	0.495" (13mm)		1.250" (32mm)	1.715" (44mm)					
CAGB10	⅝"	0.620" (16mm)	0.583" (14mm)	1.500" (38mm)	2.045" (52mm)	0.150" (4mm)	0.500" (13mm)			
CAGB14	¾"	0.870" (22mm)		1.750" (44mm)	2.295" (58mm)					
CAGB18	1⅛"	1.120" (28mm)	0.625" (16mm)	2.125" (54mm)	2.730" (69mm)	0.180" (5mm)	0.625" (16mm)			
CAGB20	1¼"	1.250" (32mm)		2.250" (57mm)	2.855" (73mm)					
CAGB22	1⅜"	1.370" (35mm)		2.375" (60mm)	2.980" (76mm)					
CAGB26	1⅝"	1.620" (41mm)		2.625" (67mm)	3.230" (82mm)		0.750" (19mm)			
CAGB34	2⅛"	2.120" (54mm)		3.125" (79mm)	3.730" (95mm)					

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Introduction
Channel
Channel Nuts & Hardware
General Fittings
Pipe & Conduit Supports
Electrical Fittings
Spring Steel
Loop & Ring Clamps
Belt Clamps & Z-Clamps
Concrete Inserts
Rooftop Supports
Gamma Pads
Technical Data



Omega Series™

Omega Series™

The Omega Series™ clamp assembly retains, guides, protects, and uniformly spaces line runs. Attached with two standard fasteners to any flat surface, the Omega Series™ clamp eliminates the use of special channels, providing a savings in both space and cost. They go up fast, lines are rigid, and look neat.

THE CLAMP — Steel with gold electro-dichromate finish, or stainless steel type 304.

THE CUSHION — Manufactured from a thermoplastic elastomer, it's built tough to withstand the effects of most oils, chemicals and industrial cleaning compounds. Interlock edge ensures that the cushion remains in place.



Stainless Steel



Assembly consists of clamp and thermoplastic elastomer cushion. Fasteners not included.

Standard Temperature: -50°F to 275°F (-45°C to 135°C)



Stainless Steel



Gold Electro-Galvanized Steel

Omega Series Extreme Temperature: -65°F to 340°F (-53°C to 170°C)

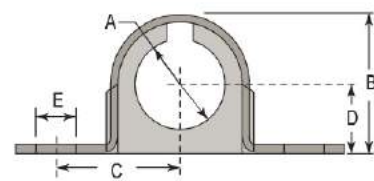
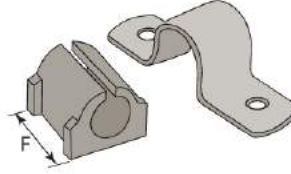


Omega Series™



Standard

Extreme Temp



Steel Part No.		Stainless Steel Part No.		Copper & Steel Tubing O.D.	Copper Water Pipe (Nom.)	Pipe Size (Nom.)	Dimensions (inches)						Hanging Design Load
Standard Black	Extreme Blue	Standard Black	Extreme Blue				A	B	C	D	E	F	
004M007	HT004M007	004MS007	HT004MS007	1/4"	-	-	0.25" (6mm)	0.48" (12mm)	0.60" (15mm)	0.22" (6mm)	0.26" (7mm)	0.78"	50 (0.22 kN)
006M008	HT006M008	006MS008	HT006MS008	3/8"	1/4"	-	0.37" (9mm)	0.62" (16mm)	0.66" (17mm)	0.31" (8mm)		0.81"	
008M011	HT008M011	008MS011	HT008MS011	1/2"	3/8"	1/4"	0.50" (13mm)	0.81" (21mm)	0.83" (21mm)	0.40" (10mm)		0.98" (25mm)	
010M013	HT010M013	010MS013	HT010MS013	5/8"	1/2"	3/8"	0.62" (16mm)	0.93" (24mm)	0.85" (22mm)	0.46" (12mm)			
012M015	HT012M015	012MS015	HT012MS015	3/4"	5/8"	-	0.75" (19mm)	1.02" (26mm)	0.90" (23mm)	0.50" (13mm)			
014M017	HT014M017	014MS017	HT014MS017	7/8"	3/4"	1/2"	0.87" (22mm)	1.12" (28mm)	1.03" (26mm)	0.53" (13mm)			
016M019	HT016M019	016MS019	HT016MS019	1"	-	-	1.00" (25mm)	1.24" (31mm)	1.04" (26mm)	0.59" (15mm)			
018M020	HT018M020	018MS020	HT018MS020	-	-	3/4"	1.05" (27mm)	1.40" (36mm)	1.11" (28mm)	0.70" (18mm)			
018M021	HT018M021	018MS021	HT018MS021	1-1/4"	1"	-	1.12" (28mm)	1.40" (36mm)	1.17" (30mm)	0.70" (18mm)			
020M024	HT020M024	020MS024	HT020MS024	1-1/4"	-	-	1.25" (32mm)	1.60" (41mm)	1.20" (30mm)	0.77" (20mm)			
021M026	HT021M026	021MS026	HT021MS026	-	-	1"	1.31" (33mm)	1.71" (43mm)	1.28" (33mm)	0.81" (21mm)	0.34" (9mm)	1.56" (40mm)	200 (0.89 kN)
022M026	HT022M026	022MS026	HT022MS026	1-3/8"	1-1/4"	-	1.37" (35mm)	1.71" (43mm)	1.28" (33mm)	0.83" (21mm)			
024M028	HT024M028	024MS028	HT024MS028	1-1/2"	-	-	1.50" (38mm)	1.85" (47mm)	1.36" (35mm)	0.90" (23mm)			
026M030	HT026M030	026MS030	HT026MS030	1-5/8"	1-1/2"	-	1.62" (41mm)	1.98" (50mm)	1.43" (36mm)	0.96" (24mm)			
027M032	HT027M032	027MS032	HT027MS032	-	-	1-1/4"	1.66" (42mm)	2.12" (54mm)	1.55" (39mm)	0.99" (25mm)			
028M032	HT028M032	028MS032	HT028MS032	1-3/4"	-	-	1.75" (44mm)	2.12" (54mm)	1.55" (39mm)	1.02" (26mm)			
030M034	HT030M034	030MS034	HT030MS034	1-7/8"	-	1-1/2"	1.87" (47mm)	2.25" (57mm)	1.64" (42mm)	1.09" (28mm)			
032M036	HT032M036	032MS036	HT032MS036	2"	-	-	2.00" (51mm)	2.38" (60mm)	1.69" (43mm)	1.15" (29mm)			
034M040	HT034M040	034MS040	HT034MS040	2-1/8"	-	-	2.12" (54mm)	2.62" (67mm)	1.86" (47mm)	1.27" (32mm)			
038M044	HT038M044	038MS044	HT038MS044	2-3/8"	-	2"	2.37" (60mm)	2.88" (73mm)	1.94" (49mm)	1.41" (36mm)			
040M046	HT040M046	040MS046	HT040MS046	2-1/2"	-	-	2.50" (64mm)	3.00" (76mm)	2.00" (51mm)	1.47" (37mm)	0.43" (11mm)	1.56" (40mm)	400 (1.78 kN)
042M048	HT042M048	042MS048	HT042MS048	2-5/8"	2-1/2"	-	2.62" (67mm)	3.13" (80mm)	2.07" (53mm)	1.53" (39mm)			
046M052	HT046M052	046MS052	HT046MS052	2-7/8"	-	2-1/2"	2.87" (73mm)	3.38" (86mm)	2.19" (56mm)	1.65" (42mm)			
050M056	HT050M056	050MS056	HT050MS056	3-1/8"	3"	-	3.12" (79mm)	3.68" (93mm)	2.32" (59mm)	1.78" (45mm)			
056M062	HT056M062	056MS062	HT056MS062	3-1/2"	-	3"	3.50" (89mm)	4.06" (103mm)	2.50" (64mm)	1.97" (50mm)			
058M064	HT058M064	058MS064	HT058MS064	3-5/8"	3-1/2"	-	3.62" (92mm)	4.19" (106mm)	2.57" (65mm)	2.03" (52mm)			
064M072	HT064M072	064MS072	HT064MS072	4"	-	3-1/2"	4.00" (102mm)	4.68" (119mm)	2.82" (72mm)	2.28" (58mm)			
066M074	HT066M074	066MS074	HT066MS074	4-1/8"	4"	-	4.12" (105mm)	4.84" (123mm)	3.05" (77mm)	2.34" (59mm)			
072M080	HT072M080	072MS080	HT072MS080	4-1/2"	-	4"	4.50" (114mm)	5.22" (133mm)	3.24" (82mm)	2.53" (64mm)			
082M090	HT082M090	082MS090	HT082MS090	5-1/8"	5"	-	5.12" (130mm)	5.82" (148mm)	3.55" (90mm)	2.84" (72mm)		0.43" (11mm)	
089M096	HT089M096	089MS096	HT089MS096	-	-	5"	5.56" (141mm)	6.31" (160mm)	4.00" (102mm)	3.06" (78mm)			
098M106	HT098M106	098MS106	HT098MS106	6-1/8"	6"	-	6.12" (155mm)	6.90" (175mm)	4.31" (109mm)	3.34" (85mm)			
106M114	HT106M114	106MS114	HT106MS114	-	-	6"	6.62" (168mm)	7.39" (188mm)	4.56" (116mm)	3.58" (91mm)			
PART NO. SUFFIX				Cushions		Example							
NONE				Thermoplastic elastomer		004M007 (STEEL) - 004MS007 (STAINLESS STEEL)							
N	-	N	-			004M007N (STEEL) - 004MS007N (STAINLESS STEEL)							
NH	-	NH	-			004M007NH (STEEL) - 004MS007NH (STAINLESS STEEL)							
Note: Fasteners not included.													

Note: Fasteners not included.

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Alpha Series™ Standard & Extreme Temp

Alpha Series™

Standard



-50°F to 275°F
(-45°C to 135°C)

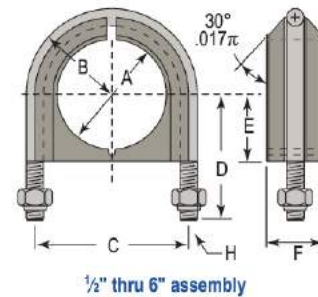
Extreme Temp



-65°F to 340°F
(-53°C to 170°C)

Designed for the tough jobs, the **Alpha Series™** U-Bolt Assembly secures pipe runs to any flat surface. The cushion design provides total load distribution, allowing the U-Bolt to become a full contact hanger, eliminating knife-edge loading. The U-Bolt traps and secures the cushion in place to prevent lateral movement, while nylon insert locknuts provide a positive lock.

Alpha Series™ U-Bolt Assembly conforms to MIL-S-901D for shock testing.



Assembly Part No.		Tube Size (O.D.)	Dimensions (Inches)							Torque	Design Load Lbs. (kN)	Slip Thru
Standard Black	Extreme Blue		A Dia.	B Radius	C	D	E	F	H Bolt Size			
UB7/8TA	HTUB7/8TA	7/8"	0.875" (22mm)	0.80" (20mm)	1.60" (41mm)	1.50" (38mm)	0.67" (17mm)	0.68" (17mm)	1/4"-20 UNC-2B	100	485 (2.16 kN)	500
UB1TA	HTUB1TA	1"	1.00" (25mm)	0.90" (23mm)	1.80" (46mm)	1.60" (41mm)	0.78" (20mm)	0.68" (17mm)	1/4"-20 UNC-2B			500
UB11/4TA	HTUB1-1/4TA	1-1/4"	1.25" (32mm)	1.02" (26mm)	2.05" (52mm)	1.70" (43mm)	0.91" (23mm)	0.68" (17mm)	1/4"-20 UNC-2B			500
UB13/8TA	HTUB1-3/8TA	1-3/8"	1.375" (35mm)	1.02" (26mm)	2.05" (52mm)	1.70" (43mm)	0.91" (23mm)	0.68" (17mm)	1/4"-20 UNC-2B			500
UB2TA	HTUB2TA	2"	2.00" (51mm)	1.40" (36mm)	2.80" (71mm)	2.20" (56mm)	1.19" (30mm)	1.24" (31mm)	3/8"-16 UNC-2B	150	1,220 (5.43 kN)	500
UB3TA	HTUB3TA	3"	3.00" (76mm)	1.95" (50mm)	3.90" (99mm)	3.00" (76mm)	1.69" (43mm)	1.24" (31mm)	1/2"-13 UNC-2B	200	2,260 (10.05 kN)	500
UB4TA	HTUB4TA	4"	4.00" (102mm)	2.52" (64mm)	5.05" (128mm)	3.70" (94mm)	2.25" (57mm)	1.24" (31mm)	1/2"-13 UNC-2B			500
UB5TA	HTUB5TA	5"	5.00" (127mm)	3.25" (83mm)	6.56" (167mm)	4.50" (114mm)	3.03" (77mm)	1.24" (31mm)	1/2"-13 UNC-2B			500
UB6TA	HTUB6TA	6"	6.00" (152mm)	3.87" (98mm)	7.75" (197mm)	5.40" (137mm)	3.56" (90mm)	1.44" (37mm)	5/8"-11 UNC-2B	250	3,620 (16.10 kN)	500
↓ SUFFIX		Clamp	Cushion							Example		
NONE		Electro-galvanized	Thermoplastic elastomer							UB 1/2"PA		
6		Stainless Steel, Type 316	Thermoplastic elastomer							UB 1/2"PA6		
N6	-	Stainless Steel, Type 316								UB 1/2"PAN6		
N	-	Electro-galvanized								UB 1/2"PAN		
NH	-	Electro-galvanized								UB 1/2"PANH		
NH6	-	Stainless Steel, Type 316								UB 1/2"PANH6		



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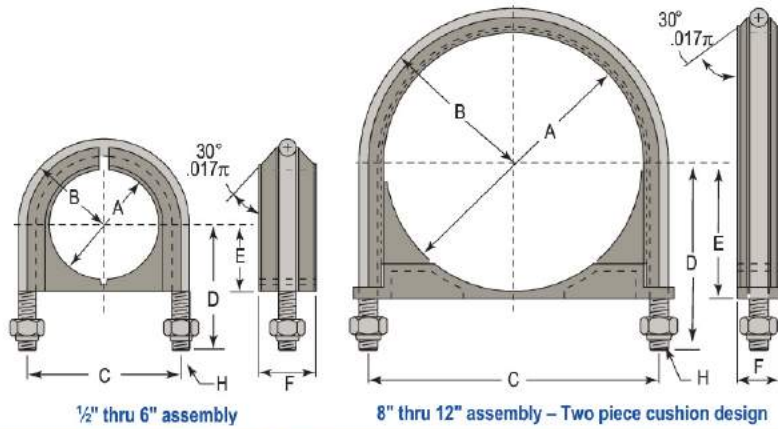
Alpha Series™ Standard & Extreme Temp



Standard



Extreme Temp



Assembly Part No.		Pipe Size (Nom.)	Dimensions (Inches)							Torque	Design Load Lbs. (kN)	Slip Thru
Standard Black	Extreme Blue		A Dia.	B Radius	C	D	E	F	H			
UB1/2PA	HTUB1/2PA	1/2"	0.840" (21mm)	0.80" (20mm)	1.60 (41mm)	1.50" (38mm)	0.67" (17mm)	0.68" (17mm)	1/4"-20 UNC-2B	100	485 (2.16 kN)	500
UB3/4PA	HTUB3/4PA	3/4"	1.05" (27mm)	0.90" (23mm)	1.80 (46mm)	1.60" (41mm)	0.78" (20mm)	0.68" (17mm)	1/4"-20 UNC-2B			500
UB1PA	HTUB1PA	1"	1.31" (33mm)	1.02" (26mm)	2.05 (52mm)	1.70" (43mm)	0.91" (23mm)	0.68" (17mm)	1/4"-20 UNC-2B			500
UB1-1/4PA	HTUB1-1/4PA	1-1/4"	1.66" (42mm)	1.27" (32mm)	2.55 (65mm)	2.10" (53mm)	1.08" (27mm)	1.24" (31mm)	3/8"-16 UNC-2B	150	1,220 (5.43 kN)	500
UB1-1/2PA	HTUB1-1/2PA	1-1/2"	1.90" (48mm)	1.40" (36mm)	2.80 (71mm)	2.20" (56mm)	1.19" (30mm)	1.24" (31mm)	3/8"-16 UNC-2B			500
UB2PA	HTUB2PA	2"	2.37" (60mm)	1.67" (42mm)	3.35 (85mm)	2.50" (64mm)	1.45" (37mm)	1.24" (31mm)	3/8"-16 UNC-2B			500
UB2-1/2PA	HTUB2-1/2PA	2-1/2"	2.87" (73mm)	1.95" (50mm)	3.90 (99mm)	3.00" (76mm)	1.69" (43mm)	1.24" (31mm)	1/2"-13 UNC-2B	200	2,260 (10.05 kN)	500
UB3PA	HTUB3PA	3"	3.50" (89mm)	2.27" (58mm)	4.55 (116mm)	3.30" (84mm)	2.00" (51mm)	1.24" (31mm)	1/2"-13 UNC-2B			500
UB3-1/2PA	HTUB3-1/2PA	3-1/2"	4.00" (102mm)	2.52" (64mm)	5.05 (128mm)	3.70" (94mm)	2.25" (57mm)	1.24" (31mm)	1/2"-13 UNC-2B			500
UB4PA	HTUB4PA	4"	4.50" (114mm)	2.50" (64mm)	5.50 (140mm)	3.90" (99mm)	2.50" (64mm)	1.24" (31mm)	1/2"-13 UNC-2B	250	3,620 (16.10 kN)	500
UB5PA	HTUB5PA	5"	5.56" (141mm)	3.25" (83mm)	6.56 (167mm)	4.50" (114mm)	3.03" (77mm)	1.24" (31mm)	1/2"-13 UNC-2B			500
UB6PA	HTUB6PA	6"	6.62" (168mm)	3.87" (98mm)	7.75 (197mm)	5.40" (137mm)	3.56" (90mm)	1.44" (37mm)	5/8"-11 UNC-2B			500
UB8PA	HTUB8PA	8"	8.62" (219mm)	4.85" (123mm)	9.82 (249mm)	6.40" (163mm)	4.56" (116mm)	1.44" (37mm)	5/8"-11 UNC-2B	275	5,420 (25.11 kN)	500
UB10PA	HTUB10PA	10"	10.75" (273mm)	6.08" (154mm)	12.16 (309mm)	7.70" (196mm)	5.68" (144mm)	1.65" (42mm)	3/4"-10 UNC-2B			500
UB12PA	HTUB12PA	12"	12.75" (324mm)	7.13" (181mm)	14.25 (362mm)	8.7" (221mm)	6.68" (170mm)	1.65" (42mm)	3/4"-10 UNC-2B			500
SUFFIX		Clamp		Cushion				Example				
NONE		Electro-galvanized		Thermoplastic elastomer				UB1/2PA				
6		Stainless Steel, Type 316		Thermoplastic elastomer				UB1/2PA6				
N6	—	Stainless Steel, Type 316						UB1/2PAN6				
N	—	Electro-galvanized						UB1/2PAN				
NH	—	Electro-galvanized						UB1/2PANH				
NH6	—	Stainless Steel, Type 316						UB1/2PANH6				

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Cush-A-Claw®

Cush-A-Claw®



Strut Mounted

Insert	Twist & Lock	Position Pipe	Snap In



Surface Mounted

Position	Mount w/Screw	Position Pipe	Snap In
Side grooves provide Centering guide		Counter-sunk hole allows tightening of any type of #10 fastener	

The **Cush-A-Claw** Grasps on to your Tube, Pipe, or Hose and holds it in place. The unique one piece patented design allows for quick, simple, and easy installation. It will not rust because it's molded from the same choice TPE Material of some of our other products that you've come to know and trust.

- Easy Snap-in Installation of Tube, Pipe, or Hose
- Sure Grip Strut Base easily rotates into strut
- Will not rust
- Non Conducting
- Saves Time and Money
- Temp Range: -50° to 275° F (-45°C to 135°C)
- Works Great Indoors or Outdoors
- Seven Sizes of Tube and Three Sizes of EMT
- Designed for Light Duty Loads and Applications
- Prevents Galvanic Corrosion of Dissimilar Metals
- An Excellent Alternative to Steel, Stainless Steel, or Galvanized Clamps.

O.D. Tube Size			EMTS Conduit Sizes		
Strut Mount Part #	Surface Mount Part #	Size O.D.	Strut Mount Part #	Surface Mount Part #	Size O.D.
CL-04	CLS-04	1/4" (6mm)	EMT-1/2	EMTS-1/2	1/2" (18mm)
CL-06	CLS-06	3/8" (10mm)	EMT-3/4	EMTS-3/4	3/4" (23mm)
CL-08	CLS-08	1/2" (13mm)	EMT-1	EMTS-1	1" (30mm)
CL-10	CLS-10	5/8" (16mm)			
CL-12	CLS-12	3/4" (19mm)			
CL-14	CLS-14	7/8" (22mm)			
CL-18	CLS-18	1 1/8" (29mm)			

75 Lbs. Load
(Safety Factor: 3)



Cush-A-Claw® is manufactured under U.S. patent #D631739, #D679177, and European Community patent #0011520030001, #0011520030002, #0011520030003, #0011520030004, #0011520030005, #0011520030006, #0011520030007

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www.zsi-foster.com



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Cush-A-Clip® & Cush-A-Click

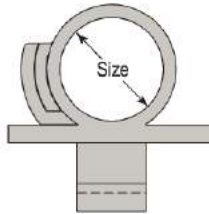


Cush-A-Clip®



A Simple, Economical, Lightweight Hanger For Supporting Tubing

- Manufactured from polyamide alloy
- U.L. Rated
- Sizes from $\frac{3}{8}$ " to $1\frac{1}{8}$ "
- One piece design makes installation a snap.
- No nuts to tighten, no parts to lose.
- Temperatures from -40°F to 275°F (-40°C to 135°C)
- Secure but non-tightening design allows for expansion, greatly reducing joint fractures

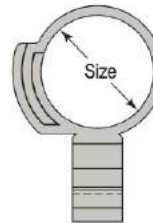
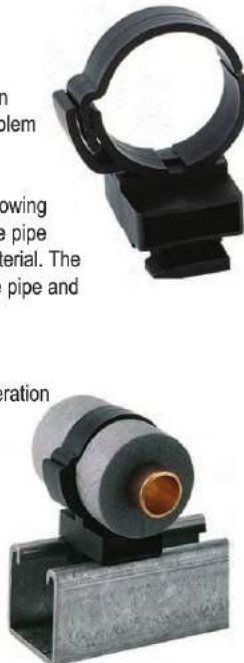


Part No.	Tube O.D.
RPC-3/8	$\frac{3}{8}$ " (10mm)
RPC-1/2	$\frac{1}{2}$ " (13mm)
RPC-5/8	$\frac{5}{8}$ " (16mm)
RPC-3/4	$\frac{3}{4}$ " (19mm)
RPC-7/8	$\frac{7}{8}$ " (22mm)
RPC-1-1/8	$1\frac{1}{8}$ " (29mm)

Cush-A-Click

The great advantage with the **Cush-A-Click** is it retains an unbroken vapor barrier seal, eliminating the problem of sweating on metal fittings. The Cush-A-Click is ideal for the installation of refrigeration systems allowing the barrier seal to run the length of the pipe work without cutting the insulation material. The Cush-A-Click quickly secures both the pipe and the insulation.

- Time and labor savings
- Simple, secure installation of refrigeration and plumbing pipe work
- No break insulation material
- Corrosion resistance
- Light weight



Part No.	Standard Copper	Metric Copper	Copper Tube		Condensate Drain
	(no insulation)		with $\frac{3}{8}$ " (10mm) Insulation	with $\frac{1}{2}$ " (13mm) Insulation	
CAC12	$\frac{3}{4}$ "	-	-	-	-
CAC14	$\frac{7}{8}$ "	22mm	-	-	yes
CAC16	1"	-	$\frac{1}{4}$ " tube	-	-
CAC18	$1\frac{1}{8}$ "	28mm	$\frac{3}{8}$ " tube	-	-
CAC20	$1\frac{1}{4}$ "	-	$\frac{1}{2}$ " tube	$\frac{1}{4}$ " tube	-
CAC22	$1\frac{3}{8}$ "	-	$\frac{5}{8}$ " tube	$\frac{3}{8}$ " tube	yes
CAC24	$1\frac{1}{2}$ "	-	$\frac{7}{8}$ " tube	$\frac{5}{8}$ " tube	-
CAC26	$1\frac{5}{8}$ "	42mm	$1\frac{1}{8}$ " tube	$\frac{3}{4}$ " tube	yes
CAC32	2"	-	-	$\frac{7}{8}$ " tube	-
CAC34	$2\frac{1}{8}$ "	54mm	$1\frac{3}{8}$ " tube	$1\frac{1}{8}$ " tube	yes

Inside diameter: Certain clips have two or more positions to accommodate both metric and standard sizes



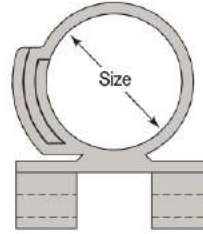
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Quick-Clip

Quick-Clip



Quick-Clip's unique one-piece composite polyamide alloy design combines strength with light weight. It will overcome the problems of using cable ties for piping, electrical, optical and network cabling.

- Quick-Clip locates easily on $\frac{3}{8}$ " rod
- No breaks in insulation material
- Fast and easy installation, saves time and money
- Single handed installation
- Manufactured from a composite polyamide, tested from -40°F to $+275^{\circ}\text{F}$, (-40°C to $+135^{\circ}\text{C}$) makes it ideal for network cables
- Studding panel inserts.



CLAMPING RANGE					
Part No.	Standard Copper	Metric Copper	Copper Tube		Condensate Drain
	(no insulation)		with $\frac{3}{8}$ " (10mm) Insulation	with $\frac{1}{2}$ " (13mm) Insulation	
QC12	$\frac{3}{8}$ "	-	-	-	-
QC14	$\frac{7}{8}$ "	22mm	-	-	yes
QC16	1"	-	$\frac{1}{4}$ " tube	-	-
QC18	$1\frac{1}{8}$ "	28mm	$\frac{3}{8}$ " tube	-	-
QC20	$1\frac{1}{4}$ "	-	$\frac{1}{2}$ " tube	$\frac{1}{4}$ " tube	-
QC22	$1\frac{3}{8}$ "	-	$\frac{5}{8}$ " tube	$\frac{3}{8}$ " tube	yes
QC24	$1\frac{1}{2}$ "	-	$\frac{7}{8}$ " tube	$\frac{5}{8}$ " tube	-
QC26	$1\frac{5}{8}$ "	42mm	$1\frac{1}{8}$ " tube	$\frac{3}{4}$ " tube	yes
QC32	2"	-	-	$\frac{7}{8}$ " tube	-
QC34	$2\frac{1}{8}$ "	54mm	$1\frac{3}{8}$ " tube	$1\frac{1}{8}$ " tube	yes

Inside diameter: Certain clips have two or more positions to accommodate both metric and standard sizes



Slide onto threaded rod, twist to engage.
Insert pipe and clip to lock.

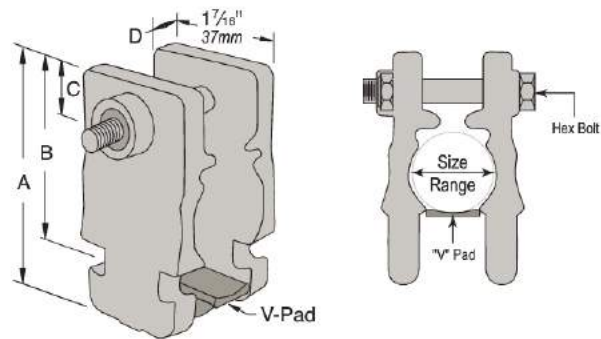


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Cush-A-Grip



Cush-A-Grip



FEATURES:

- Ten sizes of tube, five sizes of pipe
- Diameters from .25" to 1.31"

ADVANTAGES:

- Reduces inventory SKU's
- Simplifies take-offs and requirements on projects using both tube and pipe sizes
- Easy installation, non-conducting
- Permissible outdoors
- Temp. range: -40°F to +380°F (-40°C to 193°C)
- No galvanic reaction, Will not rust

BENEFITS:

- Lowers overall inventory costs
- Works with screw or nut driver
- Resists vibration
- Use in place of steel clamps with steel tube
- Multi-environmental
- Covers a wide range of applications and maintains thermal barrier
- For use on copper tube
- Use in place of stainless, aluminum, PVC or hot dipped galvanized clamps



Part No.	O.D. Tube Sizes			Pipe Sizes	Metric Sizes	Diameters (in)
CG-10	1/4"	3/8"	1/2"	1/4"	6mm – 14mm	0.25 – 0.54
CG-20	5/8"	3/4"	7/8"	3/8" – 1/2"	15mm – 22mm	0.62 – 0.87
CG-30	7/8"	1"	1-1/8"	3/4"	22mm – 28mm	0.87 – 1.12
CG-40	1"	1-1/8"	1-1/4"	3/4" – 1"	26mm – 32mm	1.00 – 1.31

Part No.	Nominal Pipe Size	Dimensions				Hex Head Cap Screw & Lock Nut
		"A"	"B"	"C"	"D"	
CG-10	1/4"	1-15/16" (49mm)	1-3/8" (35mm)	3/8" (10mm)	3/16" (5mm)	1/4"-20 x 1-1/2"
CG-20	3/8"	2-3/8" (60mm)	1-5/8" (41mm)	7/16" (11mm)	1/4" (8mm)	1/2"-20 x 2"
CG-30	1/2"	2-3/16" (65mm)	1-13/16" (46mm)	7/16" (11mm)	5/16" (8mm)	1/4"-20 x 2"
CG-40	3/4"	2-11/16" (68mm)	1-16/16" (49mm)	7/16" (11mm)	5/16" (8mm)	1/2"-20 x 2"



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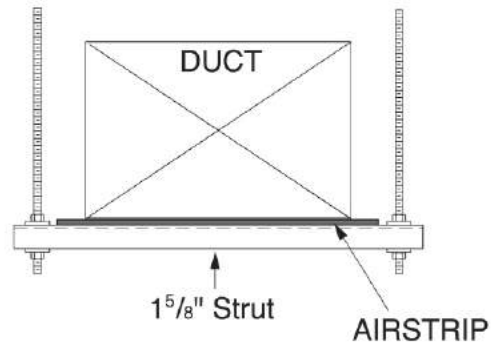
Introduction

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Channel Nuts
& HardwareGeneral
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SupportsElectrical
FittingsSpring
SteelLoop & Ring
ClampsBelt Clamps
& Z-ClampsConcrete
InsertsRoofing
SupportsGamma
PadsTechnical
Data


AIRSTRIP®

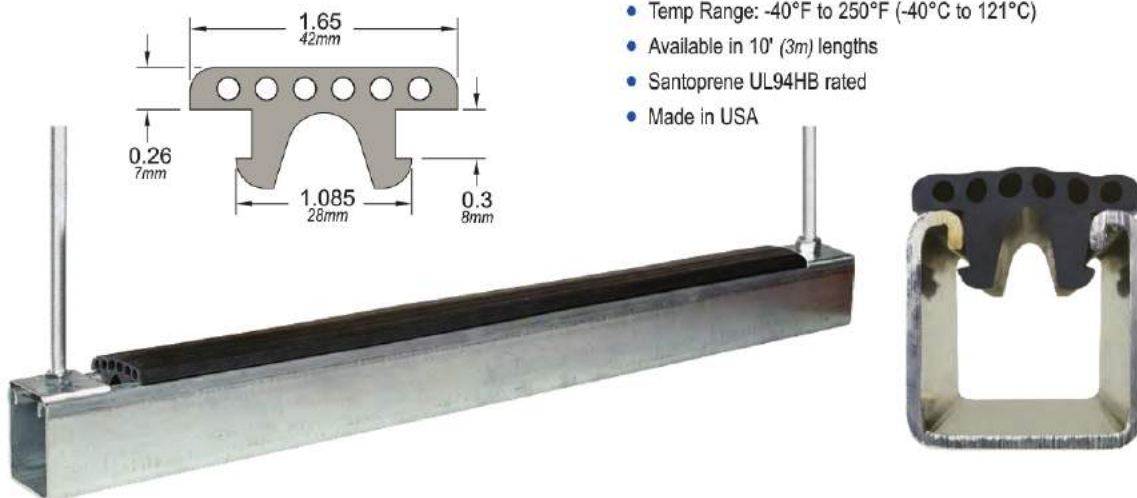
AIRSTRIP®



The AIRSTRIP is designed to dampen the noise and vibration that can occur between piping or duct work and the supporting channel. Made from 64 Durometer Santoprene, the AIRSTRIP 1 is light weight, dependable, and long-lasting.

Part No.	Max. Load Lbs. per Lineal In.		Length	
	Lbs.	(kg/25.4mm)	Ft.	(m)
AS1	40	18.1	10	3.05

- Temp Range: -40°F to 250°F (-40°C to 121°C)
- Available in 10' (3m) lengths
- Santoprene UL94HB rated
- Made in USA



Installs simply by pushing into place



To remove, squeeze the tabs at the end and push up



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www.zsi-foster.com



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Cush-A-Strip™



Cush-A-Strip™

- Manufactured from a thermoplastic elastomer, Cush-A-Strip is designed for use from -50°F to 275°F.
- Easy Stocking – Packaged in 20 foot rolls in an E-Z dispenser box for convenience in handling and storage. **Cush-A-Strip roll part number is S-716**
- Easy Measuring – Marked in 1/2" increments for fast measuring and cutting, while eliminating waste.
- Lock-lip edges ensure that Cush-A-Strip will remain in place with a balanced grip.
- Clamps ordered separately. They are available with a standard bolt and nylon lock nut in steel (electro-dichromate), and stainless steel, in sizes ranging from 1/2" tube to 6" pipe.



(1) Cut appropriate length strip using the cutting schedule shown on right.



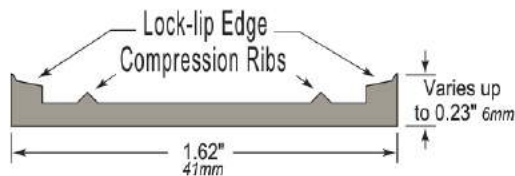
(2) Place the pipe on the Cush-A-Strip



(3) Insert the clamps in the strut



(4) Tighten the clamps.



Cush-A-Strip™ Cutting Guide

Clamp Part No.		Dimensions (Inches)			
Gold Plated Steel	Stainless Steel Type 304	Clamp Size O.D.	Tube Size O.D.	Pipe Size (Nom.)	Cutting Schedule
TG008C	NS008	1/2"	1/4"	—	7/8"
TG010C	NS010	5/8"	3/8"	—	1-1/8"
TG012C	NS012	3/4"	1/2"	1/4"	1-1/2"
TG014C	NS014	7/8"	5/8"	3/8"	2"
TG016C	NS016	1"	3/4"	—	2-1/4"
TG018C	NS018	1-1/8"	7/8"	1/2"	3"
TG020C	NS020	1-1/4"	1"	3/4"	3-1/4"
TG022C	NS022	1-3/8"	1-1/8"	—	3-5/8"
TG024C	NS024	1-1/2"	1-3/16"	—	3-7/8"
TG024C	NS024	1-1/2"	1-1/4"	1"	4"
TG026C	NS026	1-5/8"	1-3/8"	—	4-1/2"
NG028C	CS028	1-3/4"	1-1/2"	—	4-7/8"
NG030C	CS030	1-7/8"	1-5/8"	1-1/4"	5-1/4"
NG032C	CS032	2"	1-3/4"	—	5-1/2"
NG034C	CS034	2-1/8"	1-7/8"	1-1/2"	6"
NG036C	CS036	2-1/4"	2"	—	6-3/8"
NG038C	CS038	2-3/8"	2-1/8"	—	6-3/4"
NG040C	CS040	2-1/2"	2-1/4"	—	7-1/4"
NG042C	CS042	2-5/8"	2-3/8"	2"	7-1/2"
NG044C	CS044	2-3/4"	2-1/2"	—	8"
NG048C	CS048	3"	2-3/4"	—	8-3/4"
NG050C	CS050	3-1/8"	2-7/8"	2-1/2"	9-1/4"
NG054C	CS054	3-1/4"	3"	—	9-1/2"
NG060C	CS060	3-3/4"	3-1/2"	3"	11"
NG068C	CS068	4-1/4"	4"	3-1/2"	12-1/4"
NG076C	CS076	4-3/4"	4-1/2"	4"	14"
NG092C	CS092	5-3/4"	—	5"	15-1/2"
NG110C	CS110	6-7/8"	—	6"	18-1/2"

* Gold Plated Steel Clamps Supplied with Fixed Stud and Nylon Lock Nut

* Stainless Steel Clamps Supplied with Fixed Stud and Nylon Lock Nut from 1/2" through 1-3/4" Sizes and 1-7/8" through 6-7/8" Sizes are supplied with a Loose Bolt and Hex Nut

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Saddle-Up

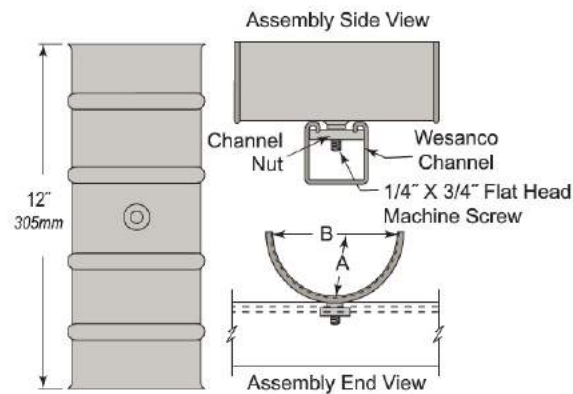
Saddle-Up

Insulation Saddle

The Saddle-Up Pipe Insulation Saddle is a formed metal shield designed to allow insulated refrigeration pipe or tubing to pass through the support without need to compromise the vapor barrier and protects from crushing or damage at hanger and support locations. Made from 20 gage electro-galvanized steel the ribbed design along its 12" (305mm) length offers the superior support needed to spread out loading on insulation which reduces the potential for internal cavity creation between the pipe and insulation. The Z-Strut mounting option provides a time tested secure and safe attachment method so there is no need for other tie downs to the support.

FEATURES:

- Shipped with all necessary hardware to attach to Z-Strut or any other industry standard 1½" (41mm) wide strut channel.
- Features flared edges to protect pipe insulation jacketing.
- Each Saddle individually marked with part number
- Counter Sunk attachment Hole and Flat Head Machine Screw prevent possible damage to insulation.
- Electro-Galvanized Steel provides excellent rust protection and has no exposed fabricated edges.



Dimensions (Inches)			½" (13mm) Insulation		¾" (19mm) Insulation		1" (25mm) Insulation		1½" (38mm) Insulation	
Part No.	B Width	A Radius	OD Tube Size	OD With Insulation	OD Tube Size	OD With Insulation	OD Tube Size	OD With Insulation	OD Tube Size	OD With Insulation
SD150	1½" (38mm)	¾" (19mm)	¾"	1½" (35mm)	—	—	—	—	—	—
			1½"	1½" (38mm)	—	—	—	—	—	—
SD200	2" (51mm)	1" (25mm)	5⁄8"	1½" (41mm)	¾"	1½" (48mm)	—	—	—	—
			¾"	1¾" (45mm)	1½"	2" (51mm)	—	—	—	—
			1"	1¾" (48mm)	—	—	—	—	—	—
SD250	2½" (64mm)	1¼" (32mm)	1"	2¼" (54mm)	5⁄8"	2½" (54mm)	¾"	2½" (60mm)	—	—
			1½"	2½" (60mm)	¾"	2½" (57mm)	1½"	2½" (64mm)	—	—
			—	—	1"	2½" (60mm)	—	—	—	—
SD300	3" (76mm)	1½" (38mm)	1½"	2½" (67mm)	1"	2½" (67mm)	5⁄8"	2½" (67mm)	—	—
			—	—	1½"	2½" (73mm)	¾"	2½" (70mm)	—	—
			—	—	—	—	1"	2½" (73mm)	—	—
SD350	3½" (89mm)	1¾" (45mm)	2"	3½" (79mm)	1½"	3½" (79mm)	1½"	3½" (79mm)	¾"	3½" (86mm)
			2½"	3½" (86mm)	—	—	1½"	3½" (86mm)	1"	3½" (89mm)
SD450	4½" (114mm)	2¼" (57mm)	2½"	3½" (86mm)	2"	3½" (92mm)	1½"	3½" (92mm)	5⁄8"	3½" (92mm)
			—	—	2½"	3½" (96mm)	—	—	¾"	3½" (95mm)
			—	—	—	—	—	—	1"	3½" (98mm)
			3"	4½" (105mm)	2½"	4½" (105mm)	2½"	4½" (105mm)	1½"	4½" (105mm)
			—	—	—	—	—	—	1½"	4½" (111mm)
SD550	5½" (140mm)	2¾" (70mm)	3½"	4½" (118mm)	3½"	4½" (118mm)	2½"	4½" (118mm)	1½"	4½" (118mm)
			4"	5½" (130mm)	3½"	5½" (130mm)	3½"	5½" (130mm)	2"	5½" (130mm)
			—	—	—	—	—	—	2½"	5½" (143mm)
SD650	6½" (165mm)	3¼" (83mm)	—	—	4"	5½" (143mm)	3½"	5½" (143mm)	2½"	5½" (143mm)
			—	—	—	—	4½"	6½" (156mm)	3½"	6½" (156mm)

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Snap-A-Saddle®

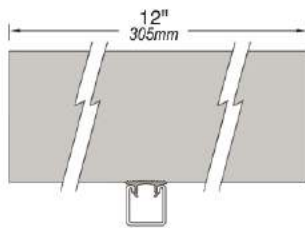
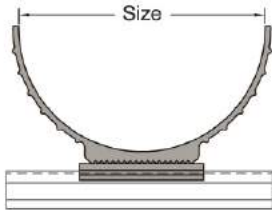


Snap-A-Saddle®

Strut Mount Plastic Insulation Saddle



Snaps easily into channel



Part No.		Nominal Inside Opening
Black	White	
SB225	SW225	2 1/4" (57mm)
SB325	SW325	3 1/4" (83mm)
SB425	SW425	4 1/4" (108mm)
SB525	SW525	5 1/4" (133mm)
SB625	SW625	6 1/4" (159mm)
SB825	SW825	8 5/8" (219mm)

The Snap-A-Saddle provides an easy way to attach insulated pipes to support channel, with one step, tool-free installation.



- Temp Range: -50° to 275°F (-46° to 135° C)
- Available in both black and white
- UL94-HB1 Rated TPV Material
- Made in USA
- Easy Installation
- Standard 12" (305mm) lengths. Special lengths available upon request



Snap-A-Saddle Size Guide - Copper Tubing					
Tubing Size	Insulation Thickness				
	1/2" (13mm)	3/4" (19mm)	1" (25mm)	1 1/2" (38mm)	2" (51mm)
1/4"	S*225	S*225	S*325	S*425	S*525
3/8"					
1/2"					
5/8"					
3/4"					
1"	S*325	S*325	S*425	S*525	S*625
1 1/4"					
1 1/2"					
2"					
2 1/2"					
3"	S*425	S*525	S*625	S*825	S*825
3 1/2"		S*625			
4"		S*825			

* Add "B" for Black or "W" for White

Snap-A-Saddle Size Guide - Schedule 40/80 Pipe					
Pipe Size	Insulation Thickness				
	1/2" (13mm)	3/4" (19mm)	1" (25mm)	1 1/2" (38mm)	2" (51mm)
1/4"	S*225	S*225	S*325	S*425	S*525
3/8"					
1/2"					
3/4"					
1"					
1 1/4"	S*325	S*425	S*525	S*625	S*825
1 1/2"					
2"					
2 1/2"	S*425	S*525	S*625	S*825	S*825
3"					
3 1/2"					
4"	S*625	S*825	S*825	S*825	S*825

* Add "B" for Black or "W" for White

Snap-A-Saddle® is manufactured under U.S. patents #D753488 and Canadian patents #163550

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Gamma Pads
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Snap-A-Saddle Pro™

Insulated Pipe Saddle for Mounting on Strut

Its revolutionary design allows for pipe movement within the support, eliminating common problems related to traditional pipe saddles: rotation, displacement and thermal insulation damages.



Breakthrough Innovation

Snap-a-Saddle Pro™ is designed to accommodate movement of the pipes generated by thermal expansion and vibration. With its unique sliding design at each end, Snap-a-Saddle Pro easily and effectively cradles and protects pipes allowing them to expand and vibrate without damaging their insulation.

Snap-a-Saddle Pro permanently eliminates insulation tears, refrigerant leaks, condensing, and freezing. It holds up to the highest quality standards of the industry.

Setting the Standard

Made of high quality, ultra-resistant polypropylene, Snap-a-Saddle Pro™ is today's most practical and economical solution to standardize pipe installations, improve appearance, and completely eliminate premature insulation tears, costly leaks, and loss of refrigerated merchandise caused by inadequate suspension systems.

Fastest Installation In The Industry

60% faster than metal or plastic shields

80% faster than clamps and collars

Keeps Thermal Bridge Intact

Eliminates insulation compression

Tool-Free Installation

One simple click is all it takes

Maintains Pipe Insulation Properties

Eliminates displacement and/or failing of pipe support, leading to refrigerant leaks

Maintains Liquid Line In Place

Eliminates refrigerant leaks



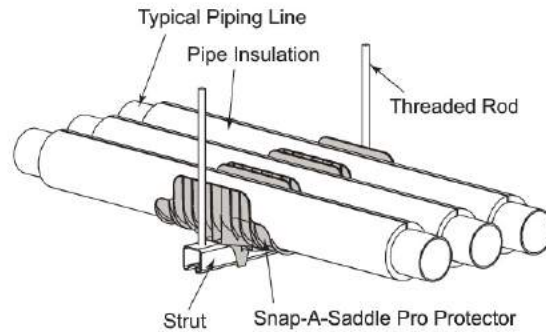
Snap-A-Saddle Pro™

Insulated Pipe Saddle for Mounting on Strut



Snap-A-Saddle Pro™

Insulated Pipe Saddle



Applications:

Refrigeration, Air Conditioning and Plumbing

Installation:

Tool-Free, "Clips" directly on standard 1-5/8" x 1-5/8" (41mm x 41mm) strut channel.

Suited for horizontal pipe installation.

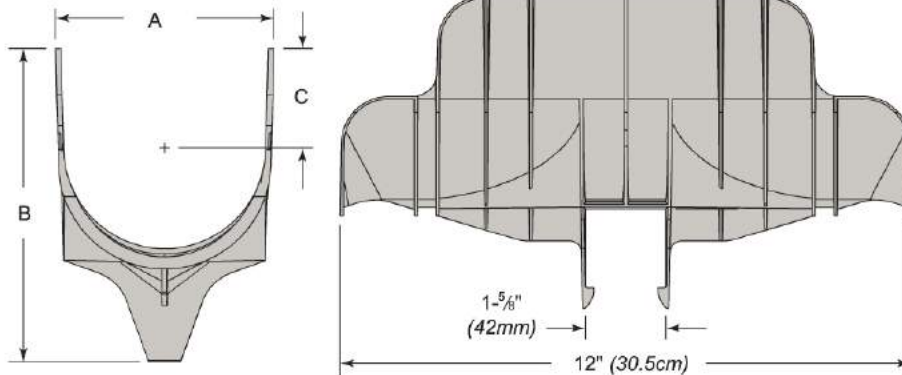
Certification:

UL classified for USA (UL-723 (ASTM E 84)) and ULC listed for Canada (ULC-S102.2).

Material:

Polypropylene copolymer

- UV resistant
- Operating temperature -40° to 178°F (-40° to 81°C)
- Paintable (preserves mechanical properties even after painting)
- Non-adhesive surface for linear expansion of thermal insulation. SAS825B & SAS825W have 20% glass filled material for additional strength.



Part No.		A	B	C
Black	White			
SAS225B	SAS225W	2.25" (57mm)	4.56" (116mm)	1.09" (28mm)
SAS325B	SAS325W	3.25" (82mm)	5.57" (140mm)	1.59" (40mm)
SAS425B	SAS425W	4.25" (108mm)	6.59" (167mm)	2.09" (53mm)
SAS525B	SAS525W	5.25" (133mm)	7.57" (192mm)	2.58" (66mm)
SAS625B	SAS625W	6.25" (159mm)	8.57" (218mm)	3.09" (78mm)
SAS825B	SAS825W	8.25" (204mm)	11.04" (280mm)	4.27" (108mm)

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& Z-Clamps

Concrete
Inserts

Rooftop
Supports

Gamma
Pads

Technical
Data



Snap-A-Saddle Pro™

Insulated Pipe Saddle for Mounting on Strut



Copper Tube Size	Insulation Thickness				
	½" (13mm)	¾" (19mm)	1" (25mm)	1½" (38mm)	2" (50mm)
¼" (6.4 mm)	SAS225	SAS225	SAS325	SAS425	SAS525
⅜" (9.5 mm)					
½" (13 mm)					
⅝" (16 mm)					
¾" (19 mm)					
⅞" (22 mm)	SAS325	SAS325	SAS425	SAS525	SAS625
1-¼" (29 mm)					
1-⅜" (35 mm)					
1-½" (41 mm)					
2-⅛" (54 mm)					
2-⅝" (67 mm)	SAS425	SAS425	SAS525	SAS625	SAS825
4-¼" (105 mm)	SAS525	SAS525	SAS625	SAS825	
5-⅝" (130 mm)	SAS525	SAS825	SAS825	SAS825	-

Schedule 40/80 Pipe Size	Insulation Thickness				
	½" (13mm)	¾" (19mm)	1" (25mm)	1½" (38mm)	2" (50mm)
¼" (6.4 mm)	SAS225	SAS225	SAS325	SAS425	SAS525
⅜" (9.5 mm)					
½" (13 mm)					
¾" (19 mm)					
1" (25 mm)	SAS325	SAS325	SAS425	SAS525	SAS625
1-¼" (31 mm)					
1-½" (38 mm)					
2" (50 mm)					
2-½" (63 mm)	SAS425	SAS425	SAS525	SAS625	SAS825
3" (75 mm)					
3-½" (88 mm)					
4" (100 mm)					
5" (127 mm)	SAS525	SAS525	SAS625	SAS825	SAS825
3-½" (88 mm)					
4" (100 mm)	SAS625	SAS625			
5" (127 mm)					
6" (152 mm)	SAS825	SAS825	-	-	-

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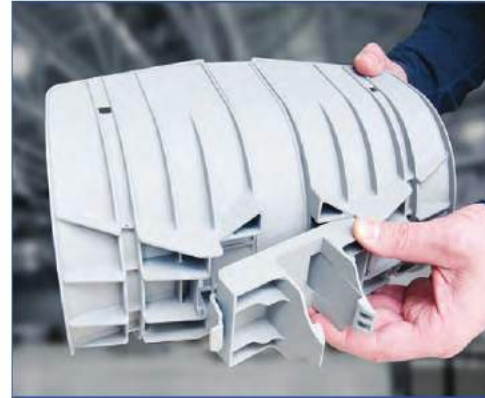
Snap-A-Saddle Pro Multi™

Adaptable Insulated Pipe Saddle



Snap-A-Saddle Pro Multi™ Adapts To Your Needs!

Allows use on various sizes of strut, H-Beam, floor-mount, Clevis and steel angle mountings
Adapts to different suspension systems, simply by swapping clipping adapters.



Breakthrough Innovation

Piping installations require different types of suspension systems, which vary in size. This new design adapts to various sizes of strut, H-Beam, floor-mount, clevis hangers, and steel angles. Thanks to the interchangeable bottom adapters, Snap-a-Saddle Pro Multi eliminates the hassle and headaches of compatibility problems you've been dealing with for so long!

Standardize Your Installation

Snap-a-Saddle Pro Multi™ makes the installer's job easier while standardizing piping installations and improving appearance. Whether you are looking at new or existing installations, the Snap-a-Saddle Pro Multi clip-on adapters will adapt to both the suspension system and the selected size of saddle core.

One Part Suits Multiple Uses

Simply change adapters

Fastest Installation In The Industry

40% Faster than metal or plastic shields

80% Faster than clamps and collars

Keeps Thermal Bridge Intact

Prevents insulation damage and compression

Tool-Free Installation

One simple click is all it takes

Maintains Pipe Insulation Properties

Permanent solution to displacement and/or falling of pipe support

Maintains Liquid Line In Place

Eliminates refrigerant leaks



WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Snap-A-Saddle Pro Multi™

Adaptable Insulated Pipe Saddle

Snap-A-Saddle Pro Multi™

Adaptable Insulated Pipe Saddle



Applications:

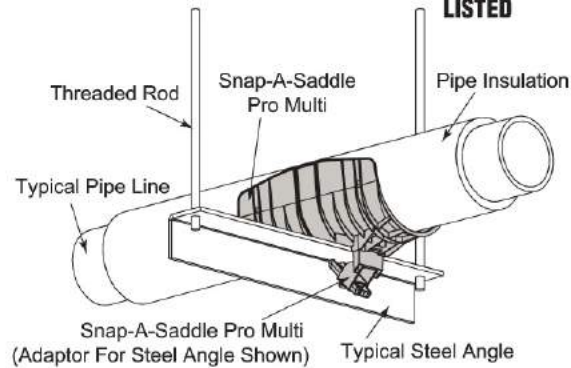
Plumbing, Mechanical, Refrigeration, and Air Conditioning

Installation:

Tool-Free, suited for horizontal pipe installation.

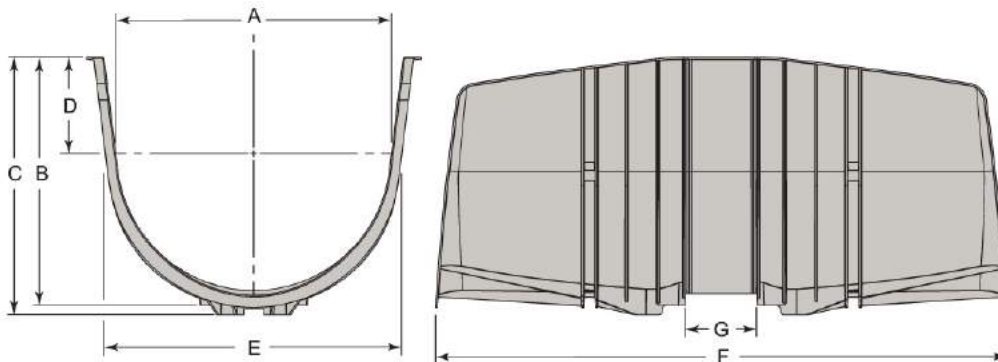
Certification:

UL classified for USA (UL-723 (ASTM E 84)) and ULC listed for Canada (ULC-S102.2).



Material:

- Polypropylene 20% glass filled
- UV resistant
- Operating temperature -40° to 178°F (-40° to 81°C)
- Paintable (preserves mechanical properties even after painting)
- Non-adhesive surface for linear expansion of thermal insulation.



Part No. Grey	A	B	C	D	E	F Length	G
SASM250G	2.34" (60mm)	1.92" (49mm)	2.33" (59mm)	0.40" (10mm)	2.45" (62mm)	12" (305mm)	1.20" (30mm)
SASM350G	3.45" (88mm)	3.17" (81mm)	3.58" (91mm)	1.09" (28mm)	3.56" (90mm)		1.48" (38mm)
SASM450G	4.50" (114mm)	3.89" (99mm)	4.19" (106mm)	1.17" (30mm)	4.61" (117mm)		1.75" (44mm)
SASM550G	5.56" (140mm)	4.90" (124mm)	5.20" (132mm)	1.66" (42mm)	5.75" (146mm)		1.78" (45mm)
SASM650G	6.46" (165mm)	5.96" (151mm)	6.26" (159mm)	2.18" (55mm)	6.75" (171mm)		2.08" (53mm)
SASM850G	8.65" (219mm)	7.93" (199mm)	8.13" (207mm)	3.04" (77mm)	8.75" (222mm)	18" (457mm)	2.26" (57mm)
SASM1050G	10.65" (271mm)	7.80" (198mm)	8.10" (206mm)	1.76" (45mm)	10.59" (269mm)	23" (584mm)	
SASM1250G	12.65" (321mm)	9.18" (233mm)	9.48" (241mm)	2.14" (54mm)	12.52" (318mm)		

The use of the Stabilizer Adapter with 10" SASM1050G and 12" SASM1250G Saddles is suggested for additional support.

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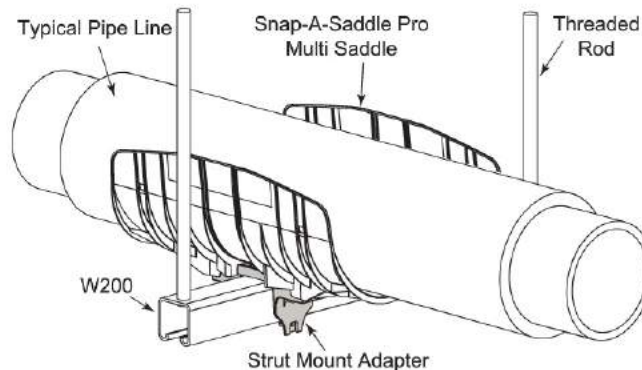
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Snap-A-Saddle Pro Multi™ - Adapters

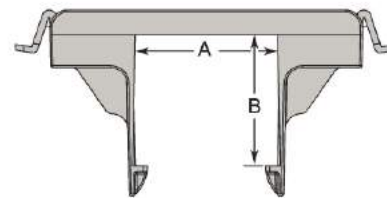


Adaptable Insulated Pipe Saddle

Strut Mount Adapter



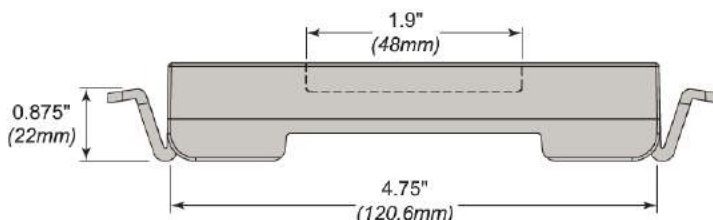
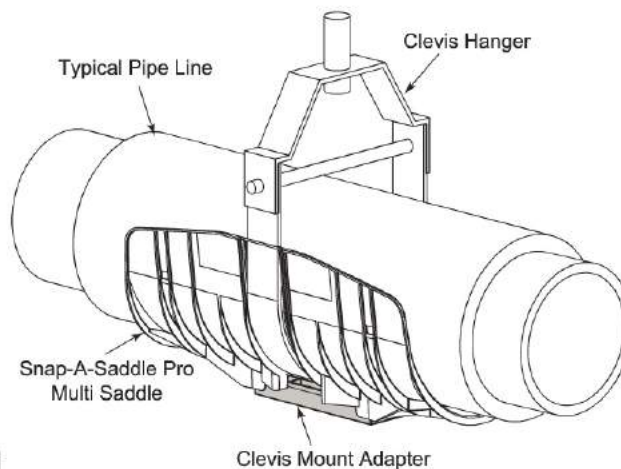
Part No.	A	B	Use with Wesanco Channel
SASM30X30G	1- ³ / ₁₆ " (30mm)	1- ³ / ₁₆ " (30mm)	-
SASM31X43G	1- ⁵ / ₁₆ " (31mm)	1- ¹ / ₁₆ " (43mm)	-
SASM40X38G	1- ⁹ / ₁₆ " (40mm)	1- ¹ / ₂ " (38mm)	-
SASM42X20G	1- ⁵ / ₁₆ " (41mm)	¹³ / ₁₆ " (21mm)	W400, W500
SASM42X42G		1- ⁵ / ₈ " (41mm)	W200, W210, W401, W501
SASM42X84G		3- ¹ / ₄ " (165mm)	W201, W211, W150
SASM42X166G		6- ¹ / ₂ " (165mm)	W151
SASM4D21G	2- ¹ / ₈ " (54mm)	1- ¹ / ₁₆ " (27mm)	-
SASM4D22G		2- ¹ / ₈ " (54mm)	-



The use of the Stabilizer Adapter with 10" SASM1050G and 12" SASM1250G Saddles is suggested for additional support.

SASMCLEVISG

Clevis Mount Adapter



SnapShock™ can be attached to Clevis Mount Adapter.

Stabilizer can be attached with Clevis Mount Adapter

Clevis Mount Adapter is utilized with Floor Adapter assembly.



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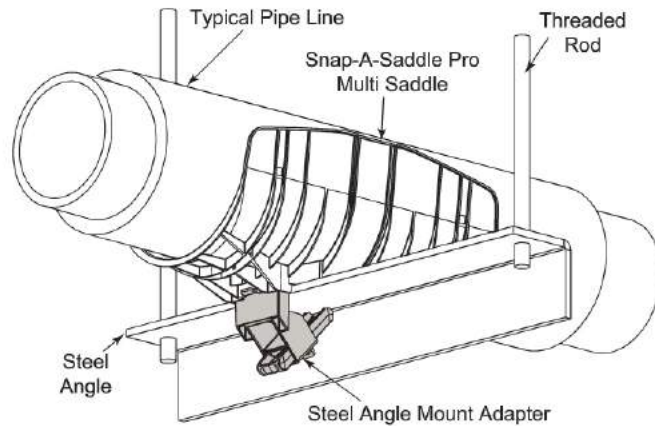
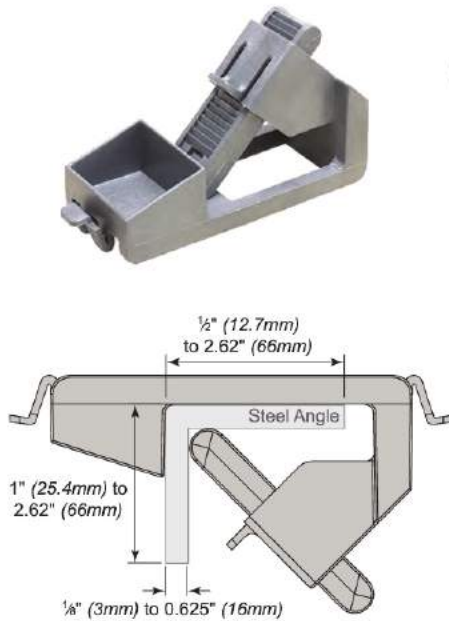


Snap-A-Saddle Pro Multi™ - Adapters

Adaptable Insulated Pipe Saddle

SASM2-5/8G

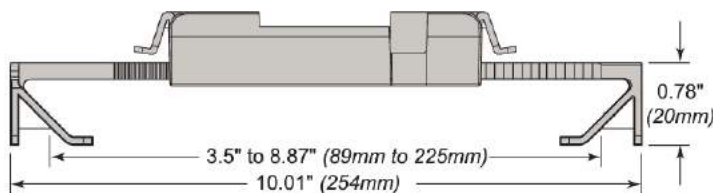
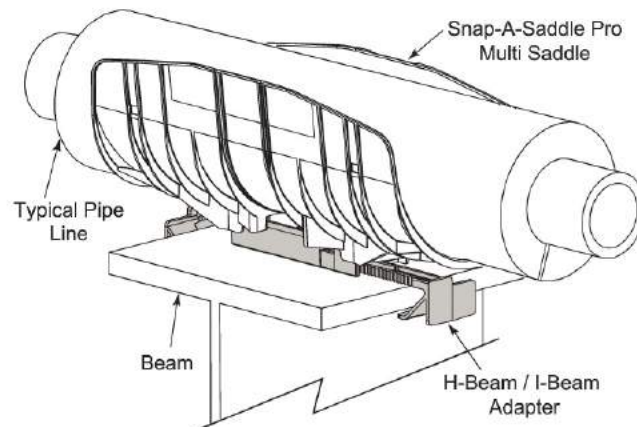
Steel Angle Mount Adapter



The use of the Stabilizer Adapter with 10" SASM1050G and 12" SASM1250G Saddles is suggested for additional support.

SASMHBEAMG

H-Beam / I-Beam Adapter



The use of the Stabilizer Adapter with 10" SASM1050G and 12" SASM1250G Saddles is suggested for additional support.

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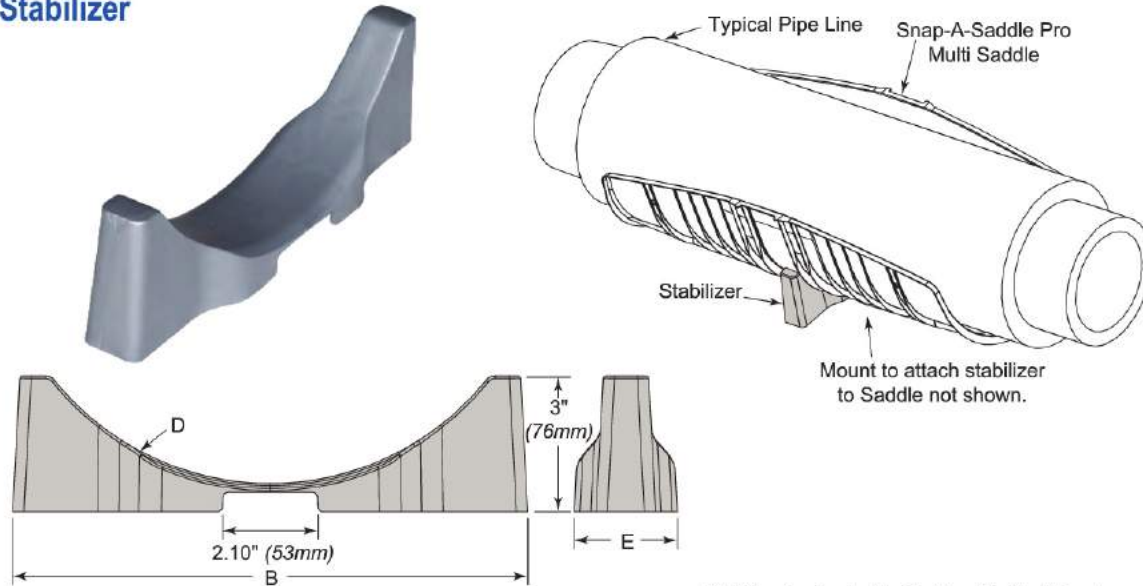
WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Snap-A-Saddle Pro Multi™ - Adapters



Adaptable Insulated Pipe Saddle

Stabilizer

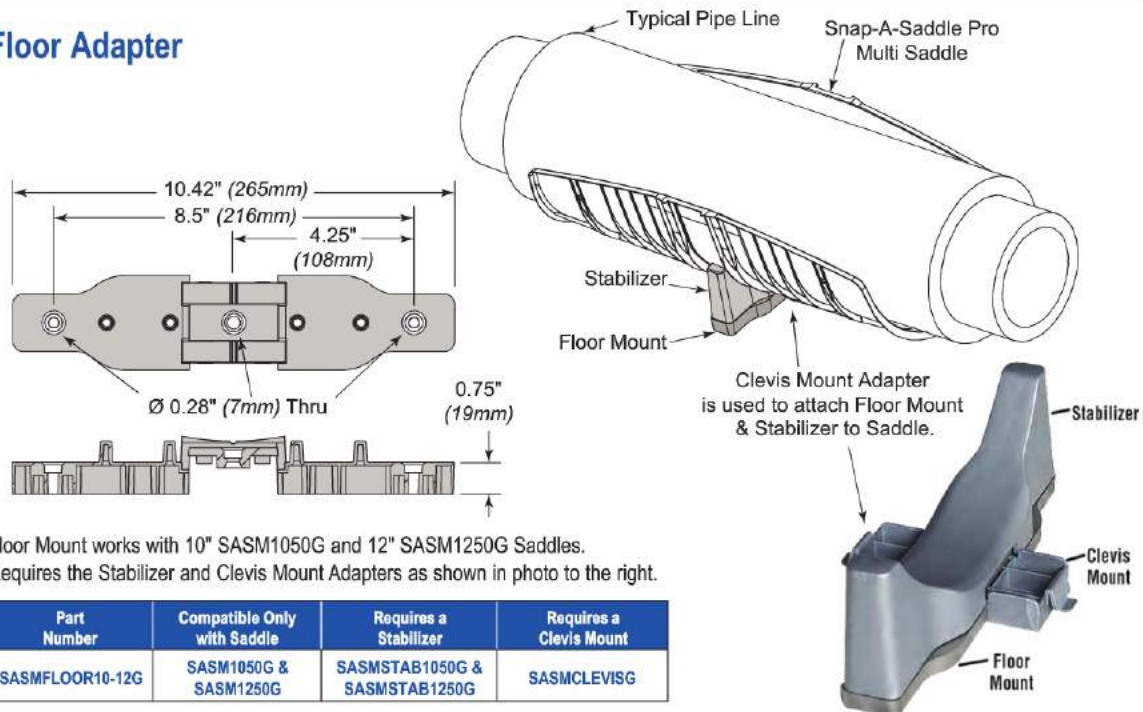


Part Number	B	D	E	Compatible Only with Saddle
SASMSTAB1050G	10.34" (263mm)	R5.13	2.24" (57mm)	SASM1050G
SASMSTAB1250G	11.38" (289mm)	R6.13	2.28" (58mm)	SASM1250G

Stabilizer is attached to Saddle with Strut Mount, Steel Angle, H & I-Beam and Clevis Mount adapters.

The use of this Stabilizer Adapter with 10" SASM1050G and 12" SASM1250G Saddles is suggested for additional support.

Floor Adapter



Floor Mount works with 10" SASM1050G and 12" SASM1250G Saddles.
Requires the Stabilizer and Clevis Mount Adapters as shown in photo to the right.

Part Number	Compatible Only with Saddle	Requires a Stabilizer	Requires a Clevis Mount
SASMLOOR10-12G	SASM1050G & SASM1250G	SASMSTAB1050G & SASMSTAB1250G	SASMCLEVISG



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Concrete Inserts
Rooftop Supports
Gamma Pads
Technical Data

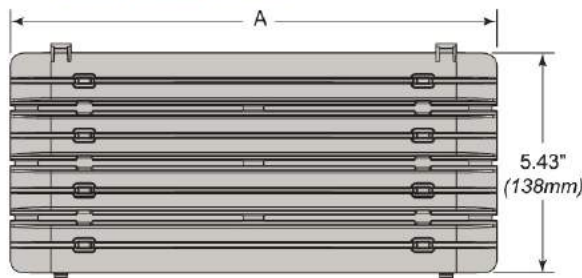
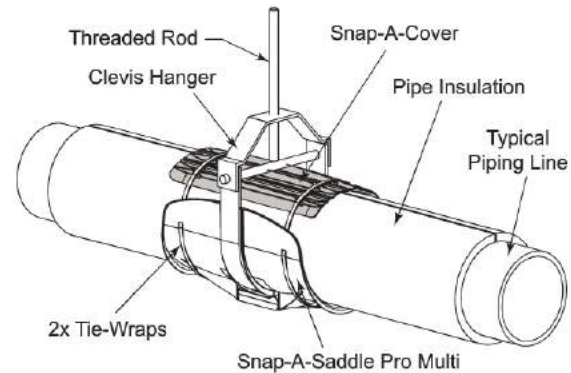


Snap-A-Cover™

Cover for Insulated Pipe Saddle

Snap-A-Cover™

Insulated Pipe Saddle Cover



Applications:

Refrigeration, Air Conditioning and Plumbing

Installation:

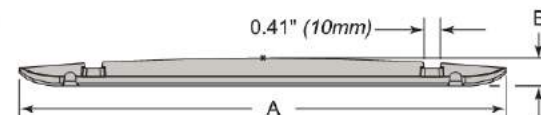
Tool-Free, Suited for vertical or horizontal pipe installation.

Certification:

UL classified for USA (UL-723 (ASTM E 84)) and ULC listed for Canada (ULC-S102.2).

Material:

- Polypropylene
- UV resistant
- Operating temperature -40° to 178°F (-40° to 81°C)
- Paintable (preserves mechanical properties even after painting)
- Non-adhesive surface for linear expansion of thermal insulation.



Part Number	Color	Use With Snap-A-Saddle Pro Part Numbers	A	B
SACX25B	Black	SAS225B, SAS325B, SAS425B, SAS525B, SAS625B	12" (305mm)	0.83" (21mm)
SACX25W	White	SAS225W, SAS325W, SAS425W, SAS525W, SAS625W		
SAC825B	Black	SAS825B		
SAC825W	White	SAS825W		

Part Number	Color	Use With Snap-A-Saddle Pro Multi Part Numbers	A	B
SACX50G	Grey	SASM250G, SASM350G, SASM450G, SASM550G, SASM650G	12" (305mm)	0.83" (21mm)
SACL50G	Grey	SASM850G, SASM1050G, SASM1250G	18" (457mm)	0.77" (19.5mm)

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SnapShock™

Magnetic Shock Detection Device



SnapShock™

Applications:

Refrigeration, Air Conditioning
and Plumbing

Installation:

Tool-Free, clips directly into the Clevis adapter of the
Snap-A-Saddle Pro Multi™

Certification:

UL classified for USA (UL-723 (ASTM E 84) and
ULC listed for Canada (ULC-S102.2).

Material:

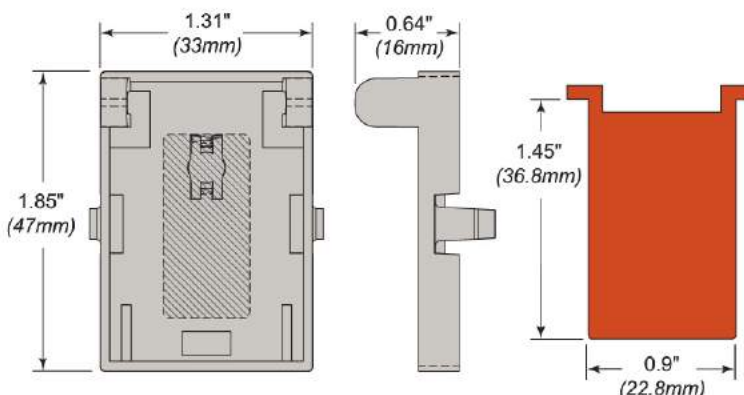
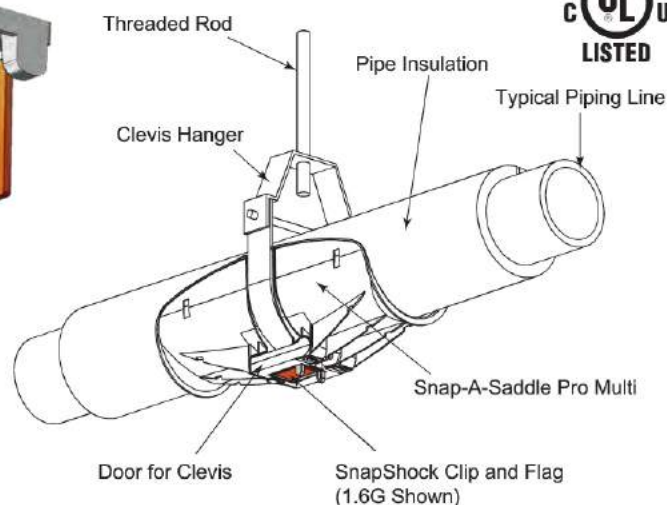
- Polypropylene 20% glass filled
- UV resistant
- Operating temperature -40° to 178°F (-40° to 81°C)



Each color coded flag will trigger at a
different shock intensity. Flags are easily
interchangeable for different shock tolerance.
Flag thickness varies by shock intensity.

- 1.8G
(Downward Allowable Stress Design)
- 1.6G
(Downward Allowable Stress Design)
- 1.4G
(Downward Allowable Stress Design)

SnapShock is sold by the set. Each set is supplied complete
with all three flags.



Install Flag



Set Flag to Arm



Activated Flag Indicates Shock Issue

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Gamma Pads
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Snap-A-Clip™

Dual-Strap Fastener for Clevis Hanger Cross-Bolt

Snap-A-Clip™



Applications:

Refrigeration, Air Conditioning, Plumbing,
Electrical and Communication

Installation:

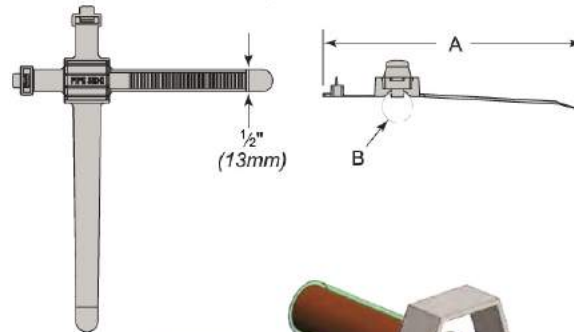
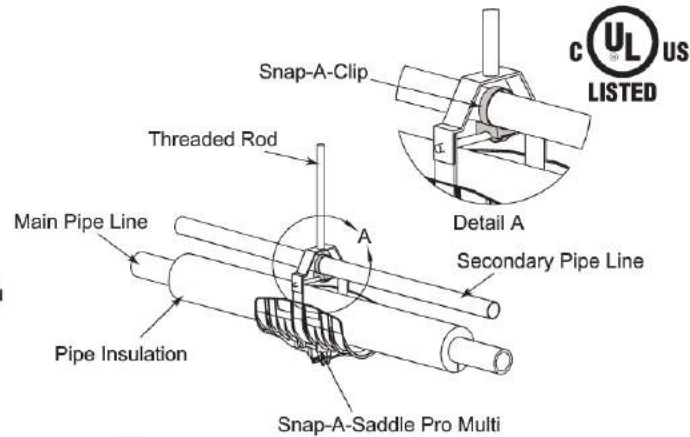
Tool-Free, Tie-wrap style

Certification:

UL classified for USA (UL-723 (ASTM E 84)) and
ULC listed for Canada (ULC-S102.2).

Material:

- Polypropylene
- UV resistant
- Operating temperature -40° to 178°F (-40° to 81°C)
- Paintable (preserves mechanical properties even after painting)



Part Number	For Pipe OD	A	B
SASP050B	1/4" - 1/2"	5.62" (143mm)	0.68" (17mm)
SASP125B	5/8" - 1-1/4"	5.77" (147mm)	1.25" (32mm)
SASP175B	1-5/16" - 1-3/4"	6.20" (158mm)	1.75" (45mm)
SASP225B	1-3/4" - 2-1/4"	6.20" (158mm)	1.71" (44mm)

Bolt Diameter	Pipe Diameter									
	1/4" (6mm)	1/2" (13mm)	3/4" (16mm)	3/4" (19mm)	1" (25mm)	1-1/4" (39mm)	1-1/2" (38mm)	1-3/4" (45mm)	2" (51mm)	2-1/4" (57mm)
1/4" (6.3mm)	SASP050B	SASP050B	—	—	—	—	—	—	—	—
5/16" (7.9mm)			SASP125B	SASP125B	SASP125B	SASP125B	SASP175B	—	—	—
3/8" (9.5mm)								—	—	—
1/2" (12.7mm)								—	—	—
5/8" (15.9mm)								—	—	—
3/4" (19.1mm)	—	—	—	—	—	—	—	—	—	
1" (25.4mm)	—	—	—	—	—	—	—	—	—	
1-1/4" (31.8mm)	—	—	—	—	—	—	—	—	—	
1-1/2" (38.1mm)	—	—	—	—	—	—	—	—	—	
1-3/4" (44.5mm)	—	—	—	—	—	—	—	—	—	
2" (50.8mm)	—	—	—	—	—	—	—	—	—	
2-1/4" (57.1mm)	—	—	—	—	—	—	—	—	—	

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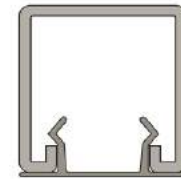
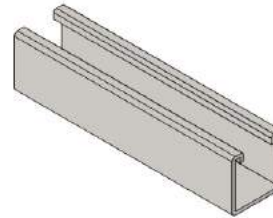
Electrical Fittings



Channel Raceways



W200, W210, W300, W500, W200KO, W210KO, W300KO, W500KO, W200SS, W210SS, W300SS, W500SS, W200SL, W210SL, W300SL, W500SL, W200H, W210H, W300H, and W500H



Maximum Number of Wires

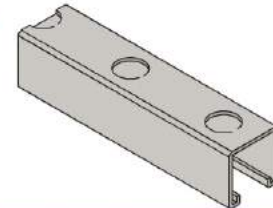
Also suitable for the number of wires in table below when installed to support and supply electric discharge type lighting fixtures when raceway wiring is suitable for at least 70°C and clearance between fixture and raceway is at least 1/8". In all cases, a snap-in cover is required to complete the raceway enclosure.

Wire Types: R, RH, RU, RW, T, or TW

Channel with Knock-Outs

3/8" (22mm) Knock-outs are punched on 6" (152mm) centers.

Add "KO" to channel number.
Example: W200KO



Wire Size AWG	W200, W200KO W210, W210KO	W300, W300KO	W500, W500KO
14	10	10	6
12	10	10	6
10	8	6	-
8	6	4	-
6	3	2	-

Electrical Specifications		
Material	ASTM	ASTM Description
Hot Rolled Plate	A 575	Steel, sheet and strip, carbon drawing quality, special killed, hot rolled.
Fitting (Steel)	A 366	Steel carbon, cold rolled sheet, commercial quality structural steel.
	A 366	
	A 36	

Electrical Finish Specifications		
Finish	Finish Code	Description
Paint-Green Powder Coating	GR	A dark green low gloss powder coating is applied and thoroughly baked after steel has been cleaned and phosphatized.
Electroplated	EG	Fittings and hardware supplied as "Electro-Galvanized" in accordance with ASTM B 633.
Mill-Galvanized (Pre-Galvanized)	PG	Galvanized steel used in the manufacture of Wesanco channel sections conforms to ASTM A 653 GR33 G90. Uncoated edges resulted from slitting, punching and channel cut off are present.
Hot Dip Galvanized After Fabrication (HDGAF)	HG	Wesanco channel and fittings which are hot dip galvanized after fabrication conform to one of the following specifications: ASTM A 123, ASTM A153, or ASTM A386.
Special Coatings	PL GOLD	Other commercially available finishes can be supplied per specification when required to protect applications.

Call ZSi-Foster at (800) 323-7053 or order now at zsi-foster.com

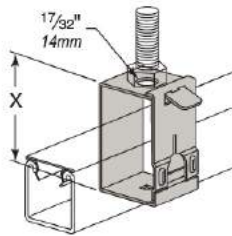


Electrical Accessories

Standard Finish: Electro-Galvanized

W6420 & W6422

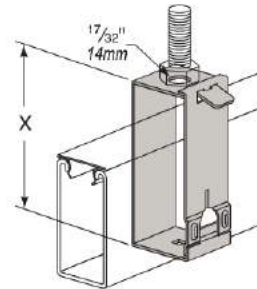
Single Channel Fixture Hanger



Part No.	I.D. X
W6420	3" (76mm)
W6422	4" (102mm)

W6424 & W6426

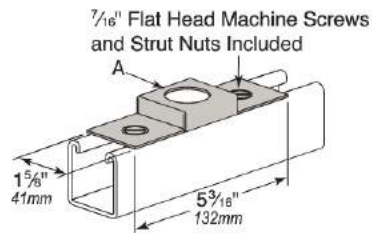
Double Channel Fixture Hanger



Part No.	I.D. "X"
W6424	4- ¹⁵ / ₁₆ " (125mm)
W6426	5- ¹⁵ / ₁₆ " (151mm)

W6442 & W6443

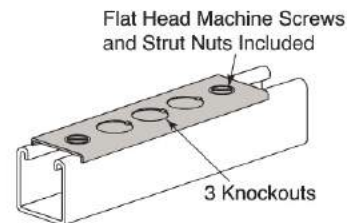
Conduit Connector



Part No.	Use with Conduit	I.D. "A"
W6442	¹ / ₂ "	⁷ / ₁₆ " (22 mm)
W6443	³ / ₄ "	1- ³ / ₃₂ " (28 mm)

W6449

Outlet Box Connection Fitting



Assembly includes Wesanco nuts and Flat Head Machine Screws

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Electrical Accessories

Standard Finish: Electro-Galvanized

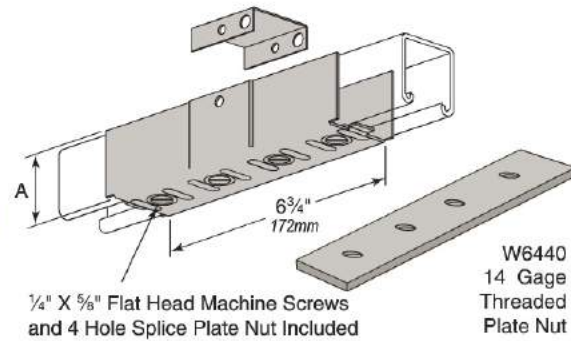


W6432 to W6435

Four-Hole Raceway Splice Fitting
(With W6439/40 Attachment Plates)

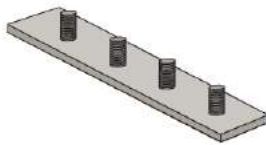


Part No.	A	Use with Channel
W6432	1-5/8" (41mm)	W200, W210
W6433	1-3/8" (35mm)	W300
W6435	1 3/16" (21mm)	W400, W500



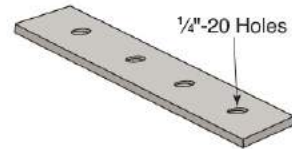
W6439

Standard Raceway Stud Plate



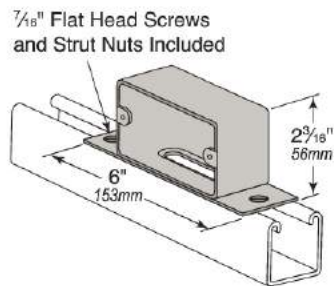
W6440

Four-hole Tapped Splice Plate
(opt.) with 4 Screws



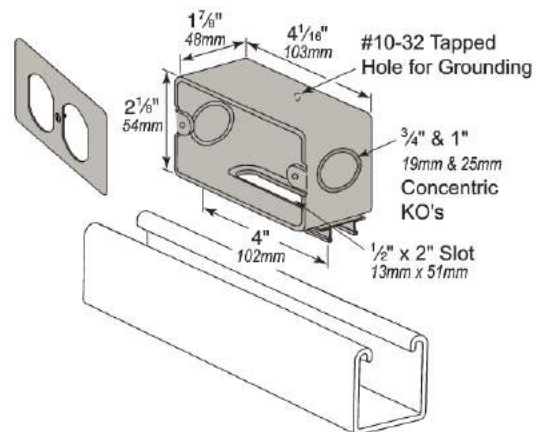
W6445

Receptacle Box



B6445S

Snap-A-Box



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Belt Clamps & Z-Clamps

Concrete Inserts

Rooftop Supports

Gamma Pads

Technical Data

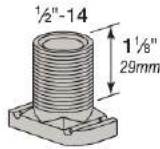


Electrical Accessories

Standard Finish: Electro-Galvanized

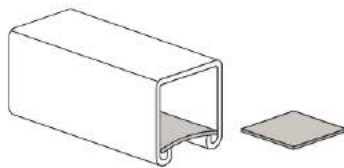
W6462

Aluminum Wiring Stud $\frac{1}{2}$ "-14 Thread $1\frac{1}{8}$ " Long



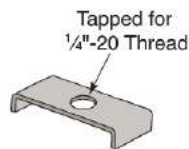
W6469

Fiber Wire Retainer



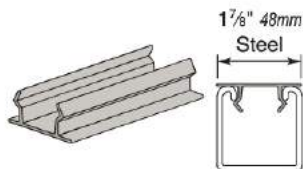
W6461

Fixture Nut



W6500

Closure Strip (19 Ga.)



Use of W6500 Closure Strip with UL listed channel completes UL Listed surface metal raceway.

Standard finish: PG

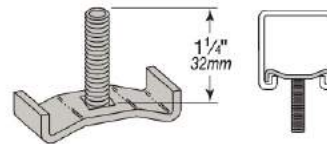
W6463

Shoulder Bolt $\frac{3}{8}$ " x 2"



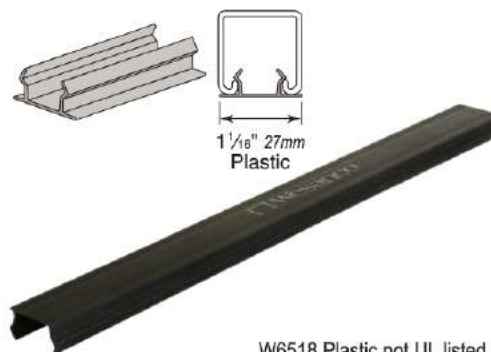
W6460

Fixture Stud



W6500PLASTIC

Plastic Closure Strip



W6518 Plastic not UL listed

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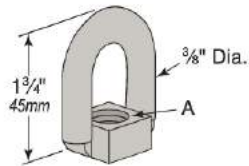
Swivel Hangers

Standard Finish: Electro-Galvanized



W6905 & W6906

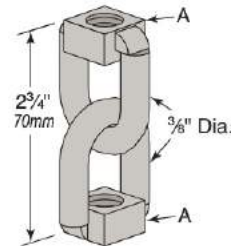
Eyelet



Part No.	A Size
W6905	3/8"-16
W6906	1/2"-13

W6915 & W6916

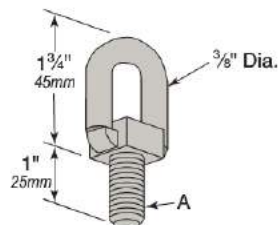
Swivel Joint



Part No.	A Size
W6915	3/8"-16
W6916	1/2"-13

W6910 & W6911

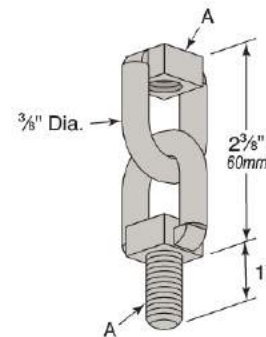
Eyelet With Stud



Part No.	A Size
W6910	3/8"-16
W6911	1/2"-13

W6920 & W6921

Swivel Joint with Stud



Part No.	A Size
W6920	3/8"-16
W6921	1/2"-13

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Gamma Pads
Technical Data



Porc-A-Clamp®

Porc-A-Clamp®

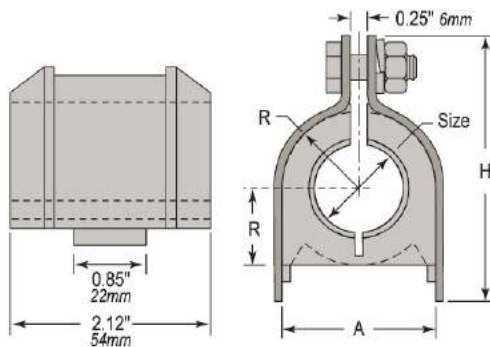
Cable Clamp



The hinged cushion allows easy installation of the wire, but the components will not get separated and lost or broken.

Replaces Porcelain and Maple Cable Clamp. Assembly consists of thermoplastic elastomer cushion with plated or stainless steel clamp. Plated steel and stainless are both supplied with Silicon Bronze bolt and nut.

- Non-breakable material
- Chemical and UV resistant
- **U.L. Listed** - Burning stops within 10 seconds after two applications of ten seconds each of a flame to a test bar with no flaming drips.
- Plated Steel, or Stainless steel clamps
- Tapered flange to protect cable
- Dielectric strength 640 volts per mil
- One piece cushion design, available with Flame retardant / Halogen Free cushions
- Silicon Bronze Hardware used to Breakup the Magnetic field around the Cable at the Clamping Location.



Part No.	Dimensions (In.)			Total Assy. Height - H
	Hole Dia.	A	R	
006CC018	3/4"	1.12" (28mm)	0.56" (14mm)	1.82" (46mm)
008CC018	1/2"			
010CC018	5/8"			
012CC026	3/4"	1.62" (41mm)	0.81" (21mm)	2.34" (59mm)
014CC026	7/8"			
016CC026	1"			
018CC026	1-1/8"	2.12" (54mm)	1.06" (27mm)	2.86" (73mm)
020CC034	1-3/4"			
022CC034	1-3/8"			
024CC034	1-1/2"	2.62" (67mm)	1.31" (33mm)	3.50" (89mm)
026CC034	1-5/8"			
028CC042	1-3/4"			
030CC042	1-3/8"	3.12" (79mm)	1.56" (40mm)	4.05" (103mm)
032CC042	2"			
034CC042	2-1/8"			
036CC050	2-1/4"	3.62" (92mm)	1.81" (46mm)	4.75" (121mm)
038CC050	2-3/8"			
040CC050	2-1/2"			
042CC050	2-5/8"	4.12" (105mm)	2.06" (52mm)	5.125" (130mm)
044CC058	2-3/4"			
046CC058	2-7/8"			
048CC058	3"	4.62" (117mm)	2.31" (59mm)	5.54" (141mm)
050CC058	3-1/4"			
052CC066	3-1/4"			
054CC066	3-3/8"	5.00" (127mm)	2.50" (64mm)	5.92" (150mm)
056CC066	3-1/2"			
058CC066	3-5/8"			
060CC074	3-3/4"	5.00" (127mm)	2.50" (64mm)	5.92" (150mm)
062CC074	3-7/8"			
064CC074	4"			
066CC074	4-1/4"	5.00" (127mm)	2.50" (64mm)	5.92" (150mm)
068CC080	4-1/2"			
070CC080	4-3/8"			
072CC080	4-1/2"			



Note: All clamps have Silicon Bronze Hardware

SUFFIX	Clamp	Cushion	Example
Z	Plated Steel	Flame Retardant	006CC018Z
S	Stainless Steel	Flame Retardant	006CC018S
ZH	Plated Steel	Flame Retardant Halogen Free	006CC018ZH
SH	Stainless Steel	Flame Retardant Halogen Free	006CC018SH

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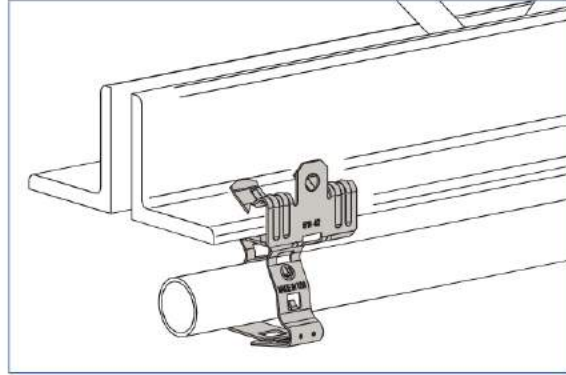
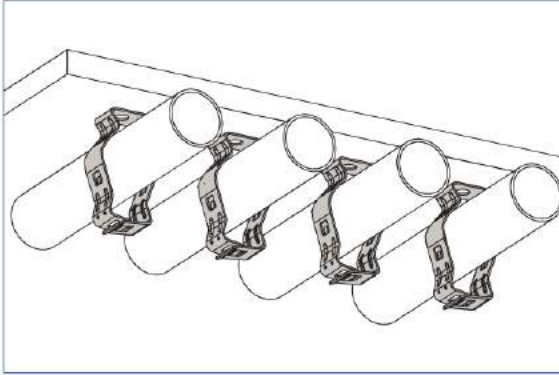


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Spring Steel



Electrical Positioning and Support Products




The ZSi-Foster Silva-Guard Finish

Superior Corrosion Resistance

The ZSi-Foster Silva-Guard finish provides one of the highest levels of corrosion resistance for spring steel fasteners available on the market. ZSi-Foster Silva-Guard coating is extremely consistent providing a finish that combines superior appearance and outstanding protection.

This aesthetically pleasing appearance is particularly important for installations in highly visible areas, such as open ceilings.

SG Finish is  Listed for indoor, outdoor, wet, and dry applications.

Innovative Three Step Coating System

The ZSi-Foster Silva-Guard finish is a three step coating system that is RoHS, WEEE, and ELV compliant.

- The first step is surface preparation involving a process designed to improve the coating adhesion.
- The second step is a base coat designed to self-heal from nicks and scratches as well as sacrifice itself instead of the fastener base material.
- The third step is a topcoat designed to be an additional protective barrier.

Spring Steel Specifications	
Material	ASTM Description
Spring Steel	Cold Roll, ASTM A684 Grade 1055 Spring Steel
Carbon Steel	ASTM A1011-00 SS GR 33 or ASTM A1011-00CS Type B

Spring Steel Finish Specifications		
Finish	Finish Code	Description
ZSi-Foster Silva-Guard	SG	ZSi-Foster Silva-Guard coating is a multi-step process that meets the 1000 hour salt spray test per ASTM B117 and DIN 50021. Silva-Guard coating is WEEE, ELV and RoHS compliant. SG Finish is approved for outdoor as well as indoor applications. It is a chrome free duplex coating system that combines an inorganic zinc-rich basecoat with an aluminum-rich organic topcoat.
Electroplated Zinc or Electro-Galvanized	EG	This coating is standard for most ZSi-Foster products. Electro-Galvanized products meet ASTM B633 SC1 or SC3, Type III. Electroplating deposits zinc on the surface of the steel by electrolysis from a bath of zinc salts.
Pre-galvanized Zinc	PG	ASTM A653 G-90 Pre-galvanized zinc is produced by continuously rolling steel coils or sheets through molten zinc at the mills.

Call ZSi-Foster at (800) 323-7053 or order now at zsi-foster.com



Conduit and Cable Support

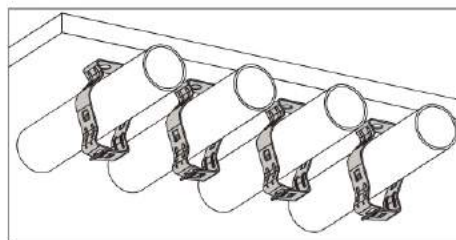
Standard Finish: Silva-Guard (SG)

CC/CCT

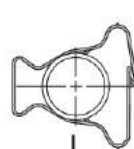
Conduit Clips



- For vertical or horizontal conduit and pipe applications.
- Threaded version can be used with 1/4"-20 threaded rods.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



Part No.	Mounting Hole	Conduit Size
CC812	3/32" Thru Hole	1/2" or 3/4" EMT, Rigid
CCT812	1/4"-20 Thread Form	
CC16	3/32" Thru Hole	1" EMT, Rigid
CCT16	1/4"-20 Thread Form	
CC20	3/32" Thru Hole	1-1/2" EMT, Rigid
CCT20	1/4"-20 Thread Form	
CC24	3/32" Thru Hole	1-1/2" EMT, Rigid
CCT24	1/4"-20 Thread Form	
CC32	3/32" Thru Hole	2" EMT, Rigid
CCT32	1/4"-20 Thread Form	



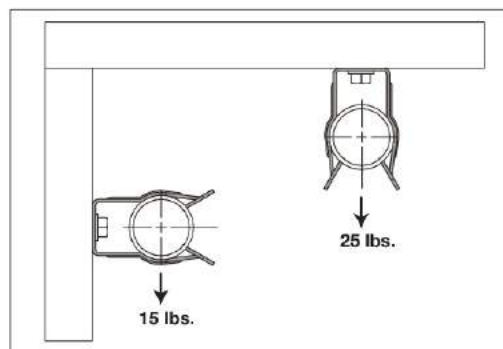
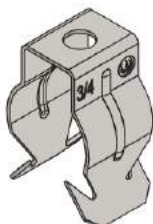
30 lbs



120 lbs

CCP

Conduit "Push In" Clips



- Eliminates need for conduit offset bending.
- For vertical or horizontal conduit and pipe applications.
- Simple Push-in design
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Mounting Hole	Conduit Size
CCP8	3/32" Thru Hole	1/2" EMT
CCP12		3/4" EMT, 1/2", Rigid
CCP16		1" EMT, 3/4" Rigid

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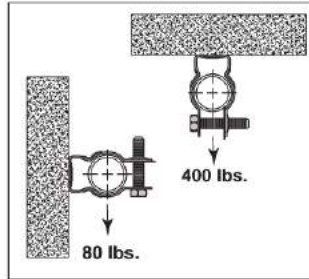
Conduit and Cable Support

Standard Finish: Silva-Guard (SG)



PCH

Pipe and Conduit Hanger



Part No.	Trade Size	Conduit Size		Hole Size
		EMT	Rigid	
PCH0	0	1/2"	3/8", 1/2"	1/4"
PCH1	1	3/4"	3/4"	1/4"
PCH2	2	1"	1"	1/4"
PCH2.5	2.5	1-1/4"	-	1/4"
PCH3	3	1-1/2"	1-1/4"	1/4"
PCH4	4	-	1-1/2"	3/8"
PCH5	5	2"	2"	3/8"
PCH6 *	6	2-1/2"	2-1/2"	5/8"
PCH7 *	7	3"	3"	5/8"
PCH8 *	8	3-1/2"	3-1/2"	5/8"
PCH9 *	9	4"	4"	5/8"

* EG finish and pan head, hex nut hardware.

- PCH #0-5 come with retained combo head screw and thread form.
- Combo head screw allows Robertson, Phillips, Slotted and Hex drivers.
- Supports vertical and horizontal installations of 3/8" - 4" Pipe and Conduit.
- 1/4"-20 Thread Form Hole Size available. Add suffix TF to Catalog Number.
- Also available in 304 and 316 Stainless Steel.
- Material:** Steel
- Finish:** Pregalvanized

WC/WCBW

Wing Clip Conduit Hanger



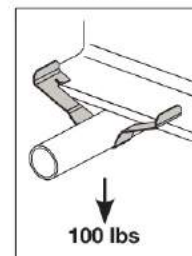
Conduit Size	#12 & #10 Wire	#9 & #8 Wire	3/16" & 1/4" Rod	1/8" Thru 1/4" Flange	3/16" Thru 3/8" Flange	1/8" Thru 1/2" Flange
1/2" EMT	WC8	WC8	WC8	WC8	WC12	WC12
1/2" RIGID						
3/4" EMT	WC12	WC12	WC12	WC12	WC16	WC16
3/4" RIGID						
1" EMT	-	WC16	WC16	WC16	WC20	WC20
1" RIGID	-					
1-1/4" EMT	-	WC20	WC20	-	-	-

WC clip shown

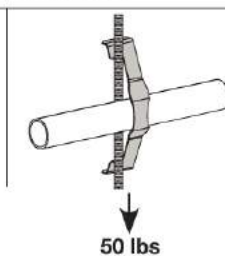
MC/AC Cable Size	#12, #10, #9 & #8 Wire
14 - 2 (.433-.475 O.D.)	WCBW
14 - 3 (.453-.500 O.D.)	WCBW
12 - 2 (.467-.475 O.D.)	WCBW
12 - 3 (.489-.535 O.D.)	WCBW
WCBW For Position Only	

- Supports conduit and pipe to a rod, wire, or flange.
- No installation tools required.
- Box Qty 100 for all sizes.
- Material:** Spring Steel
- Finish:** Silva-Guard

Flange Installation



Wire or Rod Installation



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Gamma Pads

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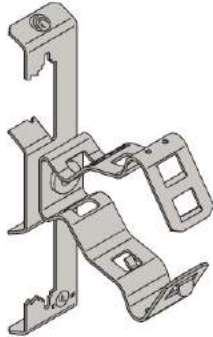


Conduit and Cable Support

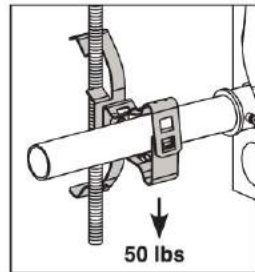
Standard Finish: Silva-Guard (SG)

MFC

Multi-Function Clip with Assemblies



Wire or Rod Installation

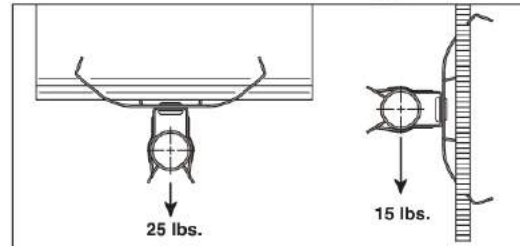
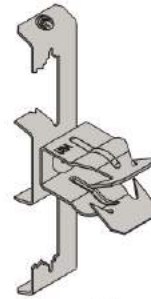


- Supports conduit and pipe to a rod, wire or flange.
- No tools required. Easy adjustment after installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Flange Size	Threaded Rod Size	Conduit Size or Threads
MFC812	1/8" - 3/8"	1/4" Threaded Rod	1/2" EMT, Rigid
MFC16			3/4" EMT, Rigid
			1" EMT, Rigid

MFCCCP

Multi-Function Clip with Conduit "Push In" Clip

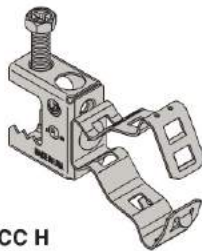


- No tools required for installation of conduit.
- Supports conduit to a rod, wire or flange.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

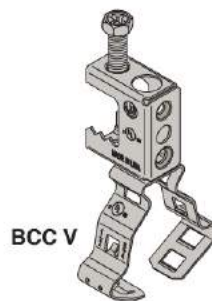
Part No.	Flange Size	Wire or Rod Size	Conduit Size
MFCCCP8	1/8" - 3/8"	#12 - 1/4" wire or rod with or without Threads	1/2" EMT
MFCCCP12			3/4" EMT, 1/2" Rigid
MFCCCP16			1" EMT, 3/4" Rigid

BCC

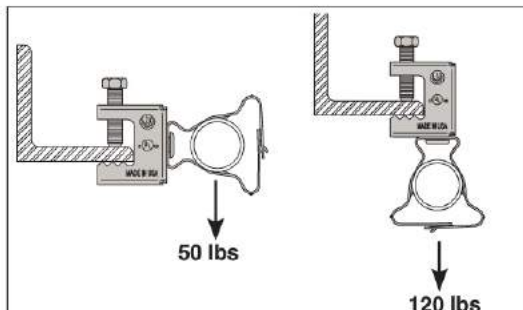
Beam Clamp with Conduit Clip



BCC H



BCC V



Part No.	Conduit Size
BCC812HM	1/2" & 3/4" EMT, Rigid
BCC16HM	1" EMT, Rigid
BCC20HM	1-1/4" EMT, Rigid
BCC24HM	1-1/2" EMT, Rigid
BCC32HM	2" EMT, Rigid
BCC812VM	1/2" & 3/4" EMT, Rigid
BCC16VM	1" EMT, Rigid
BCC20CM	1-1/4" EMT, Rigid
BCC24VM	1-1/2" EMT, Rigid
BCC32VM	2" EMT, Rigid



- Eliminates offset bending of conduit.
- For installation on 1/2" maximum flanges.
- Included combo head screw allows Robertson, Phillips/Slotted and Hex drivers.
- Conduit clip rotates 360 degrees.
- For support of conduit per NEC 344.30(B).
- **Material:** Spring Steel
- **Finish:** Silva-Guard

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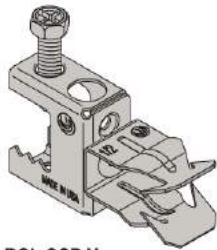
Conduit and Cable Support

Standard Finish: Silva-Guard (SG)

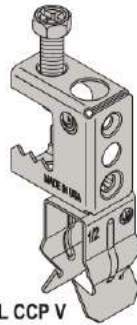


BCL CCP

Beam Clamp with Conduit "Push In" Clip

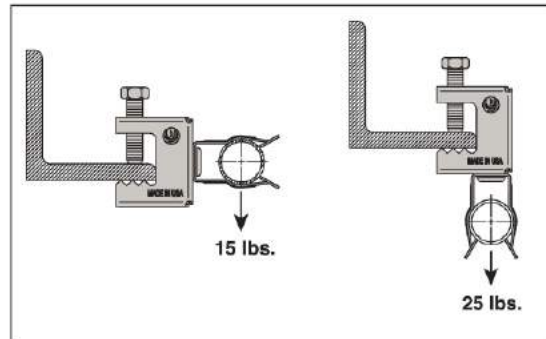


BCL CCP H



BCL CCP V

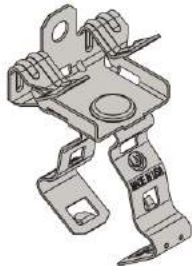
- Eliminates offset bending of conduit.
- For installation on 1/2" maximum flanges.
- Included combo head screw allows Robertson, Phillips/Slotted and Hex drivers.
- Conduit clip rotates 360 degrees.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



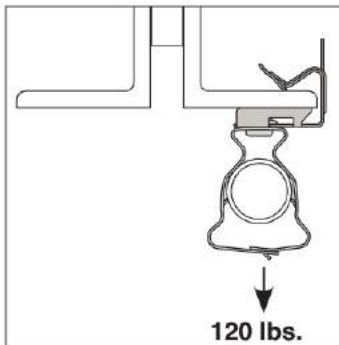
Part No.	Conduit Size
BCLCCP8HM	1/2" EMT
BCLCCP12HM	3/4" EMT, 1/2" Rigid
BCLCCP16HM	1" EMT, 3/4" Rigid
BCLCCP8VM	1/2" EMT
BCLCCP12VM	3/4" EMT, 1/2" Rigid
BCLCCP16VM	1" EMT, 3/4" Rigid

FH C

Flange Clip with Conduit Clip



- Supports pipe and conduit from beam flanges.
- Conduit clip rotates 360 degrees.
- Flange thickness range stamped on part.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



Part No.	Min. - Max. Flange Thickness	Conduit Size
FH24CC812	1/8" - 1/4" (3mm - 6mm)	1/2" & 3/4" EMT, Rigid
FH58CC812	5/16" - 1/2" (8mm - 13mm)	
FH912CC812	9/16" - 3/4" (14mm - 19mm)	
FH24CC16	1/8" - 1/4" (3mm - 6mm)	1" EMT, Rigid
FH58CC16	5/16" - 1/2" (8mm - 13mm)	
FH912CC16	9/16" - 3/4" (14mm - 19mm)	
FH23CC20	1/8" - 1/4" (3mm - 6mm)	1-1/4" EMT, Rigid
FH58CC20	5/16" - 1/2" (8mm - 13mm)	
FH912CC20	9/16" - 3/4" (14mm - 19mm)	
FH24CC24	1/8" - 1/4" (3mm - 6mm)	1-1/2" EMT, Rigid
FH58CC24	5/16" - 1/2" (8mm - 13mm)	
FH912CC24	9/16" - 3/4" (14mm - 19mm)	
FH24CC32	1/8" - 1/4" (3mm - 6mm)	2" EMT, Rigid
FH58CC32	5/16" - 1/2" (8mm - 13mm)	
FH912CC32	9/16" - 3/4" (14mm - 19mm)	

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Rooftop Supports

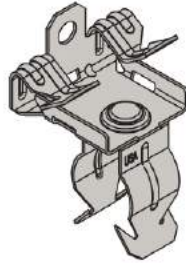
Gamma Pads

Technical Data



FH CCP

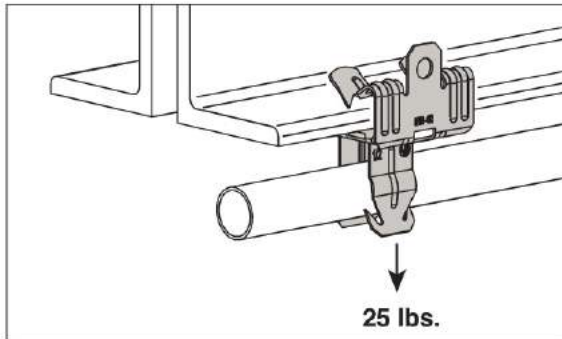
Flange Clip with
Conduit "Push In" Clip



Conduit and Cable Support

Standard Finish: Silva-Guard (SG)

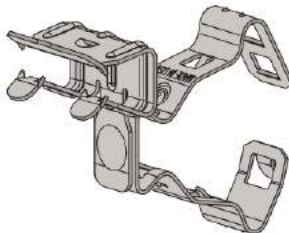
- Supports conduit from beam flanges.
- Conduit clip rotates 360 degrees.
- Flange thickness range stamped on part.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



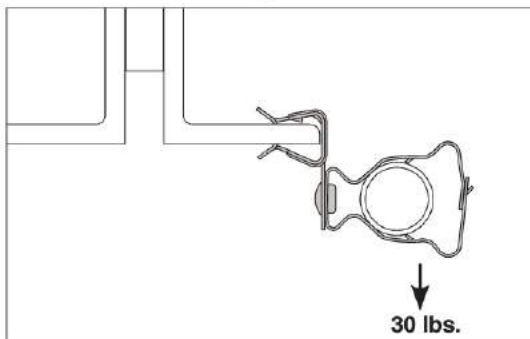
Part No.	Min. - Max. Flange Thickness	Conduit Size
FH24CCP8	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	$\frac{1}{2}"$ EMT
FH58CCP8	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FH912CCP8	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FH24CCP12	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	$\frac{3}{4}"$ EMT, $\frac{1}{2}"$ Rigid
FH58CCP12	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FH912CCP12	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FH24CCP16	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	1" EMT, $\frac{3}{4}"$ Rigid
FH58CCP16	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FH912CCP16	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	

FHS C

Flange Clip Side Mount with Conduit Clip



- Supports pipe and conduit from beam flanges.
- Flange thickness range stamped on part.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



Part No.	Min. - Max. Flange Thickness	Conduit Size
FHS24CC812	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	$\frac{1}{2}"$ & $\frac{3}{4}"$ EMT, Rigid
FHS58CC812	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FHS912CC812	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FHS24CC16	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	1" EMT, Rigid
FHS58CC16	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FHS912CC16	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FHS24CC20	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	1- $\frac{1}{4}"$ EMT, Rigid
FHS58CC20	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FHS912CC20	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FHS24CC24	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	1- $\frac{1}{2}"$ EMT, Rigid
FHS58CC24	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FHS912CC24	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FHS24CC32	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	2" EMT, Rigid
FHS58CC32	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FHS912CC32	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	

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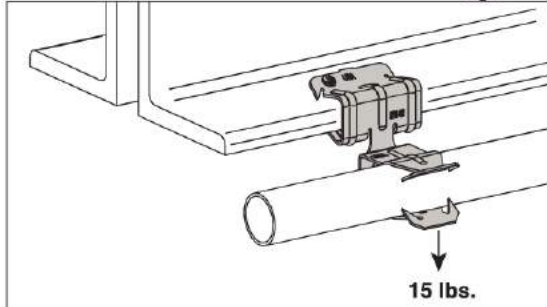
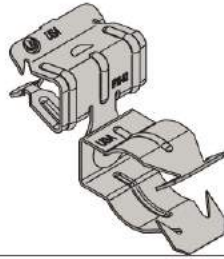
Conduit and Cable Support

Standard Finish: Silva-Guard (SG)



FHS CCP

Flange Clip Side Mount
with Conduit "Push In" Clip

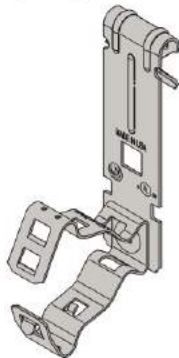


- Supports conduit from beam flanges.
- Flange thickness range stamped on part.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Min. - Max. Flange Thickness	Conduit Size
FHS24CCP8	1/8" - 1/4" (3mm - 6mm)	1/2" EMT
FHS58CCP8	5/16" - 1/2" (8mm - 13mm)	
FHS912CCP8	3/8" - 3/4" (14mm - 19mm)	
FHS24CCP12	1/8" - 1/4" (3mm - 6mm)	3/4" EMT, 1/2" Rigid
FHS58CCP12	5/16" - 1/2" (8mm - 13mm)	
FHS912CCP12	3/8" - 3/4" (14mm - 19mm)	
FHS24CCP16	1/8" - 1/4" (3mm - 6mm)	1" EMT, 3/4" Rigid
FHS58CCP16	5/16" - 1/2" (8mm - 13mm)	
FHS912CCP16	3/8" - 3/4" (14mm - 19mm)	

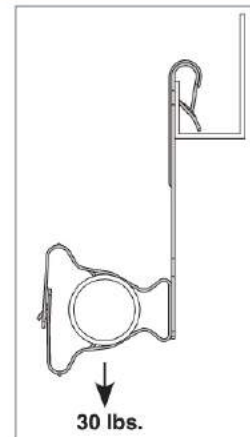
FHV CC

Flange Hanger with Conduit Clip



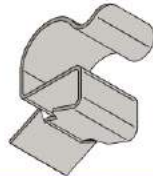
- Supports pipe and conduit from bar joist's and "C" purlin's.
- Compatible with many industry standard installation tools.
- 1/8"-1/4" flange thickness range.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Min. - Max. Flange Thickness	Conduit Size
FHV3CC812	1/8" - 1/4"	1/2" & 3/4" EMT, Rigid
FHV3CC16	1/8" - 1/4"	1" EMT, Rigid

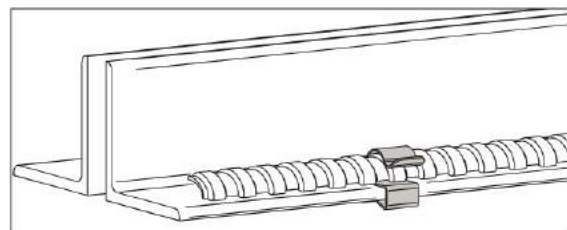


CFC

Conduit Clip to Flange



Part No.	Flange Thickness	Cable O.D.
CFC2D	1/16" - 3/16"	0.46 - 0.56
CFC4D	3/16" - 9/32"	0.46 - 0.56
CFC4E		0.50 - 0.72
CFC8D	3/16" - 1/2"	0.46 - 0.56
CFC8E		0.50 - 0.72



- Supports flexible conduit and cable from flanges.
- Simple Push-in clip design.
- **Material:** Steel
- **Finish:** Electro-Galvanized

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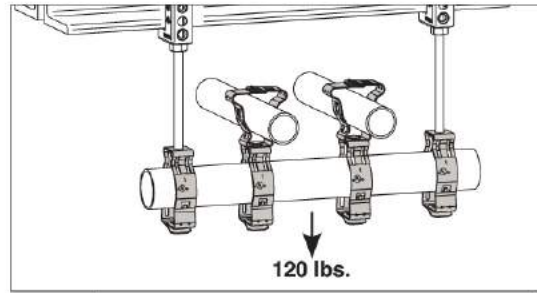
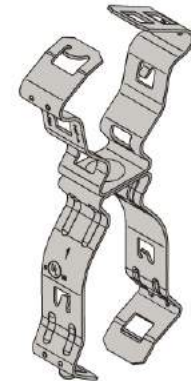
Gamma
Pads

Technical
Data


CC CC

 Conduit Clip
with Conduit Clip

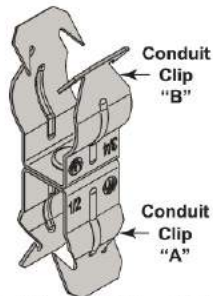

- No screws or bolts required.
- For lightweight trapeze systems.
- Conduit clip rotates 360 degrees.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



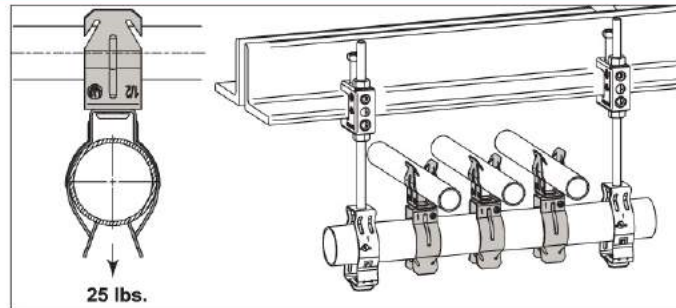
Part No.	Conduit Clip
CC16CC812	1/2" or 3/4" EMT, Rigid
CC16CC16	1" EMT, Rigid
CC16CC20	1-1/4" EMT, Rigid
CC16CC24	1-1/2" EMT, Rigid
CC16CC32	2" EMT, Rigid

CCP CCP

Conduit "Push In" Clip with Conduit "Push In" Clip



- No tools required for conduit installation.
- For lightweight trapeze systems.
- Conduit clips rotate 360 degrees.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



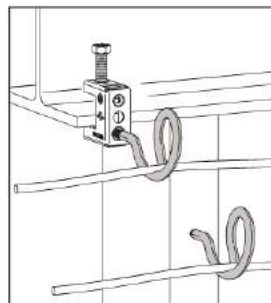
Part No.	Conduit Clip "A"	Conduit Clip "B"
CCP8CCP8	1/2" EMT	1/2" EMT
CCP8CCP12		3/4" EMT, 1/2" Rigid
CCP8CCP16		1" EMT, 3/4" Rigid
CCP12CCP12	3/4" EMT, 1/2" Rigid	3/4" EMT, 1/2" Rigid
CCP12CCP16		1" EMT, 3/4" Rigid
CCP16CCP16	1" EMT, 3/4" Rigid	1" EMT, 3/4" Rigid

BR

Bridle Ring



- Supports low voltage communication cable.
- Compatible with many other fasteners for support from purlin, T-grid, drop wire, and beam flanges.
- **Material:** Steel
- **Finish:** Electro-galvanized



Part No.	Ring Size I.D.	Thread Size
BR1012	3/4"	#10-24
BR1020	1-1/4"	#10-24
BR2520		1/4"-20
BR2520WS		1/4" Wood Screw
BR1032	2"	#10-24
BR2532		1/4"-20
BR2532WS		1/4" Wood Screw

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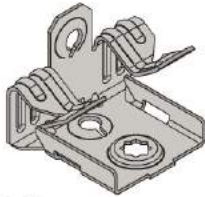
Structural Attachment

Standard Finish: Silva-Guard (SG)



FCH

Flange Clip



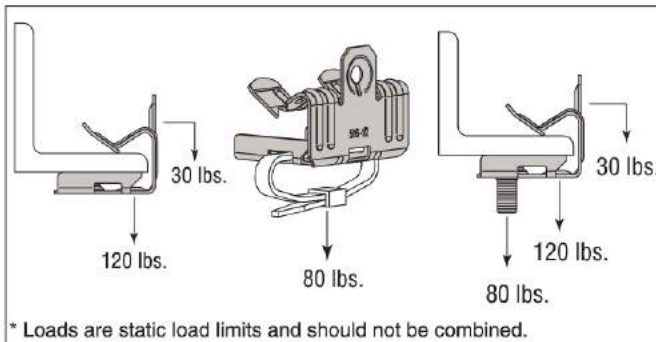
FCH



FCH S
w/Stud

$\frac{1}{4}$ "-20 x
 $\frac{3}{8}$ " Stud

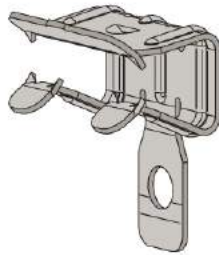
- Multi use beam clamp used to support threaded rod, electrical boxes, and bridal rings from beam flanges.
- Beam clamp with stud is for supporting electrical boxes from beam flanges.
- Punched holes provided for zip tie applications.
- $\frac{1}{4}$ "-20 thread forms permit threaded rod applications.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



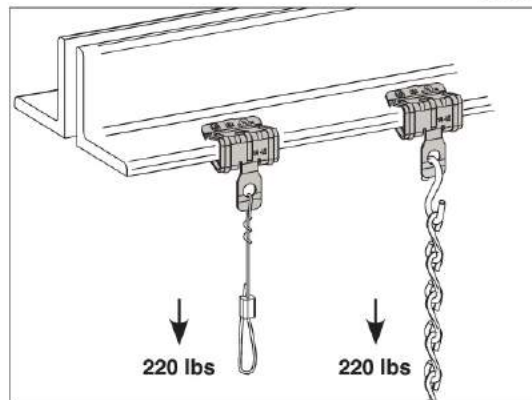
Part No.	Flange Thickness
FCH24	$\frac{1}{8}$ " - $\frac{1}{4}$ " (3mm - 6mm)
FCH58	$\frac{5}{16}$ " - $\frac{1}{2}$ " (8mm - 13mm)
FCH912	$\frac{9}{16}$ " - $\frac{3}{4}$ " (14mm - 19mm)
FCH24S	$\frac{1}{8}$ " - $\frac{1}{4}$ " (3mm - 6mm)
FCH58S	$\frac{5}{16}$ " - $\frac{1}{2}$ " (8mm - 13mm)
FCH912S	$\frac{9}{16}$ " - $\frac{3}{4}$ " (14mm - 19mm)

FSM

Flange Clip Side Mount



Part No.	Flange Thickness	Hole Size
FSM24	$\frac{1}{8}$ " - $\frac{1}{4}$ " (3mm - 6mm)	$\frac{9}{32}$ " (7.1mm)
FSM58	$\frac{5}{16}$ " - $\frac{1}{2}$ " (8mm - 13mm)	
FSM912	$\frac{9}{16}$ " - $\frac{3}{4}$ " (14mm - 19mm)	



- Beam clamp with hole for supporting tie wire and jack chain to beam flanges.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

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Roofing
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Gamma
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Data

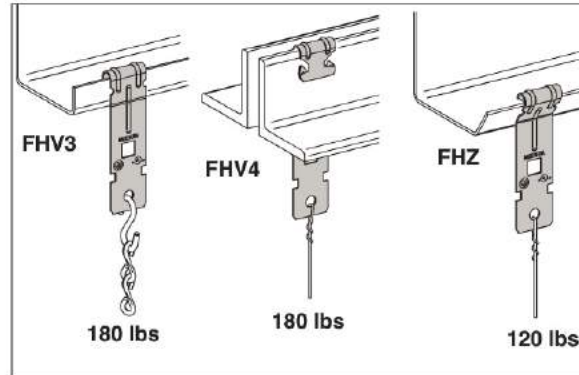
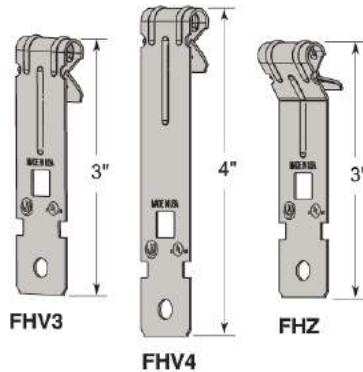


Structural Attachment

Standard Finish: Silva-Guard (SG)

FVZ, FHZ

Flange Hanger for Purlins and Bar Joists

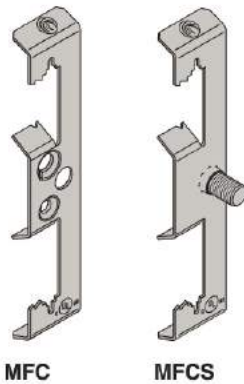


- **FHV3:** Flange clip with hole for supporting tie wire and jack chain to bar joist's and "C" purlin's.
- **FHV4:** Extra long flange clip with hole for supporting tie wire and jack chain to tall bar joist's and "C" purlin's.
- **FHZ:** Angled flange clip with hole for supporting tie wire and jack chain to "Z" purlin's.
- Compatible with many industry standard installation tools.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Min. - Max. Flange Thick-ness	Hole Size
FHV3	$\frac{1}{16}'' - \frac{1}{4}''$ (2mm - 8mm)	$\frac{9}{32}''$ (7.1mm)
FHV4		
FHZ		

MFC

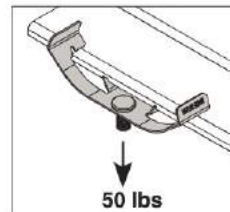
Multi-Function Clip with Assemblies



Part No.	Flange Size	Threaded Rod Size	Conduit Size or Threads
MFC	$\frac{1}{8}'' - \frac{3}{8}''$	$\frac{1}{4}''$ Threaded Rod	$\frac{3}{32}''$ - hole, $\frac{1}{4}''$ - 20 and 10-24 thread form
MFCS	$\frac{1}{8}'' - \frac{3}{8}''$	$\frac{1}{4}''$ Threaded Rod	$\frac{1}{4}''$ - 20 staked stud with nut (UL listed box support)

- **MFC:** Supports #10-24 and $\frac{1}{4}''$ -20 bridal rings to rod and wire.
- **MFCS:** Supports electrical boxes to rod and wire.
- No tools required. Easy adjustment after installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Flange Installation



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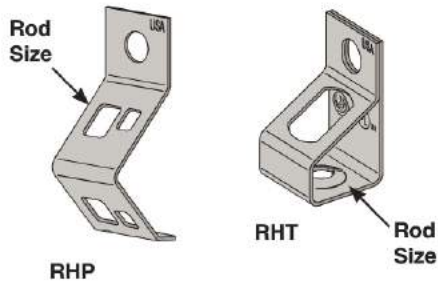
Structural Attachment

Standard Finish: Silva-Guard (SG)



RHP RHT

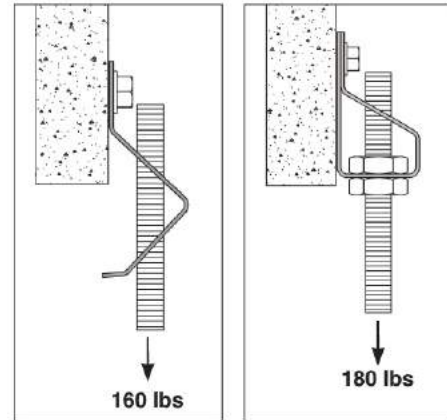
Rod Hanger Push Install or Rod Hanger Thread Install



- **RHP:** Suspends plain and threaded rod from vertical surfaces, and provides easy adjustment of rod after installation.
- **RHT:** Suspends threaded rod from vertical surfaces.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

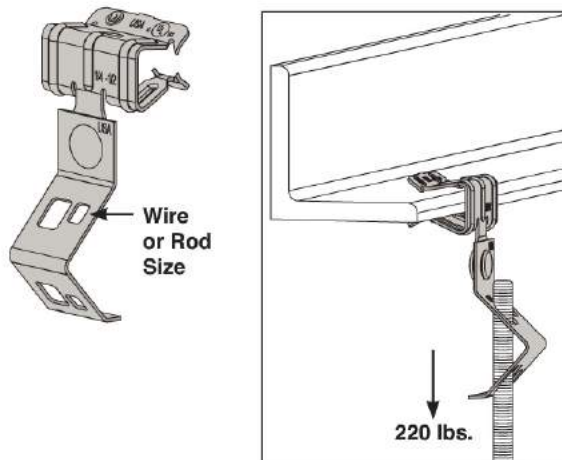
Part No.	Rod Size
RHP4	#8 Wire or 1/4" Plain or Threaded Rod
RHP6	3/8" Plain or Threaded Rod
RHT4T	1/2" - 20 Thread Form
RHT6T	3/8" - 16 Thread Form
RHT6 *	13/32" Thru Hole for 1/4" or 3/8" Threaded Rod

* Nuts sold separately



FH P

Flange Clip Side Mount with Rod Hanger Push Install



- Suspends plain and threaded rod from beam flanges.
- Easy adjustment of rod after installation.
- Flange thickness range stamped on part.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Minimum - Maximum Flange Thickness	Wire/ Rod Size
FH24RHP4	1/8" - 1/4" (3mm - 6mm)	#8 Wire or 1/4" Rod
FH58RHP4	5/16" - 1/2" (8mm - 13mm)	
FH912RHP4	9/16" - 3/4" (14mm - 19mm)	
FH24RHP6	1/8" - 1/4" (3mm - 6mm)	3/8" Rod
FH58RHP6	5/16" - 1/2" (8mm - 13mm)	
FH912RHP6	9/16" - 3/4" (14mm - 19mm)	

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Belt Clamps & Z-Clamps

Concrete Inserts

Rooftop Supports

Gamma Pads

Technical Data

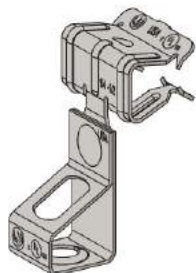


Structural Attachment

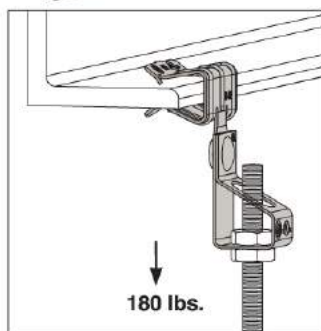
Standard Finish: Silva-Guard (SG)

FH RHT

Flange Clip Side Mount with Rod Hanger Thread Install



- Suspends threaded rod from beam flanges.
- Flange thickness range stamped on part.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

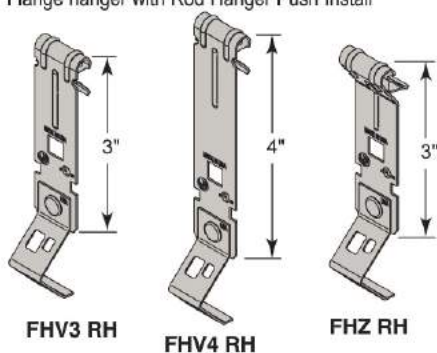


Part No.	Min. - Max. Flange Thickness	Hole Size
FH24RH4T	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	$\frac{1}{4}"$ - 20 Thread Form
FH58RH4T	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FH912RH4T	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FH24RH6T	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	$\frac{3}{8}"$ - 16 Thread Form
FH58RH6T	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FH912RH6T	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	
FH24RH6 *	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)	$\frac{1}{32}"$ thru hole for $\frac{1}{4}"$ or $\frac{3}{8}"$ Threaded Rod
FH58RH6 *	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)	
FH912RH6 *	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)	

* 2 nuts required (sold separately)

FVZ RH

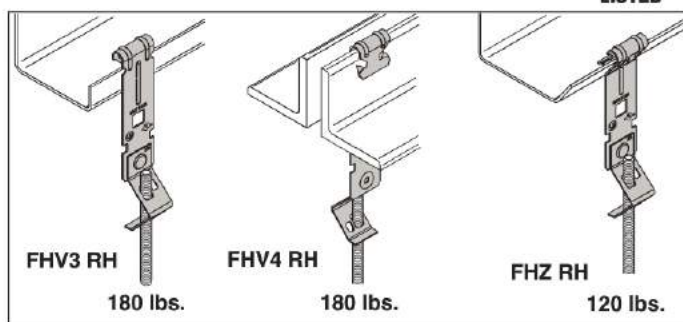
Flange hanger with Rod Hanger Push Install



- **FHV3:** Suspends plain and threaded rod from bar joist's and "C" purlin's.
- **FHV4:** Extra long clip suspends plain and threaded rod from bar joist's.
- **FHZ:** Angled clip suspends plain and threaded rod from "Z" purlin's.
- Easy adjustment of rod after installation.
- Compatible with many industry standard installation tools.

- **Material:** Spring Steel
- **Finish:** Silva-Guard

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Part No.	Wire / Rod Size	Min. - Max. Flange Thickness
FHV3RH4	#8 Wire or $\frac{1}{4}"$ Plain or Threaded Rod	$\frac{1}{16}" - \frac{1}{4}"$
FHV3RH6	$\frac{3}{8}"$ Plain or Threaded Rod	
FHV4RH4	#8 Wire or $\frac{1}{4}"$ Plain or Threaded Rod	$\frac{1}{16}" - \frac{1}{4}"$
FHV4RH6	$\frac{3}{8}"$ Plain or Threaded Rod	
FHZRH4	#8 Wire or $\frac{1}{4}"$ Plain or Threaded Rod	$\frac{1}{16}" - \frac{1}{4}"$
FHZRH6	$\frac{3}{8}"$ Plain or Threaded Rod	

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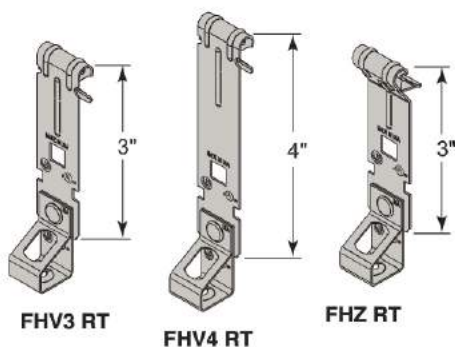
Structural Attachment

Standard Finish: Silva-Guard (SG)

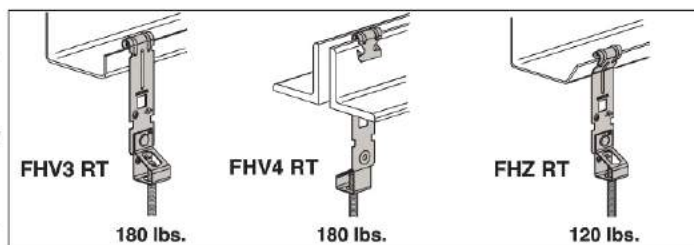


FVZ RT

Flange Hanger with Rod Hanger Threaded Install



- **FHV3 RT:** Suspends threaded rod from bar joist's and "C" purlin's.
- **FHV4 RT:** Extra long clip suspends threaded rod from bar joist's.
- **FHZ RT:** Angled clip suspends threaded rod from "Z" purlin's.
- Compatible with many industry standard installation tools.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

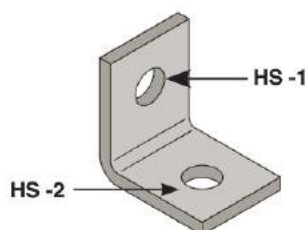


Part No.	Rod Size	Min. - Max. Flange Thickness
FHV3RH4T	1/4"-20 Thread Form	1/8" - 1/4"
FHV3RH6T	3/8"-16 Thread Form	
FHV3RH6 *	13/32" Thru Hole for 1/4" or 3/8" Threaded Rod	
FHV4RH4T	1/4"-20 Thread Form	1/8" - 1/4"
FHV4RH6T	3/8"-16 Thread Form	
FHV4RH6 *	13/32" Thru Hole for 1/4" or 3/8" Threaded Rod	
FHZRH4T	1/4"-20 Thread Form	1/8" - 1/4"
FHZRH6T	3/8"-16 Thread Form	
FHZRH6 *	13/32" Thru Hole for 1/4" or 3/8" Threaded Rod	

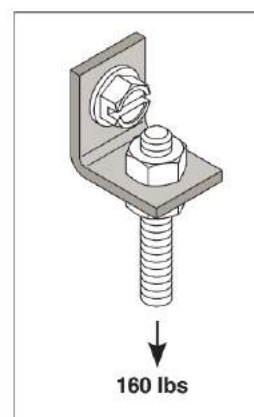
* Nuts sold separately

AB

Angle Bracket



- Accepts wire, chain and rod drops from concrete or wood.
- **Material:** Steel
- **Finish:** Pregalvanized



Part No.	HS - 1	HS - 2
AB04	9/32" (7.1mm)	9/32" (7.1mm)
AB06	9/32" (7.1mm)	13/32" (10.3mm)

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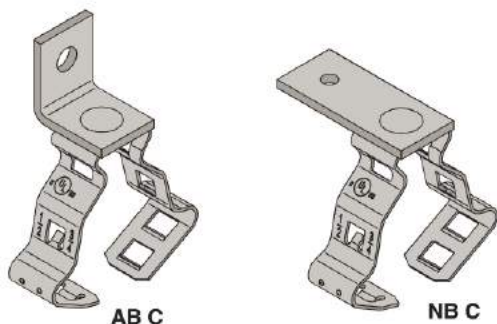


Structural Attachment

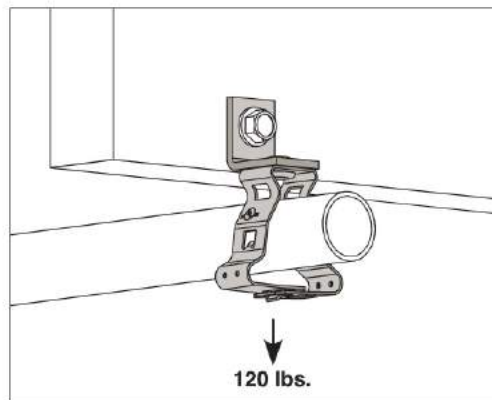
Standard Finish: Silva-Guard (SG)

AB C, NB C

Angle Bracket and Nail Bracket with Conduit Clip



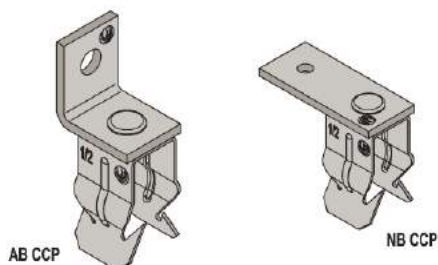
- **AB C:** Supports horizontal runs of conduit through metal studs and prevents conduit from rattling in wall.
- **NB C:** Attaches conduit to wood, concrete and steel, works with power tools and nails.
- Conduit clip rotates 360 degrees.
- **Material:** Steel & Spring Steel
- **Finish:** Pregalvanized & Silva-Guard



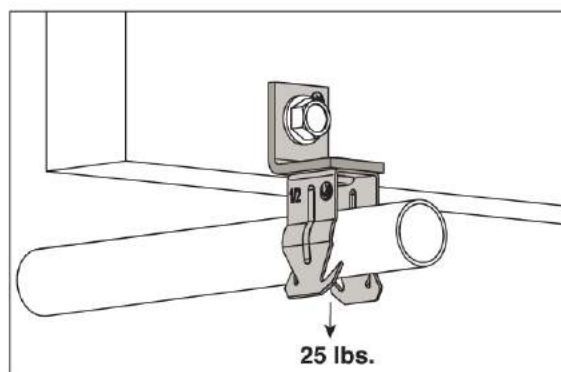
Part No.	Conduit Size	Hole Size
ABCC812	1/2" or 3/4" EMT, Rigid	5/32"
NBCC812	1/2" or 3/4" EMT, Rigid	3/16"

AB CCP, NB CCP

Angle and Nail Bracket with Conduit "Push In" Clip



- **AB CCP:** Supports horizontal runs of conduit through metal studs and prevents conduit from rattling in wall.
- **NB CCP:** Attaches conduit to wood, concrete and steel, works with power tools and nails.
- Conduit clip rotates 360 degrees.
- **Material:** Steel & Spring Steel
- **Finish:** Pregalvanized & Silva-Guard



Part No.	Conduit Size	Hole Size
ABCCP8	1/2" EMT	5/32"
ABCCP12	3/4" EMT, 1/2" Rigid	
NBCCP8	1/2" EMT	3/16"
NBCCP12	3/4" EMT, 1/2" Rigid	

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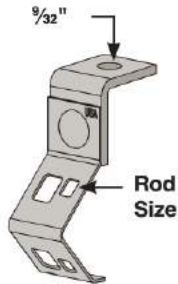
Structural Attachment

Standard Finish: Silva-Guard (SG)

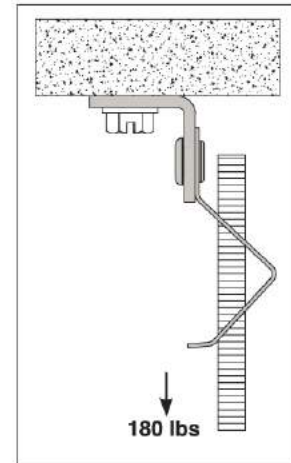


ABR

Angle Bracket with Rod Hanger Push Install



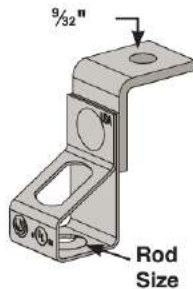
- Attaches to concrete, wood and steel.
- Suspends plain and threaded rod from horizontal surfaces.
- Easy adjustment of rod after installation.
- **Material:** Steel & Spring Steel
- **Finish:** Pregalvanized & Silva-Guard



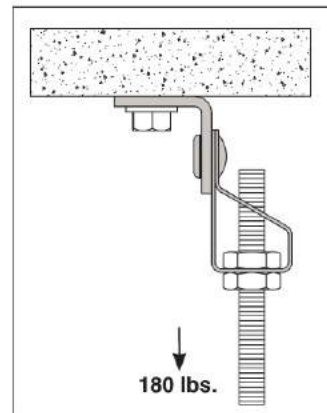
Part No.	Rod Size
ABRH4	#8 Wire or 1/4" Plain or Threaded Rod
ABRH6	3/8" Plain or Threaded Rod

ABR T

Angle Bracket with Rod Hanger Thread Install



- Attaches to concrete, wood and steel.
- Suspends threaded rod from horizontal surfaces.
- **Material:** Steel & Spring Steel
- **Finish:** Pregalvanized & Silva-Guard



Part No.	Rod Size
ABRH4T	1/4" - 20 Thread Form
ABRH6T	3/8" - 16 Thread Form
ABRTH6 *	13/32" Thru Hole for 1/4" or 3/8" Threaded Rod

* Nuts sold separately

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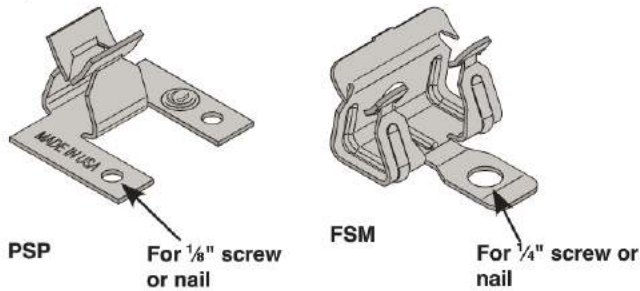


Structural Attachment

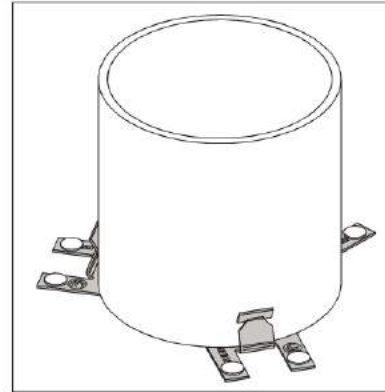
Standard Finish: Silva-Guard (SG) or ElectroGalvanized (EG)

PSP, FSM

Pipe Sleeve Positioner



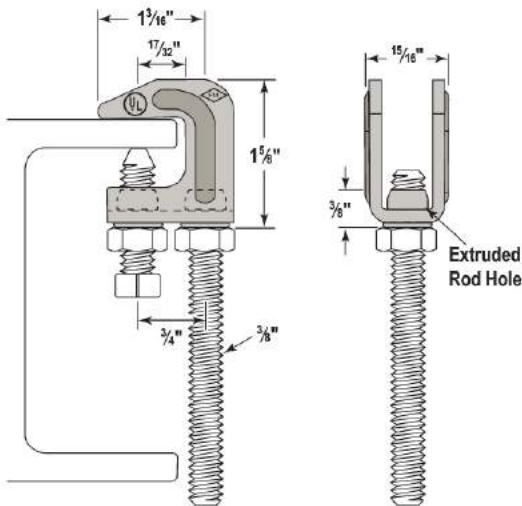
Part No.	Sleeve Diameter	Pipe Wall Thickness	Min./Max. Sleeve Thickness Range
PSP2-6	2" - 6" (51mm - 152mm)	Schedule #40 Pipe	$0" - \frac{5}{16}"$ (0 - 8mm)
PSPA	Any Dia.	Up to $\frac{5}{16}"$ (8mm)	
FSM58	6" (152mm)	Schedule #80 Pipe	$\frac{1}{4}" - \frac{1}{2}"$ (6mm - 13mm)
FSM58	8" - 10" (203mm - 254mm)	Schedule #40 Pipe	
FSM912	9" - 14" (229mm - 358mm)	Schedule #80 Pipe	$\frac{1}{2}" - \frac{3}{4}"$ (13mm - 19mm)



- Use to position pipe sleeves during concrete pours.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Silver Claw

Beam Clamp



- Carbon Steel - Avoids Hydrogen Embrittlement
- Extruded Rod Hole - More Threads Captured
- Made in USA - Meets Requirements for Buy America
- Handles $\frac{3}{8}$ " Threaded Rod
- Attaches to $\frac{3}{4}$ " (19mm) Beam or Bar Joist
- Open Back for Easy Inspection and Adjustment
- $\frac{3}{4}$ " (19mm) Flange Beam
- Zinc Electroplate
- Installs in Upright Position
- Torque Value = 60 in-lbs
- Made in USA
- UL Listed for Top of Beam
- FM Approved for NFPA 13, Maximum Rated Pipe Size
- Complies with Manufacturers Standardization Society SP-69 (Type 19 & 23) and Federal Specification WW-H-171E



Part No.	Rod Size	Max. Load
SCL037EG	$\frac{3}{8}"$	400 Lbs.

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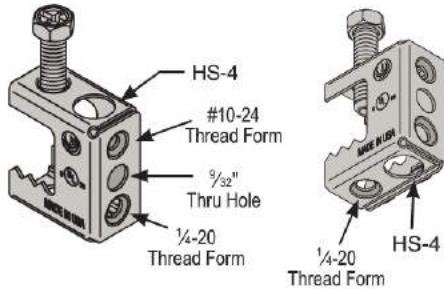
Structural Attachment

Standard Finish: Silva-Guard (SG) or Electrogalvanized (EG)



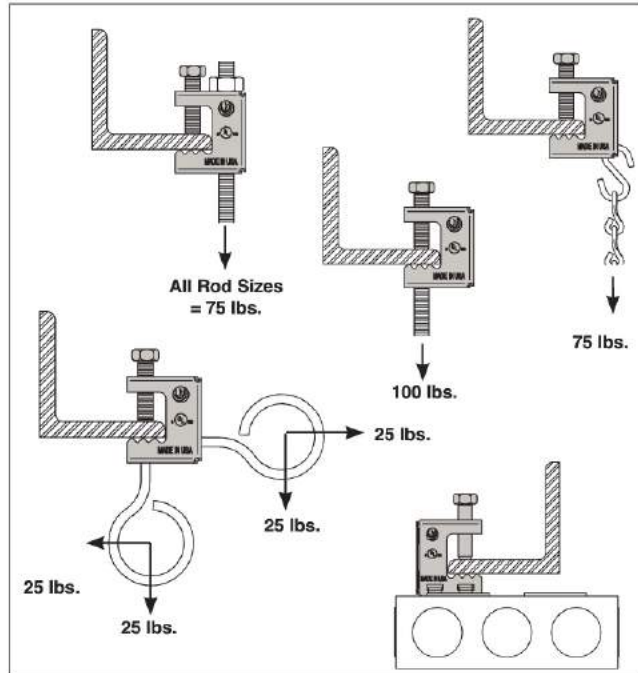
BCL

Beam Clamp



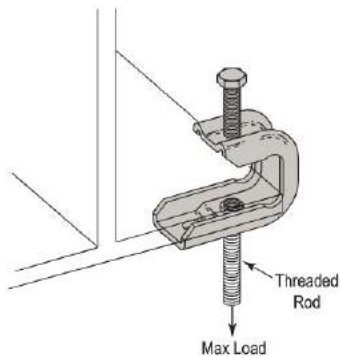
- UL Listed for box support.
- For installation on $\frac{1}{2}$ " maximum beam flanges.
- Included combo head set screw allows Robertson, Phillips/Slotted and Hex drivers.
- Accepts "S" hooks, threaded rod and bridal rings.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Max. Flange Thickness	HS-4
BCL	$\frac{1}{2}$ "	$\frac{1}{32}$ " Thru Hole for $\frac{1}{4}$ " or $\frac{3}{8}$ " Rod



BC92

Light Duty – Beam Clamps



- **Material:** Carbon Steel
- **Finish:** Electrogalvanized

Part No.	Rod Size	Max Flange Thickness	Max Load (W) lbs
BC92025EG	$\frac{1}{4}$ "-20	$\frac{5}{8}$ " (16 mm)	100 (0.44kN)
BC92037EG	$\frac{3}{8}$ "-16	$\frac{3}{4}$ " (19 mm)	200 (0.89kN)



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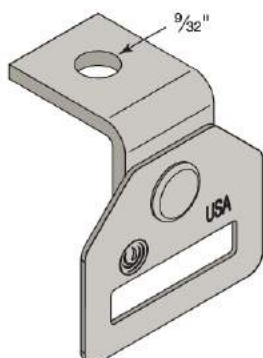


Structural Attachment

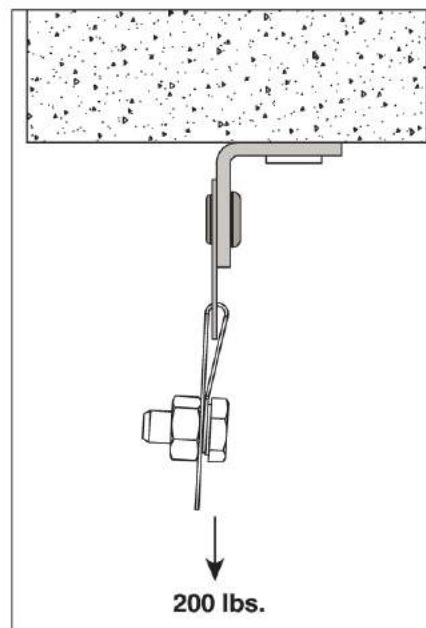
Standard Finish: Silva-Guard (SG)

ABSHP

Angle Bracket with Strap Hanger

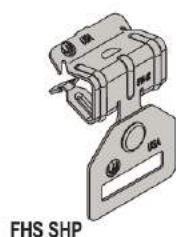


- Supports pipe or duct with strapping.
- Fits strap up to 1" wide.
- **Material:** Steel & Spring Steel
- **Finish:** Pregalvanized & Silva-Guard

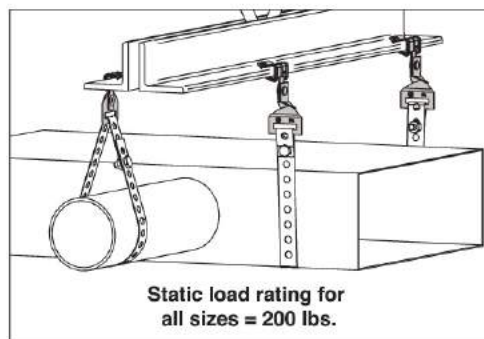
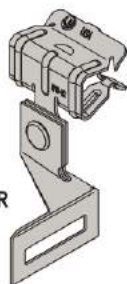


FHS SH

Flange Clip Side Mount with Strap Hanger



FHS SHR



- Supports pipe or duct with strapping from beam flanges.
- Fits strap up to 1" wide.
- Flange thickness range stamped on part.
- Only a hammer required for installation.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Min. - Max. Flange Thickness
FHS24SHP	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)
FHS58SHP	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)
FHS912SHP	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)
FHS24SHR	$\frac{1}{8}" - \frac{1}{4}"$ (3mm - 6mm)
FHS58SHR	$\frac{5}{16}" - \frac{1}{2}"$ (8mm - 13mm)
FHS912SHR	$\frac{9}{16}" - \frac{3}{4}"$ (14mm - 19mm)

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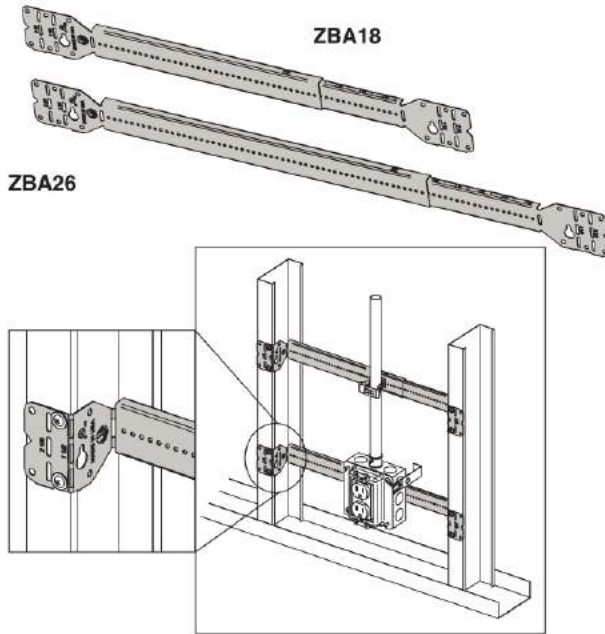
Stud Wall Applications

Standard Finish: Pregalvanized (PG)



ZBA Z-Bracket

Adjustable Screw Gun Bracket for Wood or Metal Studs

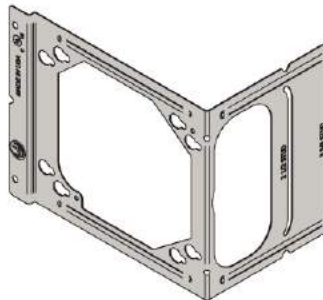


- Complete adjustability for infinite stud spacings.
- Requires only a screw gun to install.
- Pre-punched holes allow easy box or conduit attachment.
- Stud spacing scale stamped on bracket for precise preassembly.
- Locking tabs prevent disassembly.
- Use with SDTSLP8X1/2 screws, see page 187.
- **Material:** Steel
- **Finish:** Pregalvanized

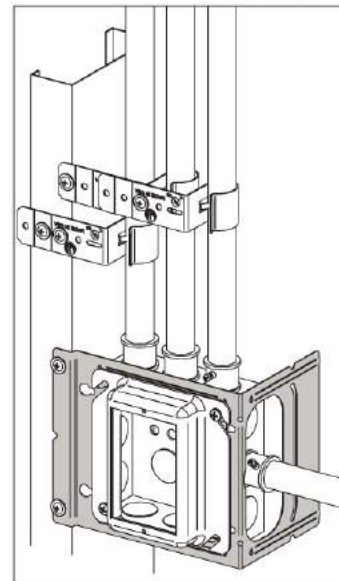
Part No.	Stud Centers	Distance Between Studs	Box Depth
ZBA18PG	11" to 18" (279mm to 457mm)	10" to 16-3/4" (254mm to 425mm)	1-1/2" or 2-1/8" (38mm or 54mm)
ZBA26PG	16" to 26" (406mm to 660mm)	14" to 25-1/4" (356mm to 641mm)	

BBSM

Electrical Box Bracket for Wood or Metal Studs



- Used to attach 4" and 4-11/16" outlet boxes to wood or metal studs.
- Large cutouts provided for conduit and fittings.
- Integral farside support prevents outlet box movement.
- Use with SDTSLP8X1/2 screws, see page 187
- **Material:** Steel
- **Finish:** Pregalvanized



Part No.	Outlet Boxes	Box Depths	Stud Depths
BBSM	4" (102mm) Square, 4-11/16" (119mm) Square and Low Voltage Plaster Rings	1-1/4", 1-1/2", and 2-1/8" Deep (32mm, 38mm, and 54mm)	2-1/2", 3-5/8" (64 mm, 92 mm)

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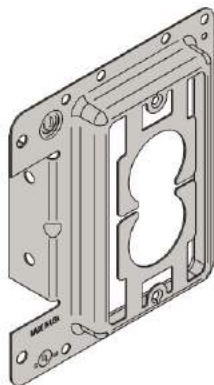
Roofing
Supports

Gamma
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Technical
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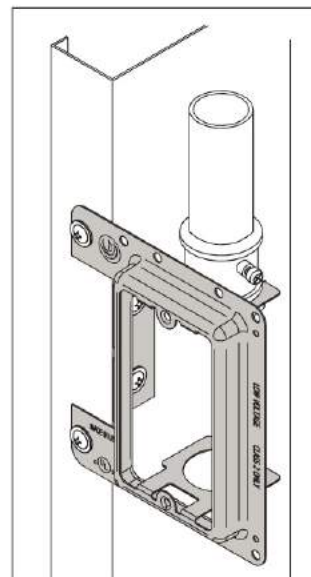
**LVMN**

Low Voltage Mounting Plate for New Construction



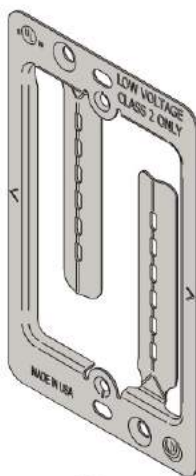
- Wood or Metal Studs
- New work design requires a screw gun for installation.
- Inner tabs allow $\frac{3}{4}$ " EMT or $\frac{1}{2}$ " EMT with reducer fitting for conduit applications if required.
- Can be mounted vertically or horizontally on wood or metal studs.
- Replaces electrical box in Class 2 low voltage installations.
- Use with SDTSLP8X1/2 screws, see page 187
- **Material:** Steel
- **Finish:** Pregalvanized

Part No.	Drywall Thickness
LVMN	$\frac{1}{2}$ " thru $\frac{5}{8}$ " (13mm to 16mm)

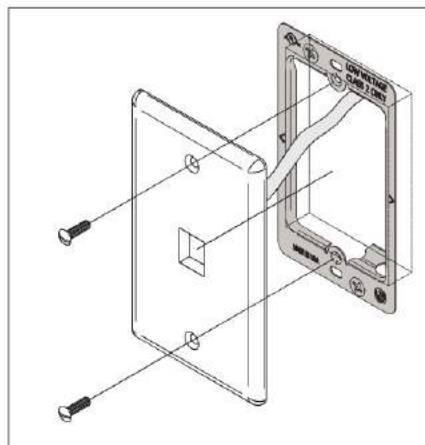


LVMS

Low Voltage Mounting Plate with Screws for Existing Construction



- Old work design requires a drywall saw and screw driver for installation.
- Provided screws make a more secure bracket installation.
- Replaces electrical box in Class 2 low voltage installations.
- **Material:** Steel
- **Finish:** Pregalvanized



Part No.	Drywall Thickness
LVMS	$\frac{1}{2}$ " thru $1\frac{1}{4}$ " (13mm to 32mm)

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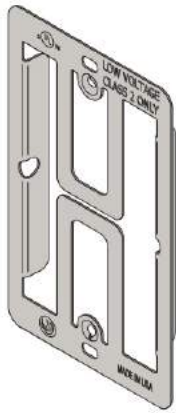
Stud Wall Applications

Standard Finish: Pregalvanized (PG) or Silva-Guard (SG)

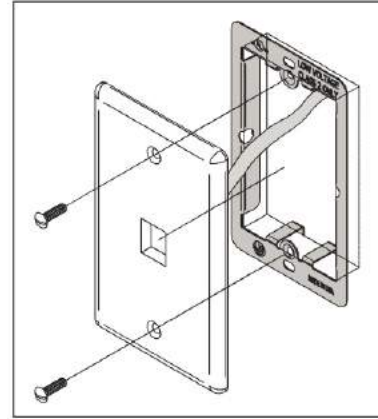


LVMP

Low Voltage Mounting Plate for Existing Construction



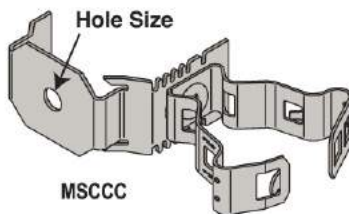
- Old work design requires a drywall saw and screw driver for installation.
- Replaces electrical box in Class 2 low voltage installations.
- **Material:** Steel
- **Finish:** Pregalvanized



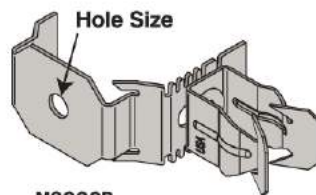
Part No.	Drywall Thickness
LVMP	1/2" thru 1-1/4" (13mm to 32mm)

MSC CC CCP

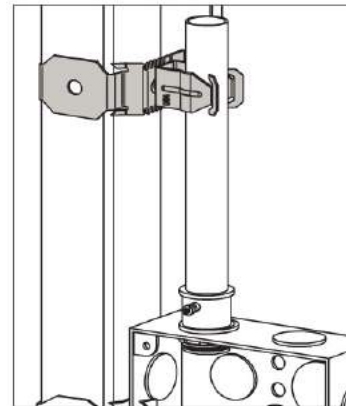
Metal Stud Clip with Conduit Clip & Conduit "Push In" Clip



MSCCC



MSCCCP



- Supports pipe and conduit to studs.
- Hole provided for additional support.
- Use with SDTSLP8X1/2 screws, see page 187
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Hole Size	Conduit Size
*MSCCC8-12	3/32"	1/2" or 3/4" EMT, Rigid
*MSCCC16		1" EMT, Rigid
*MSCCC20		1-1/4" EMT, Rigid
MSCCCP8	3/32"	1/2" EMT
MSCCCP12		3/4" EMT, 1/2" Rigid
MSCCCP16		1" EMT, 3/4" Rigid

* NOTE: UL Listed

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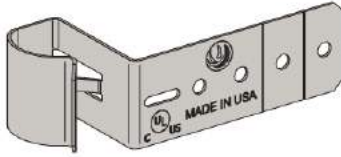


Stud Wall Applications

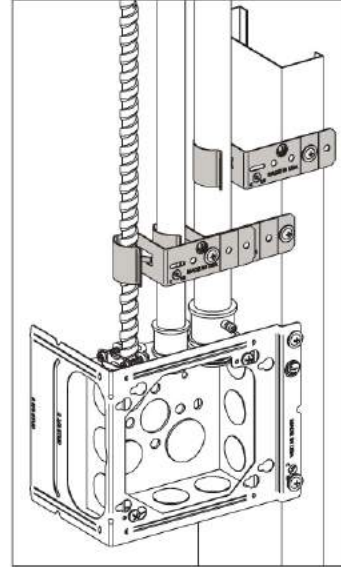
Standard Finish: Pregalvanized (PG) or Silva-Guard (SG)

CTS

Conduit Clip to Wood or Metal Stud



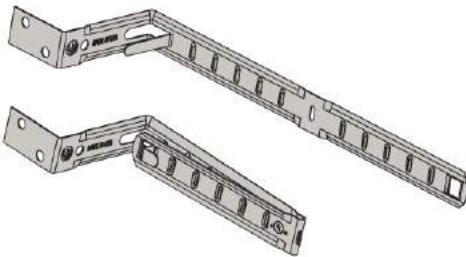
- Eliminates offset bending of conduit.
- Aligns conduit with standard knockouts.
- Accommodates EMT and MC/AC cable.
- Complies with NEC 358.30(A), conduit support within 36" of an electrical box.
- For use with wood and metal studs. Use with SDTSLP8X1/2 screws, see page 187
- **Material:** Spring Steel
- **Finish:** Silva-Guard



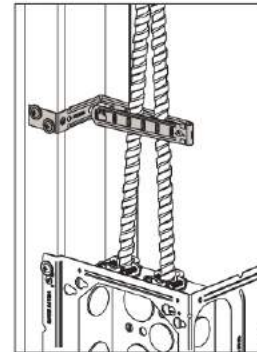
Part No.	Box Depth	MC/AC Cable Size	Conduit Size
CTS812	1-3/8" (38mm)	14-2, 14-3, 12-2, 12-3	1/2" or 3/4" EMT MC/AC (13mm or 19mm)

CSSTS

Cable Support Strap for Wood or Metal Studs



- Integral ribs used to maintain cable separation.
- Complies with NEC 300.4(D).
- For use with wood and metal studs.
- Use with SDTSLP8X1/2 screws, see page 187
- **Material:** Steel
- **Finish:** Pregalvanized



Part No.	Cable Type	Cable Size	Cables per Fastener	Description
CSSTS	Romex™ and Non-Metallic Sheathed Cable	14-2, 12-2, 10-2, 14-3, 12-3, and 10-3 with ground	6 Max.	To Attach Romex Non-Metallic Sheathed Cable, AC, BX, and MC Cable to Wood or Metal Stud
		8-2 and 6-2 with ground	4 Max.	
	Metal Clad (MC) Cable	14-2, 12-2, 10-2, 14-3, 12-3, 10-3, 14-4, 12-4, and 10-4 with ground	4 Max.	

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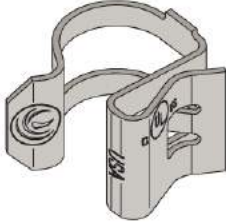
Stud Wall Applications

Standard Finish: Silva-Guard (SG) or Electrogalvanized (EG)

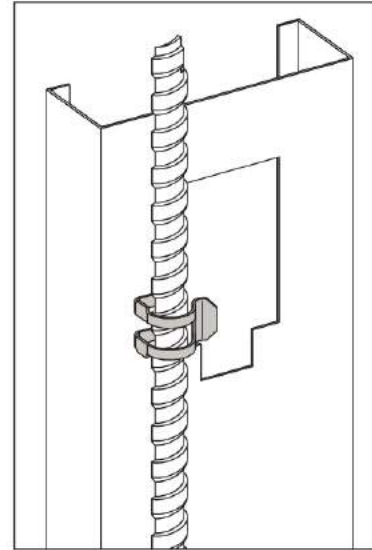


CCMS

MC/AC Cable Clip to Metal Stud



- Cable clip attaches MC/AC cable to metal studs.
- No tools required for application.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



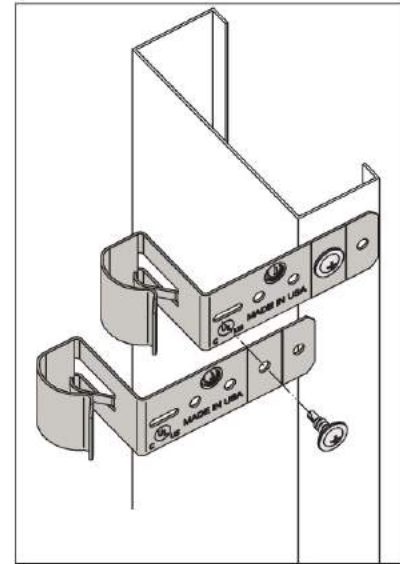
Part No.	Cable Type	Cable Size	Description
CCMS	MC/AC Cable	14-2, 14-3, 12-2, 12-3	MC/AC Cable Clip to Metal Stud

SDTSLP8X1/2

Self Drilling and Tapping Screw



- #8 x 1/2" Long Self drilling and tapping, low profile screws
- Thin head prevents drywall bulge.
- #2 phillips driver for screw gun use.
- **Material:** Steel
- **Finish:** Electrogalvanized



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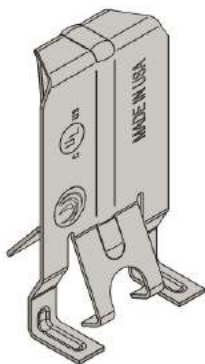


Ceiling and Acoustical Applications

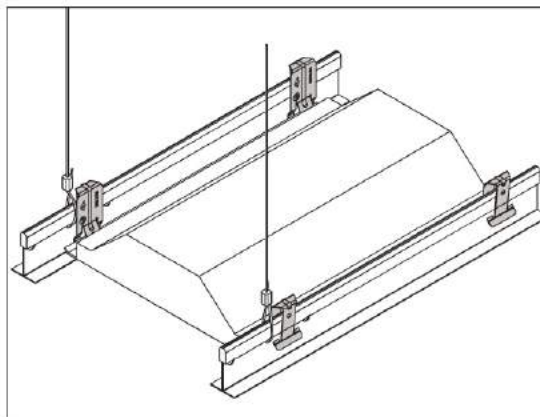
Standard Finish: Silva-Guard (SG)

SCT

Support Clip for Troffer Lights & Lay-Ins



- Four clips per fixture required per UL listing.
- Compatible with straight lip or upturned lip fixtures.
- Tall grid compatible.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



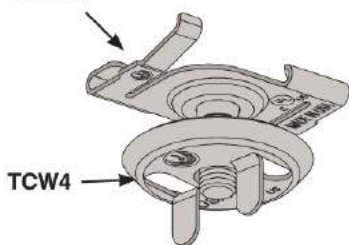
Part No.	Description
SCT15	Support clip for securing troffers, lay-ins and air diffusers to T-Grid

TCB, TCS

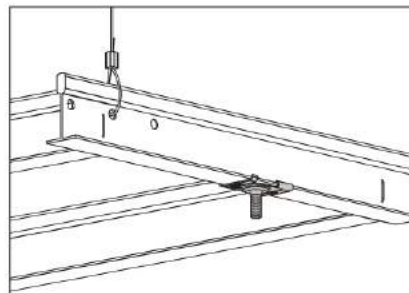
Twist Clip with Wing Nut



TCB16



- Use to attach lighting to main T-bars.
- Simple twist on design eliminates the need for installation tools.
- Will not damage T-grid.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



Part No.	Stud Length	Description	Static Load Limit per Fastener
TCB16	5/8"	15/16" Tee Twist Clip with Stud	50 Lbs.
TCW4	—	1/4"-20 Twist Clip Wing Nut	100 Lbs.
TCS16	5/8"	15/16" Tee Twist Clip and Wing Nut	50 Lbs.

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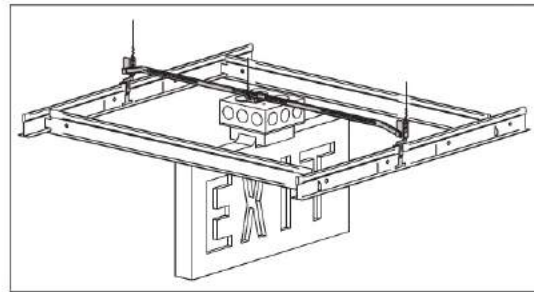
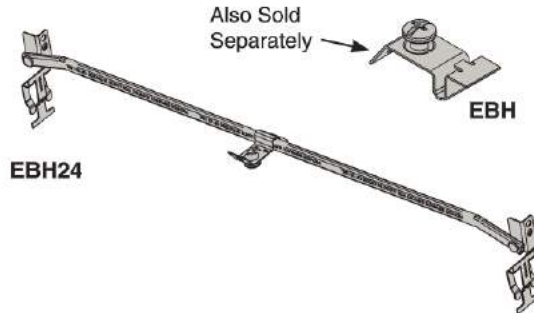
Ceiling and Acoustical Applications

Standard Finish: Silva-Guard (SG)



EBH

Electrical Box Hanger with Box Mounting Clip

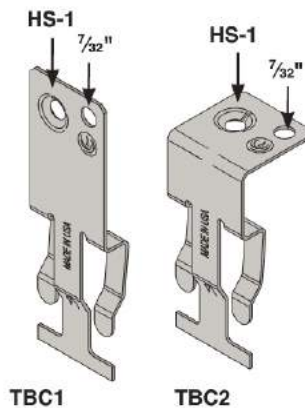


Part No.	Description
EBH24	Complete assembly to flush mount a 1-1/2" box with or without 3/4" device ring or 2-1/8" box to ceiling tile. Used for 24" on center T-grid spacing.
EBH	Box mounting clip and screw for attaching one or multiple boxes to EB 24 assembly.

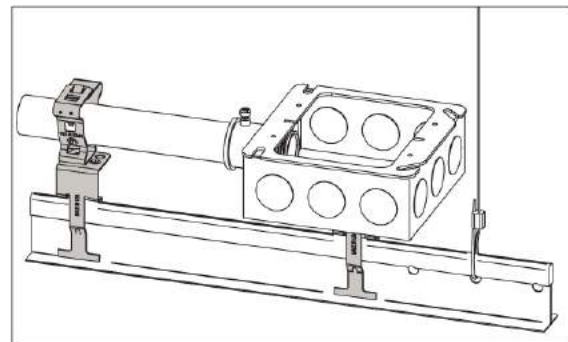
- Complete hanger assembly for supporting an electrical box above T-grid.
- Multiple holes provided for drop wire securement to building structure.
- Dual height feature permits 1-1/2" electrical box with or without 3/4" device ring and 2-1/8" box to be flush mounted with ceiling tile.
- Included mounting clip and 1/4" screw is compatible with standard knock-out configurations.
- **Material:** Steel & Spring Steel
- **Finish:** Pregalvanized & Silva-Guard

TBC

T-Bar Clip



- Attaches outlet boxes and conduit clips above T-grid.
- 7/32" hole provided for drop wire.
- Clip snaps onto T-bar. No tools required.
- **Material:** Spring Steel
- **Finish:** Silva-Guard



Part No.	HS-1
TBC1	1/4" x 20 Thread Form
TBC2	1/4" x 20 Thread Form

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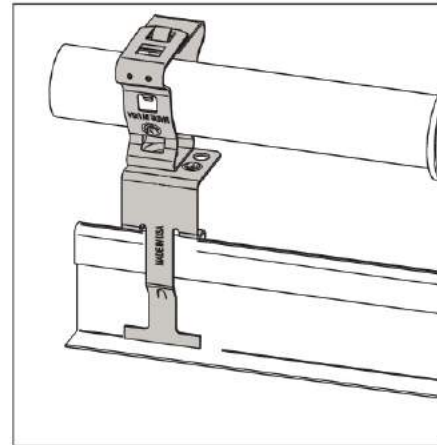
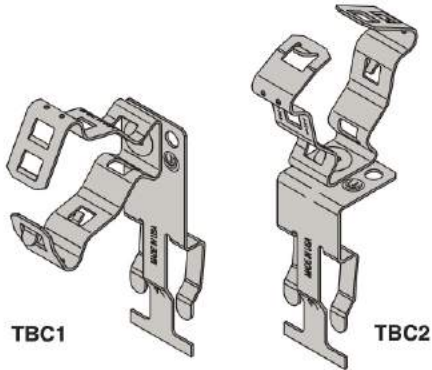


Ceiling and Acoustical Applications

Standard Finish: Silva-Guard (SG)

TB C

T-Bar Clip with Conduit Clip

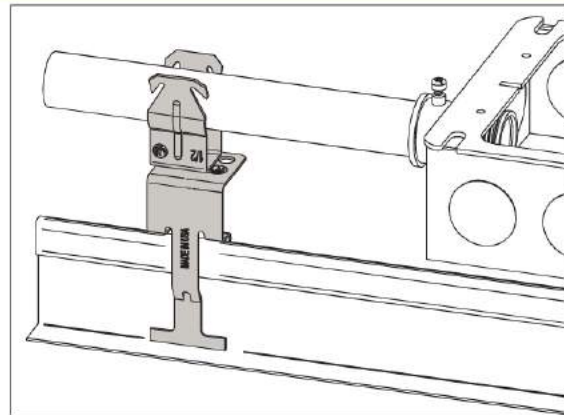
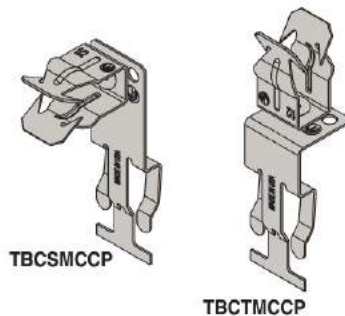


- Supports pipe and conduit above T-bars. Conduit clip rotates 360 degrees.
- No screws or bolts required. No installation tools required.
- $\frac{7}{32}$ " Hole provided for drop wire.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Conduit Size
TBC1C812	$\frac{1}{2}$ " or $\frac{3}{4}$ " EMT, Rigid
TBC1C16	1" EMT, Rigid
TBC2C812	$\frac{1}{2}$ " or $\frac{3}{4}$ " EMT, Rigid
TBC2C16	1" EMT, Rigid

TBC SMCCP, TMCCP

T-Bar Clip with Conduit "Push In" Clip



- Supports pipe and conduit above T-bars.
- Conduit clip rotates 360 degrees.
- No screws, bolts or installation tools required.
- $\frac{7}{32}$ " hole provided for drop wire.
- **Material:** Spring Steel
- **Finish:** Silva-Guard

Part No.	Mount	Conduit Size
TBCSMCCP8	Side Mount	$\frac{1}{2}$ " EMT
TBCSMCCP12		$\frac{3}{4}$ " EMT, $\frac{1}{2}$ " Rigid
TBCSMCCP16		1" EMT, $\frac{3}{4}$ " Rigid
TBCTMCCP8	Top Mount	$\frac{1}{2}$ " EMT
TBCTMCCP12		$\frac{3}{4}$ " EMT, $\frac{1}{2}$ " Rigid
TBCTMCCP16		1" EMT, $\frac{3}{4}$ " Rigid

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Loop and Ring Clamps



ZSi-Foster Offers a Full Range of Loop, Ring & Cable Clamps

SPN Loop Clamps

Plated Steel $\frac{1}{2}$ " (13mm) Wide
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SPW Loop Clamps

Plated Steel $\frac{3}{4}$ " (19mm) Wide
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SPD Loop Clamps

2-Tube Cushioned Cable Clamps,
Plated Steel $\frac{3}{4}$ " (19mm) Wide
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SPH Cush-A-Ring Clamps

SPH Cush-A-Ring Clamp for
Copper Tube or Steel Tube or Pipe
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SPP Cush-A-Ring Clamps

SPP Cush-A-Ring Clamp for
PEX, CPVC, or PVC Pipe
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SVN Loop Clamps

Vinyl Dipped - Galvanized Steel
 $\frac{1}{2}$ " (13mm) Wide
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LVZ Loop Clamps

Vinyl Dipped Galvanized Steel
1" (24mm) Wide
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SVW Loop Clamps

Vinyl Dipped Galvanized Steel
 $\frac{3}{4}$ " (19mm) Wide
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SSN Loop Clamps

Stainless Steel $\frac{1}{2}$ " (13mm) Wide
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Cable Clamps

Plastic Cable Clamps
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HVN Loop Clamps

Vinyl Dipped Galvanized Steel
 $\frac{1}{2}$ " (13mm) Wide
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HSN Loop Clamps

Stainless Steel $\frac{1}{2}$ " (13mm) Wide
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Python Series

Zinc Plated Steel
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Python II Series

Stainless Steel Type 316
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Call ZSi-Foster at (800) 323-7053 or order now at zsi-foster.com



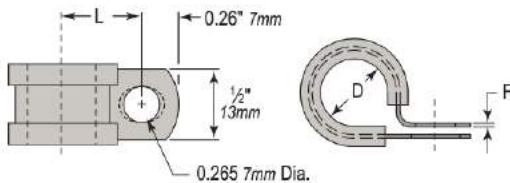
SPN Loop Clamps

SPN Loop Clamps

Plated Steel Loop Clamps $\frac{1}{2}$ " (13mm) Wide



- Light to medium duty steel clamp
- E.P.D.M. cushion for electrical insulation and vibration absorption
- Steel clamps are zinc electroplated for corrosion resistance
- Some sizes available in aluminum. Contact factory for details.
- Temperature range -50°F to $+275^{\circ}\text{F}$ (-45°C to 135°C)



Plated Steel Part No.	Stainless Steel Part No.	Dimensions (in)		
		D Size	L	F
SPN-03	SPN-03SS	$\frac{3}{16}$ " (5mm)	0.499" (13mm)	0.032" (1mm)
SPN-04	SPN-04SS	$\frac{1}{4}$ " (6mm)	0.530" (13mm)	
SPN-05	SPN-05SS	$\frac{5}{16}$ " (8mm)	0.561" (14mm)	
SPN-06	SPN-06SS	$\frac{3}{8}$ " (10mm)	0.592" (15mm)	
SPN-07	SPN-07SS	$\frac{7}{16}$ " (11mm)	0.623" (16mm)	
SPN-08	SPN-08SS	$\frac{1}{2}$ " (13mm)	0.655" (17mm)	
SPN-09	SPN-09SS	$\frac{9}{16}$ " (14mm)	0.749" (19mm)	
SPN-10	SPN-10SS	$\frac{5}{8}$ " (16mm)	0.780" (20mm)	
SPN-11	SPN-11SS	$\frac{11}{16}$ " (17mm)	0.811" (21mm)	
SPN-12	SPN-12SS	$\frac{3}{4}$ " (19mm)	0.840" (21mm)	
SPN-14	SPN-14SS	$\frac{7}{8}$ " (22mm)	0.889" (23mm)	
SPN-16	SPN-16SS	1" (25mm)	0.952" (24mm)	
SPN-18	SPN-18SS	1- $\frac{1}{8}$ " (29mm)	1.030" (26mm)	
SPN-20	SPN-20SS	1- $\frac{1}{4}$ " (32mm)	1.093" (28mm)	
SPN-22	SPN-22SS	1- $\frac{3}{8}$ " (35mm)	1.155" (29mm)	
SPN-24	SPN-24SS	1- $\frac{1}{2}$ " (38mm)	1.218" (31mm)	
SPN-26	SPN-26SS	1- $\frac{5}{8}$ " (41mm)	1.280" (33mm)	
SPN-28	SPN-28SS	1- $\frac{3}{4}$ " (44mm)	1.343" (34mm)	
SPN-30	SPN-30SS	1- $\frac{7}{8}$ " (49mm)	1.405" (36mm)	0.040" (1mm)
SPN-32	SPN-32SS	2" (51mm)	1.476" (37mm)	
SPN-34	SPN-34SS	2- $\frac{1}{8}$ " (5mm)	1.538" (39mm)	
SPN-36	SPN-36SS	2- $\frac{1}{4}$ " (57mm)	1.661" (42mm)	
SPN-38	SPN-38SS	2- $\frac{3}{8}$ " (60mm)	1.663" (42mm)	
SPN-40	SPN-40SS	2- $\frac{1}{2}$ " (64mm)	1.728" (44mm)	
SPN-42	SPN-42SS	2- $\frac{5}{8}$ " (67mm)	1.788" (45mm)	
SPN-48	SPN-48SS	3" (76mm)	1.976" (50mm)	
SPN-52	SPN-52SS	3- $\frac{1}{4}$ " (83mm)	2.100" (53mm)	
SPN-56	SPN-56SS	3- $\frac{1}{2}$ " (89mm)	2.226" (57mm)	
SPN-64	SPN-64SS	4" (102mm)	2.476" (63mm)	



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SPW & SPD Loop Clamps



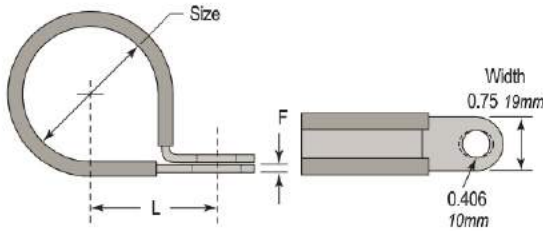
SPW Loop Clamps

Plated Steel $\frac{3}{4}$ " (19mm) Wide



- Light to medium duty steel clamp
- E.P.D.M. cushion for electrical insulation and vibration absorption
- Steel clamps are zinc electroplate for corrosion resistance
- Color - Silver with black durable cushion.
- Temperature range -50°F to +275°F (-45°C to 135°C)

Available in stainless steel. Some sizes available in aluminum.
Contact factory for details.

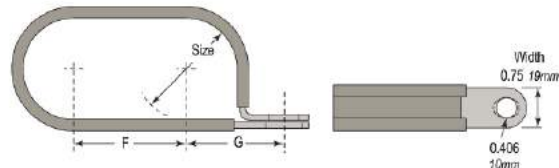


Part No.	Size in	Dimensions (in)	
		L	F
SPW-04	$\frac{1}{4}$ " (6 mm)	0.639" (16 mm)	0.031" (1mm)
SPW-06	$\frac{3}{8}$ " (10 mm)	0.702" (18 mm)	
SPW-07	$\frac{7}{16}$ " (11 mm)	0.732" (19 mm)	
SPW-08	$\frac{1}{2}$ " (13 mm)	0.764" (19 mm)	
SPW-09	$\frac{5}{16}$ " (14 mm)	0.795" (20 mm)	
SPW-10	$\frac{3}{8}$ " (16 mm)	0.827" (21 mm)	
SPW-12	$\frac{3}{4}$ " (19 mm)	0.889" (23 mm)	
SPW-14	$\frac{7}{8}$ " (22 mm)	0.952" (24 mm)	
SPW-16	1" (25 mm)	1.014" (26 mm)	
SPW-18	1- $\frac{1}{8}$ " (29 mm)	1.090" (28 mm)	0.050" (1mm)
SPW-20	1- $\frac{1}{4}$ " (32 mm)	1.159" (29 mm)	
SPW-24	1- $\frac{1}{2}$ " (38 mm)	1.284" (33 mm)	
SPW-26	1- $\frac{5}{8}$ " (41 mm)	1.348" (34 mm)	
SPW-28	1- $\frac{3}{4}$ " (44 mm)	1.409" (36 mm)	
SPW-30	1- $\frac{7}{8}$ " (48 mm)	1.471" (37 mm)	
SPW-32	2" (51 mm)	1.534" (39 mm)	
SPW-36	2- $\frac{1}{4}$ " (57 mm)	1.659" (42 mm)	
SPW-40	2- $\frac{3}{8}$ " (64 mm)	1.784" (45 mm)	
SPW-48	3" (76 mm)	2.034" (52 mm)	

SPD Loop Clamps

2-Tube Cushioned Cable Clamps, Plated Steel $\frac{3}{4}$ " (19mm) Wide

- Medium duty steel clamp that can be slipped over two tubes or multiple wires and closed with a bolt at assembly.
- Steel clamps are zinc electroplate for corrosion resistance
- E.P.D.M. cushion for electrical insulation and vibration absorption
- Temperature range -50°F to +275°F (-45°C to 135°C)



Part No.	Size in.	Dimensions (in)	
		F	G
SPD-08	$\frac{1}{2}$ " (13 mm)	0.50" (13 mm)	0.764" (19 mm)
SPD-12	$\frac{3}{4}$ " (19 mm)	0.75" (19 mm)	0.889" (23 mm)
SPD-16	1" (25 mm)	1.00" (25 mm)	1.014" (26 mm)
SPD-20	1- $\frac{1}{4}$ " (29 mm)	1.125" (29 mm)	1.159" (29 mm)

Available in stainless steel. Some sizes available in aluminum.
Contact factory for details.

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SPH Cush-A-Ring Clamps

SPH Cush-A-Ring Clamps

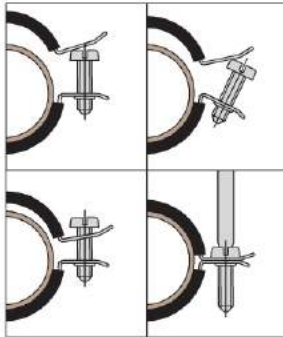
SPH Cush-A-Ring Clamp for Copper Tube or Steel Tube or Pipe



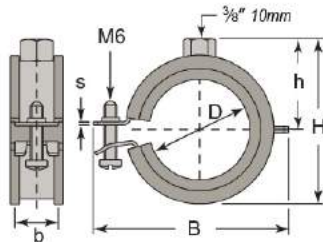
The **Cush-A-Ring** is a unique rubber lined hanger for copper and steel tube or pipe. The SPH-1 thru SPH-10 is a two-part clamp that has a hinged side with a single screw locking system. The quick locking system is easy to close with one hand, which makes it

easier and faster for installation.

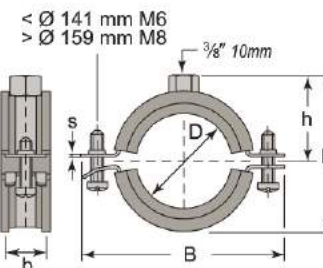
The noise insulating rubber lining is made of UV-resistant EPDM rubber. The Cush-A-Ring is zinc plated for corrosion resistance.



SPH-1 thru SPH-10



SPH-11 thru SPH-14



- Rubber lined, noise insulated
- With quick locking system
- Clamp easy to close with one hand
- UV-resistant black EPDM rubber lining
- Zinc plated
- ASTM E-84
- Meets - Buy America Act

Part No.	Dimensions (in)						
	D (mm)	IP	CT	B	H	h	b x s (mm)
SPH-1	11 – 14	$\frac{1}{4}$ " (6mm)	$\frac{3}{8}$ " (10mm)	1.9" (48mm)	1.4" (36mm)	0.87" (22mm)	20 x 1.25
SPH-2	15 – 18	$\frac{3}{8}$ " (10mm)	$\frac{1}{2}$ " (13mm)	1.9" (48mm)	1.4" (36mm)	0.87" (22mm)	
SPH-3	20 – 23	$\frac{1}{2}$ " (13mm)	$\frac{3}{4}$ " (19mm)	2.2" (56mm)	1.6" (41mm)	0.94" (24mm)	
SPH-4	25 – 28	$\frac{3}{4}$ " (19mm)	1" (25mm)	2.4" (61mm)	1.8" (46mm)	1.10" (28mm)	
SPH-5	31 – 35	1" (25mm)	1- $\frac{1}{4}$ " (32mm)	2.6" (66mm)	2.0" (51mm)	1.20" (30mm)	
SPH-6	40 – 43	1- $\frac{1}{4}$ " (32mm)	1- $\frac{1}{2}$ " (38mm)	3.0" (76mm)	2.4" (61mm)	1.30" (33mm)	
SPH-7	48 – 53	1- $\frac{1}{2}$ " (38mm)	-	3.3" (84mm)	2.6" (66mm)	1.50" (38mm)	
SPH-8	54 – 56	-	2" (51mm)	3.5" (89mm)	2.8" (71mm)	1.60" (41mm)	
SPH-9	57 – 63	2" (51mm)	-	3.7" (94mm)	3.1" (79mm)	1.70" (43mm)	
SPH-10	64-70	-	2- $\frac{1}{2}$ " (64mm)	4.5" (114mm)	3.9" (99mm)	2.20" (56mm)	23 x 2.00
Below parts have 2 bolt configurations							
SPH-11	73-80	2- $\frac{1}{2}$ " (64 mm)	3" (76 mm)	5.0" (127 mm)	4.3" (109 mm)	2.40" (61 mm)	23 x 2.00
SPH-12	83-91	3" (76 mm)	-	5.4" (137 mm)	4.8" (122 mm)	2.60" (66 mm)	25 x 2.50
SPH-13	100- 105	-	4" (102 mm)	6.0" (152 mm)	5.3" (135 mm)	2.90" (74 mm)	
SPH-14	108-114	4" (102 mm)	-	6.3" (160 mm)	5.7" (145 mm)	3.10" (79 mm)	

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SPP Cush-A-Ring Clamps



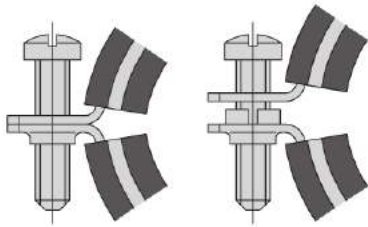
SPP Cush-A-Ring Clamps

SPP Cush-A-Ring Clamp for PEX, CPVC, or PVC Pipe

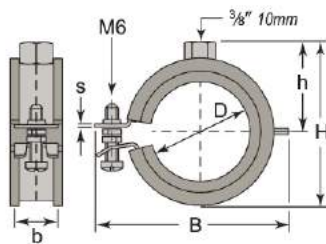


The **Cush-A-Ring** is a unique rubber lined hanger for PEX, CPVC, and PVC pipe. The SPP-1 thru SPP-10 has a two-part clamp with a hinged side and a single screw locking system. The quick locking system is easy to close with one hand, which makes it easier and faster for installation. The noise insulating rubber lining is made of UV-resistant EPDM rubber. The Cush-A-Ring is zinc plated for corrosion resistance.

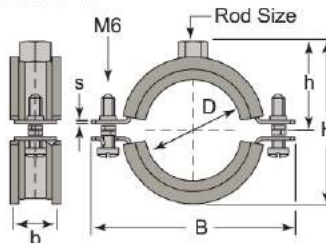
- With quick locking system
- Clamp easy to close with one hand
- Specially formulated, green, UV, and age resistant EPDM rubber lining
- Perfect for PEX, Fusion, CPVC, and PVC pipe
- ASTM E-84
- Complies with MSS SP-58 and SP-69
- Material steel, zinc plated



SPP-1 thru SPP-9



SPP-10 thru SPP-14



Part No.	Dimensions (in)						Rod Size
	D	IP	CT	B	H	h	
SPP-2	15 – 18	$\frac{3}{8}$ " (10mm)	$\frac{1}{2}$ " (13mm)	1.9" (48mm)	1.4" (36mm)	0.87" (22mm)	$\frac{3}{8}$ " (10mm)
SPP-3	20 – 23	$\frac{1}{2}$ " (13mm)	$\frac{3}{4}$ " (19mm)	2.2" (56mm)	1.7" (43mm)	0.94" (24mm)	
SPP-4	25 – 28	$\frac{3}{4}$ " (19mm)	1" (25mm)	2.4" (61mm)	1.9" (48mm)	1.0" (25mm)	
SPP-5	31 – 35	1" (25mm)	1- $\frac{1}{4}$ " (32mm)	2.6" (66mm)	2.2" (56mm)	1.2" (30mm)	
SPP-6	40 – 43	1- $\frac{1}{4}$ " (32mm)	1- $\frac{1}{2}$ " (38mm)	3.0" (76mm)	2.6" (66mm)	1.3" (33mm)	
SPP-7	48 – 53	1- $\frac{1}{2}$ " (38mm)	-	3.3" (84mm)	3.0" (76mm)	1.5" (38mm)	
SPP-8	54 – 56	-	2" (51mm)	3.5" (89mm)	3.0" (76mm)	1.6" (41mm)	
SPP-9	60 – 65	2" (51mm)	-	4.3" (109mm)	3.4" (86mm)	1.7" (43mm)	
SPP-10	70 – 76	2- $\frac{1}{2}$ " (64mm)	-	4.9" (124mm)	4.1" (104mm)	2.2" (56mm)	
Below parts have 2 bolt configurations							
SPP-11	86 – 91	3" (76mm)	-	5.4" (137mm)	4.6" (117mm)	2.4" (61mm)	$\frac{3}{8}$ " (10mm)
SPP-12	110 – 114	4" (102mm)	-	6.3" (160mm)	5.8" (147mm)	2.9" (74mm)	
SPP-13	124 – 132	-	-	6.8" (173mm)	5.9" (150mm)	3.1" (79mm)	$\frac{1}{2}$ " (13mm)
SPP-14	155 – 160	-	-	8.0" (203mm)	7.4" (188mm)	3.9" (99mm)	

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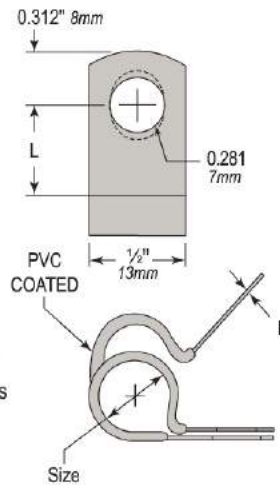
SVN & SVW Loop Clamps

SVN Loop Clamps

Vinyl Dipped - Galvanized Steel $\frac{1}{2}$ " (13mm) Wide



- Medium duty steel clamp that can be slipped over a tube or wire and closed with a bolt at assembly. Holes provide easy alignment. Its pre-developed shape allows for proper closing and excellent fit of the clamp.
- Galvanized Steel
- PVC coated, black color
- Temperature range -25°F to +160°F (-32°C to +71°C)



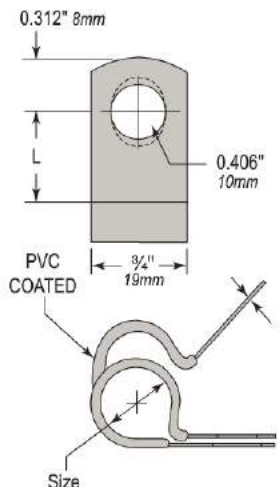
Part No.	Size in.	Dimensions (in)	
		L	F
SVN-03	$\frac{3}{16}$ " (5mm)	0.500" (13mm)	0.032" (1mm)
SVN-04	$\frac{1}{4}$ " (6mm)	0.531" (13mm)	
SVN-05	$\frac{5}{16}$ " (8mm)	0.562" (14mm)	
SVN-06	$\frac{3}{8}$ " (10mm)	0.593" (15mm)	
SVN-08	$\frac{1}{2}$ " (13mm)	0.856" (17mm)	0.048" (1mm)
SVN-09	$\frac{9}{16}$ " (14mm)	0.687" (17mm)	
SVN-10	$\frac{5}{8}$ " (16mm)	0.718" (18mm)	
SVN-12	$\frac{3}{4}$ " (19mm)	0.781" (20mm)	
SVN-14	$\frac{7}{8}$ " (22mm)	0.843" (21mm)	
SVN-16	1" (25mm)	0.906" (23mm)	
SVN-18	1- $\frac{1}{8}$ " (29mm)	0.968" (25mm)	

SVW Loop Clamps

Vinyl Dipped Galvanized Steel $\frac{3}{4}$ " (19mm) Wide



- Medium duty steel clamp that can be slipped over a tube or wire and closed with a bolt at assembly. Holes provide easy alignment. Its pre developed shape allows for proper closing and excellent fit of the clamp..
- Galvanized Steel
- PVC coated, black color
- Temperature range -25°F to +160°F (-32°C to +71°C)



Part No.	Size in.	Dimensions (in)	
		L	F
SVW-04	$\frac{1}{4}$ " (6mm)	0.656" (17mm)	0.032" (1mm)
SVW-05	$\frac{5}{16}$ " (8mm)	0.562" (14mm)	
SVW-06	$\frac{3}{8}$ " (10mm)	0.0718" (2mm)	
SVW-08	$\frac{1}{2}$ " (13mm)	0.761" (20mm)	0.048" (1mm)
SVW-09	$\frac{9}{16}$ " (14mm)	0.812" (21mm)	
SVW-10	$\frac{5}{8}$ " (16mm)	0.843" (21mm)	
SVW-12	$\frac{3}{4}$ " (19mm)	0.906" (23mm)	
SVW-13	$\frac{15}{16}$ " (21mm)	0.937" (24mm)	
SVW-14	$\frac{7}{8}$ " (22mm)	0.968" (25mm)	
SVW-15	$\frac{15}{16}$ " (24mm)	1.000" (25mm)	
SVW-16	1" (25mm)	1.031" (26mm)	
SVW-18	1- $\frac{1}{8}$ " (29mm)	1.092" (28mm)	
SVW-20	1- $\frac{1}{4}$ " (32mm)	1.156" (29mm)	
SVW-22	1- $\frac{3}{8}$ " (35mm)	1.218" (31mm)	

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WARNING: These products can expose you to chemicals including lead, which is known to the State of California to cause cancer, and which is known to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LVZ Loop Clamps

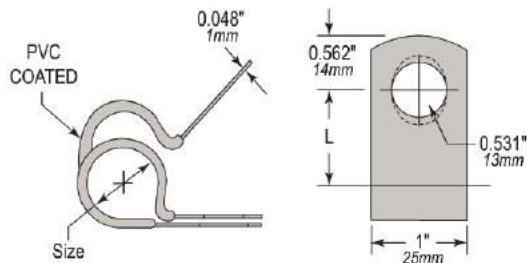


LVZ Loop Clamps

Vinyl Dipped Galvanized Steel 1" (25mm) Wide



- Heavy duty steel clamp
- Galvanized Steel
- PVC coated, black color
- Temperature range -25°F to +160°F (-32°C to +71°C)



Part No.	Size in.	L
LVZ-18	1-1/8" (29mm)	1.218" (31mm)
LVZ-19	1-3/16" (30mm)	1.250" (32mm)
LVZ-20	1-1/4" (32mm)	1.281" (33mm)
LVZ-21	1-5/16" (33mm)	1.312" (33mm)
LVZ-24	1-1/2" (38mm)	1.406" (36mm)
LVZ-25	1-3/16" (40mm)	1.437" (36mm)
LVZ-28	1-3/4" (44mm)	1.531" (39mm)
LVZ-29	1-13/16" (46mm)	1.562" (40mm)
LVZ-32	2" (51mm)	1.687" (43mm)
LVZ-33	2-1/16" (52mm)	1.718" (44mm)
LVZ-36	2-1/4" (57mm)	1.812" (46mm)
LVZ-40	2-1/2" (64mm)	1.937" (49mm)
LVZ-42	2-5/8" (67mm)	2.000" (51mm)
LVZ-44	2-3/4" (70mm)	2.062" (52mm)
LVZ-46	2-7/8" (73mm)	2.125" (54mm)
LVZ-57	3-9/16" (90mm)	2.437" (62mm)



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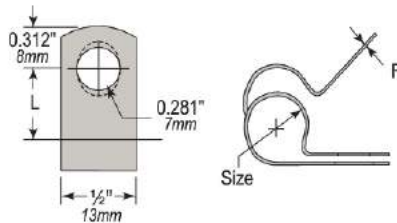
SSN & Cable Loop Clamps

SSN Loop Clamps

Stainless Steel $\frac{1}{2}$ " (13mm) Wide



- Medium duty steel clamp that can be slipped over a tube or wire and closed with a bolt at assembly. Holes provide easy alignment. Its pre-developed shape allows for proper closing and excellent fit.
- Stainless steel, type 301 or 304

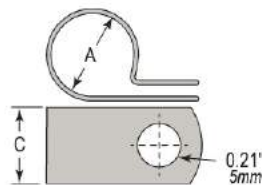


Part No.	Size in.	Dimensions (in)	
		L	F
SSN-03	$\frac{3}{16}$ " (5mm)	0.500" (13mm)	0.032" (1mm)
SSN-04	$\frac{1}{4}$ " (6mm)	0.531" (13mm)	
SSN-05	$\frac{5}{16}$ " (8mm)	0.562" (14mm)	
SSN-06	$\frac{3}{8}$ " (10mm)	0.593" (15mm)	
SSN-08	$\frac{1}{2}$ " (13mm)	0.656" (17mm)	0.048" (1mm)
SSN-09	$\frac{9}{16}$ " (14mm)	0.687" (17mm)	
SSN-10	$\frac{5}{8}$ " (16mm)	0.718" (18mm)	
SSN-12	$\frac{3}{4}$ " (19mm)	0.781" (20mm)	
SSN-14	$\frac{7}{8}$ " (22mm)	0.843" (21mm)	
SSN-16	1" (25mm)	0.906" (23mm)	
SSN-18	1- $\frac{1}{8}$ " (29mm)	0.968" (25mm)	

Cable Clamps



Cable Clamps are perfect for securing wires and cables in the electric, automotive and aircraft industries.



Part No.	A (in.)	C (in.)
CC3-1/8	0.130" (3mm)	0.358" (9mm)
CC3-3/16	0.189" (5mm)	
CC3-1/4	0.260" (7mm)	
CC3-5/16	0.307" (8mm)	
CC3-3/8	0.382" (10mm)	0.362" (9mm)
CC5-1/8	0.114" (3mm)	0.500" (13mm)
CC5-1/4	0.232" (6mm)	
CC5-3/8	0.358" (9mm)	
CC5-1/2	0.480" (12mm)	
CC5-9/16	0.543" (14mm)	
CC5-3/4	0.732" (19mm)	
CC5-7/8	0.858" (22mm)	
CC5-1-1/8	1.100" (28mm)	

UV Black also available upon request Closed Bottom

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HVN & HSN Loop Clamps

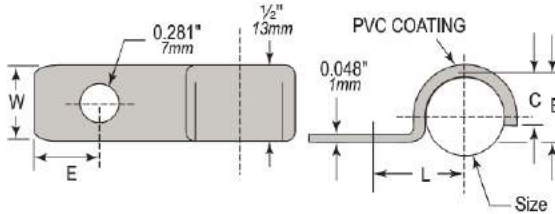


HVN Loop Clamps

Vinyl Dipped Galvanized Steel



- Black vinyl plastic coated (PVC)
- Galvanized Steel for corrosion resistance
- Temperature range -25°F to +160°F (-32°C to +71°C)



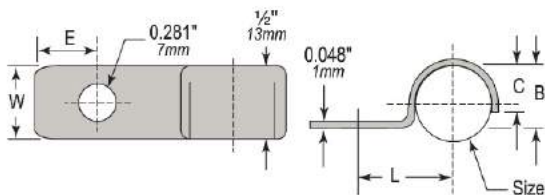
Part No.	Size in.	Dimensions (in)				
		L	E	B	C	W
HVN-04	1/4" (6mm)	0.500" (13mm)	0.250" (6mm)	0.250" (6mm)	0.188" (5mm)	1/2" (13mm)
HVN-05	5/16" (8mm)	0.531" (13mm)	0.312" (8mm)	0.312" (8mm)	0.218" (6mm)	5/8" (16mm)
HVN-06	3/8" (10mm)	0.562" (14mm)	0.312" (8mm)	0.375" (10mm)	0.281" (7mm)	
HVN-08	1/2" (13mm)	0.687" (17mm)	0.312" (8mm)	0.500" (13mm)	0.343" (9mm)	
HVN-09	9/16" (14mm)	0.750" (19mm)	0.312" (8mm)	0.562" (14mm)	0.437" (11mm)	
HVN-10	5/8" (16mm)	0.812" (21mm)	0.312" (8mm)	0.625" (16mm)	0.406" (10mm)	
HVN-12	3/4" (19mm)	0.875" (22mm)	0.312" (8mm)	0.750" (19mm)	0.468" (12mm)	

HSN Loop Clamps

Stainless Steel



- Stainless steel, Type 301 or 304



Part No.	Size in.	Dimensions (in)				
		L	E	B	C	W
HSN-04	1/4" (6mm)	0.500" (13mm)	0.250" (6mm)	0.250" (6mm)	0.188" (5mm)	1/2" (13mm)
HSN-05	5/16" (8mm)	0.531" (13mm)	0.312" (8mm)	0.312" (8mm)	0.218" (6mm)	5/8" (16mm)
HSN-06	3/8" (10mm)	0.562" (14mm)	0.312" (8mm)	0.375" (10mm)	0.281" (7mm)	
HSN-08	1/2" (13mm)	0.687" (17mm)	0.312" (8mm)	0.500" (13mm)	0.343" (9mm)	
HSN-09	9/16" (14mm)	0.750" (19mm)	0.312" (8mm)	0.562" (14mm)	0.437" (11mm)	
HSN-10	5/8" (16mm)	0.812" (21mm)	0.312" (8mm)	0.625" (16mm)	0.406" (10mm)	
HSN-12	3/4" (19mm)	0.875" (22mm)	0.312" (8mm)	0.750" (19mm)	0.468" (12mm)	

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Introduction

Channel

Channel Nuts
& Hardware

General
Fittings

Pipe & Conduit
Supports

Electrical
Fittings

Spring
Steel

Loop & Ring
Clamps

Beta Clamps
& Z-Clamps

Concrete
Inserts

Rooftop
Supports

Gamma
Pads

Technical
Data



Python Cable Clamps

Python Series

STRONG: Load is applied at right angles to ensure tight fit. Python hose clamps keep their grip on the hose and can be reused. Rolled up band edges ensure a smooth transition between band and hose. Hexagonal screw head with drive slot makes for easy accessibility.



Python – Zinc Plated		
Zinc Plated Part No.	SAE Size	Clamping Range in.
PY-3	3	$\frac{5}{16}'' - \frac{9}{16}''$ (8mm – 14mm)
PY-4	4	$\frac{7}{16}'' - \frac{11}{16}''$ (11mm – 17mm)
PY-6	6	$\frac{1}{2}'' - \frac{13}{16}''$ (13mm – 20mm)
PY-8	8	$\frac{5}{8}'' - \frac{15}{16}''$ (15mm – 24mm)
PY-10	10	$\frac{3}{4}'' - 1\frac{1}{4}''$ (19mm – 28mm)
PY-12	12	$\frac{7}{8}'' - 1\frac{1}{4}''$ (22mm – 32mm)
PY-16	16	$1\frac{1}{8}'' - 1\frac{1}{2}''$ (29mm – 38mm)
PY-20	20	$1\frac{1}{4}'' - 1\frac{3}{4}''$ (32mm – 44mm)
PY-24	24	$1\frac{1}{2}'' - 2''$ (38mm – 50mm)
PY-28	28	$1\frac{3}{4}'' - 2\frac{1}{4}''$ (44mm – 56mm)
PY-32	32	$2'' - 2\frac{3}{4}''$ (50mm – 65mm)
PY-40	40	$2\frac{3}{4}'' - 3''$ (58mm – 75mm)
PY-44	44	$2\frac{7}{8}'' - 3\frac{1}{8}''$ (68mm – 85mm)
PY-52	52	$3'' - 3\frac{3}{4}''$ (77mm – 95mm)
PY-64	64	$3\frac{7}{8}'' - 4\frac{1}{8}''$ (87mm – 112mm)
PY-80	80	$4\frac{1}{4}'' - 5\frac{1}{8}''$ (104mm – 138mm)
PY-96	96	$5\frac{1}{8}'' - 6\frac{1}{2}''$ (130mm – 165mm)
PY-104	104	$5\frac{7}{8}'' - 7\frac{1}{4}''$ (150mm – 180mm)
PY-122	122	$6\frac{7}{8}'' - 8\frac{1}{4}''$ (175mm – 205mm)
PY-138	138	$7\frac{7}{8}'' - 9\frac{1}{4}''$ (200mm – 231mm)
PY-154	154	$8\frac{7}{8}'' - 10\frac{1}{4}''$ (226mm – 256mm)
PY-170	170	$9\frac{7}{8}'' - 11\frac{1}{4}''$ (251mm – 282mm)
PY-186	186	$10\frac{7}{8}'' - 12\frac{1}{4}''$ (277mm – 307mm)

The **Python II** provides greater clamping force with less trouble than heavy-duty T-Bolt type clamps.

- Lower cost than T-Bolts with superb performance.
- Thicker band for greater tensile strength.
- Greater clamping range than T-Bolt $1\frac{1}{2}''$ clamping range over 2" diameter
- 316 stainless steel
- Non perforated band with embossed threads safely seals without cutting the hose.



PYTHON II – Stainless Steel Type 316	
Part No.	Clamping Range in.
PY-331	$\frac{5}{16}'' - \frac{9}{16}''$ (8mm – 14mm)
PY-431	$\frac{7}{16}'' - \frac{11}{16}''$ (11mm – 17mm)
PY-631	$\frac{1}{2}'' - \frac{13}{16}''$ (13mm – 20mm)
PY-831	$\frac{5}{8}'' - \frac{15}{16}''$ (15mm – 24mm)
PY-1031	$\frac{3}{4}'' - 1\frac{1}{4}''$ (19mm – 28mm)
PY-1231	$\frac{7}{8}'' - 1\frac{1}{4}''$ (22mm – 32mm)
PY-1631	$1\frac{1}{8}'' - 1\frac{1}{2}''$ (26mm – 38mm)
PY-2031	$1\frac{1}{4}'' - 1\frac{3}{4}''$ (32mm – 44mm)
PY-2431	$1\frac{1}{2}'' - 2''$ (38mm – 50mm)
PY-2831	$1\frac{3}{4}'' - 2\frac{1}{4}''$ (32 – 57mm)
PY-3231	$1\frac{1}{2}'' - 2\frac{1}{2}''$ (38 – 64mm)
PY-3631	$1\frac{3}{4}'' - 2\frac{3}{4}''$ (44 – 70mm)
PY-4031	$2'' - 3''$ (51 – 76mm)
PY-4431	$2\frac{1}{4}'' - 3\frac{1}{4}''$ (57 – 83mm)
PY-4831	$2\frac{1}{2}'' - 3\frac{1}{2}''$ (64 – 89mm)
PY-5231	$2\frac{3}{4}'' - 3\frac{3}{4}''$ (70 – 95mm)
PY-5631	$3'' - 4''$ (76 – 102mm)
PY-6031	$3\frac{1}{4}'' - 4\frac{1}{4}''$ (83 – 108mm)
PY-6431	$3\frac{1}{2}'' - 4\frac{1}{2}''$ (89 – 114mm)
PY-7231	$3\frac{3}{4}'' - 5''$ (89 – 127mm)
PY-8031	$4'' - 5\frac{1}{2}''$ (102 – 140mm)
PY-8831	$4\frac{1}{2}'' - 6''$ (114 – 152mm)
PY-9631	$5'' - 6\frac{1}{2}''$ (127 – 165mm)
PY-10431	$5\frac{1}{2}'' - 7''$ (140 – 178mm)
PY-11231	$6'' - 7\frac{1}{2}''$ (152 – 191mm)
PY-12031	$6\frac{1}{2}'' - 8''$ (165 – 203mm)
PY-12831	$7'' - 8\frac{1}{2}''$ (178 – 216mm)
PY-13831	$7\frac{3}{8}'' - 9\frac{1}{8}''$ (194 – 232mm)
PY-15431	$8\frac{5}{8}'' - 10\frac{1}{4}''$ (219 – 257mm)
PY-17031	$9\frac{5}{8}'' - 11\frac{1}{4}''$ (244 – 282mm)
PY-18631	$10\frac{5}{8}'' - 12\frac{1}{4}''$ (270 – 307mm)

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Beta Clamps and Z-Clamps



Ideal for Clamping Pipe, Tube, Hose, & Electrical Cables



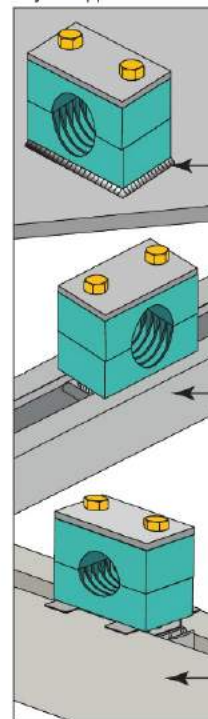
Beta Clamps are ideal for clamping pipe, tube, hose, and electric cables. They are an economical and easy way of securing them in all types of terrestrial, marine, O.E.M. and Industrial applications. Thanks to the advanced features and the breadth and depth of our product offering, Beta Clamps are used in all areas of industrial, mobile and marine hydraulics, general industrial pipe construction, the field of press technology, instrumentation and control technology, and many more.

- Beta Clamps offer shock-absorption, vibration dampening and noise reducing properties.
- Beta Clamps feature a practical and economical design which make for quick, easy pipe installation and layout.
- Upper and lower clamp half are identical.
- Ribs in clamp bore are designed to absorb shock and vibration in the direction of the tube axis.
- Clamp Body Standard – Polypropylene (Green Color) -22°F to 194°F (-30°C to +90°C)
- Aluminum Clamp Body is available for use in high heat applications.

CLAMP COMPONENTS – The other metallic components of the clamps are manufactured in:

- Lower and upper plates: steel, stainless steel type 304
- Screw bolts: steel, S40C, stainless steel type 304

ZSi-Foster's Beta Clamps offer an installation option for all of your application needs.



Common Welded Method

Install by welding the weld plate to existing steel

Din Rail Mounted

Attach to C-Rail using ZSI C-Rail Nuts

Strut Mounted

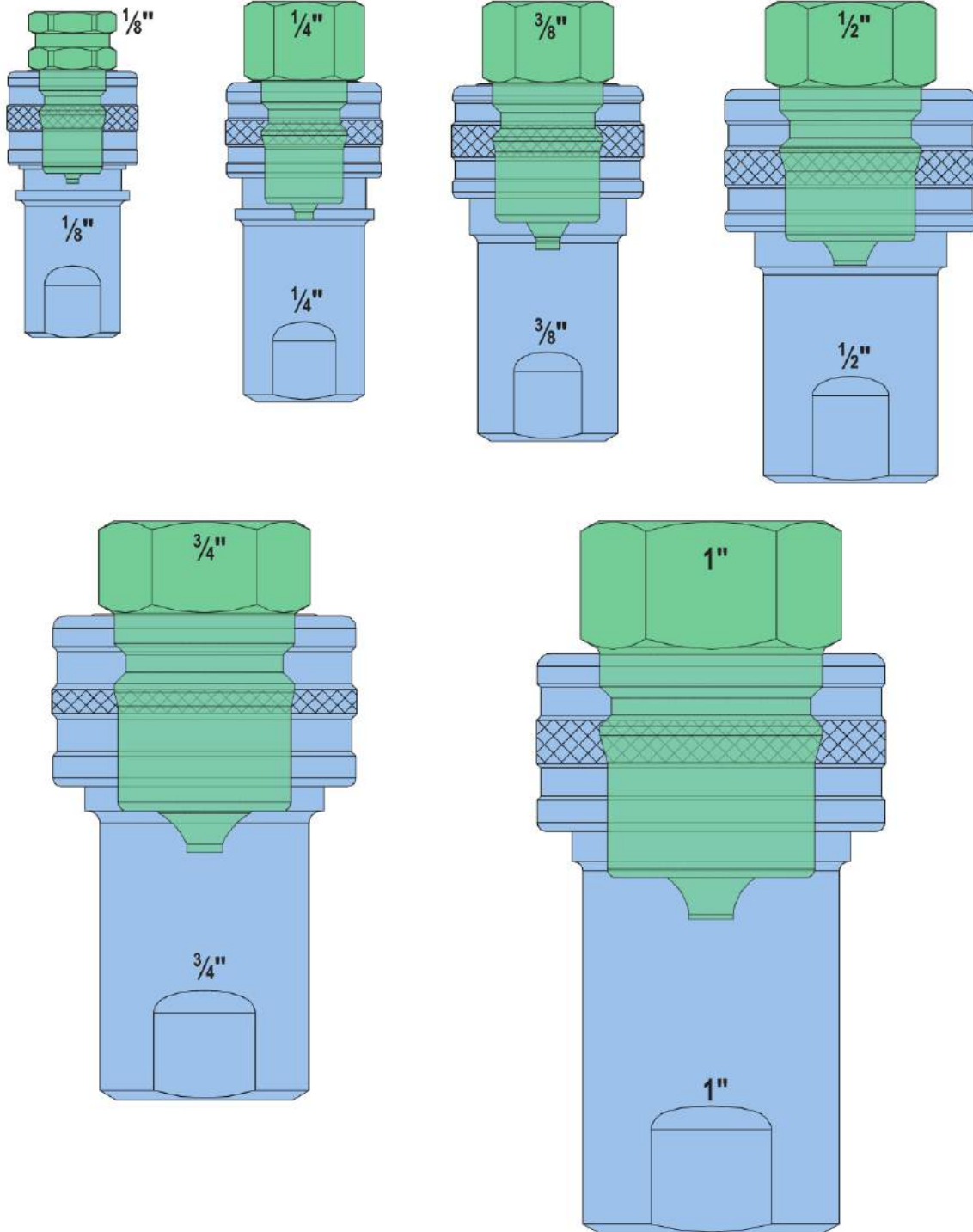
Attach to Wesanco Channel using our exclusive Channel Adapter Nut

Call ZSi-Foster at (800) 323-7053 or order now at zsi-foster.com

Actual Size Layouts



FBK & DS Series



Pneumatic QD

Hydraulic QD

Blow Guns & Accessories

Fittings & Accessories

Hoses & Fittings

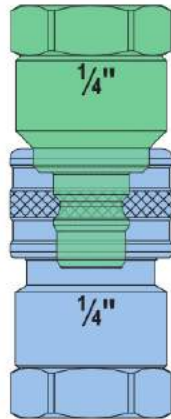
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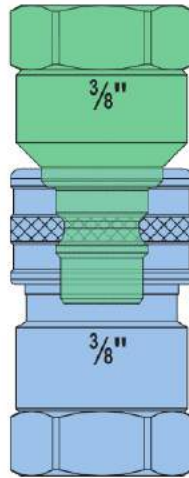
Actual Size Layouts



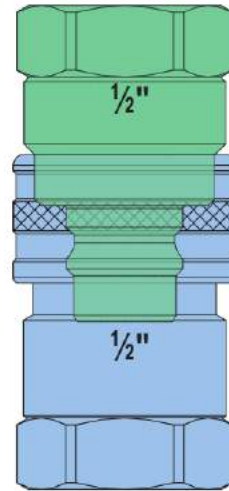
Series FH & FIH



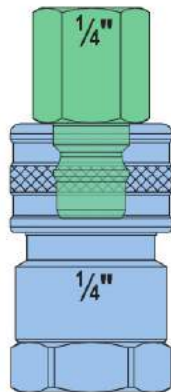
FH 1/4"
Two Way Valved Plug



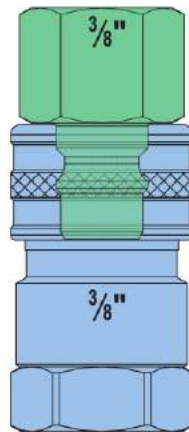
FH 3/8"
Two Way Valved Plug



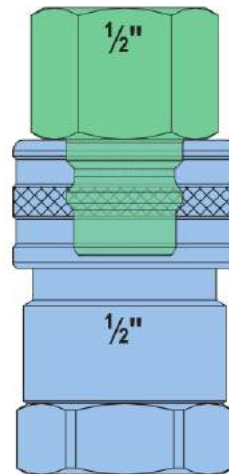
FH 1/2"
Two Way Valved Plug



FH/FIH 1/4"
Un-valved Plug



FH/FIH 3/8"
Un-valved Plug



FH/FIH 1/2"
Un-valved Plug

Pneumatic QD

Hydraulic QD

Blow Guns & Accessories

Fittings & Accessories

Hoses & Fittings

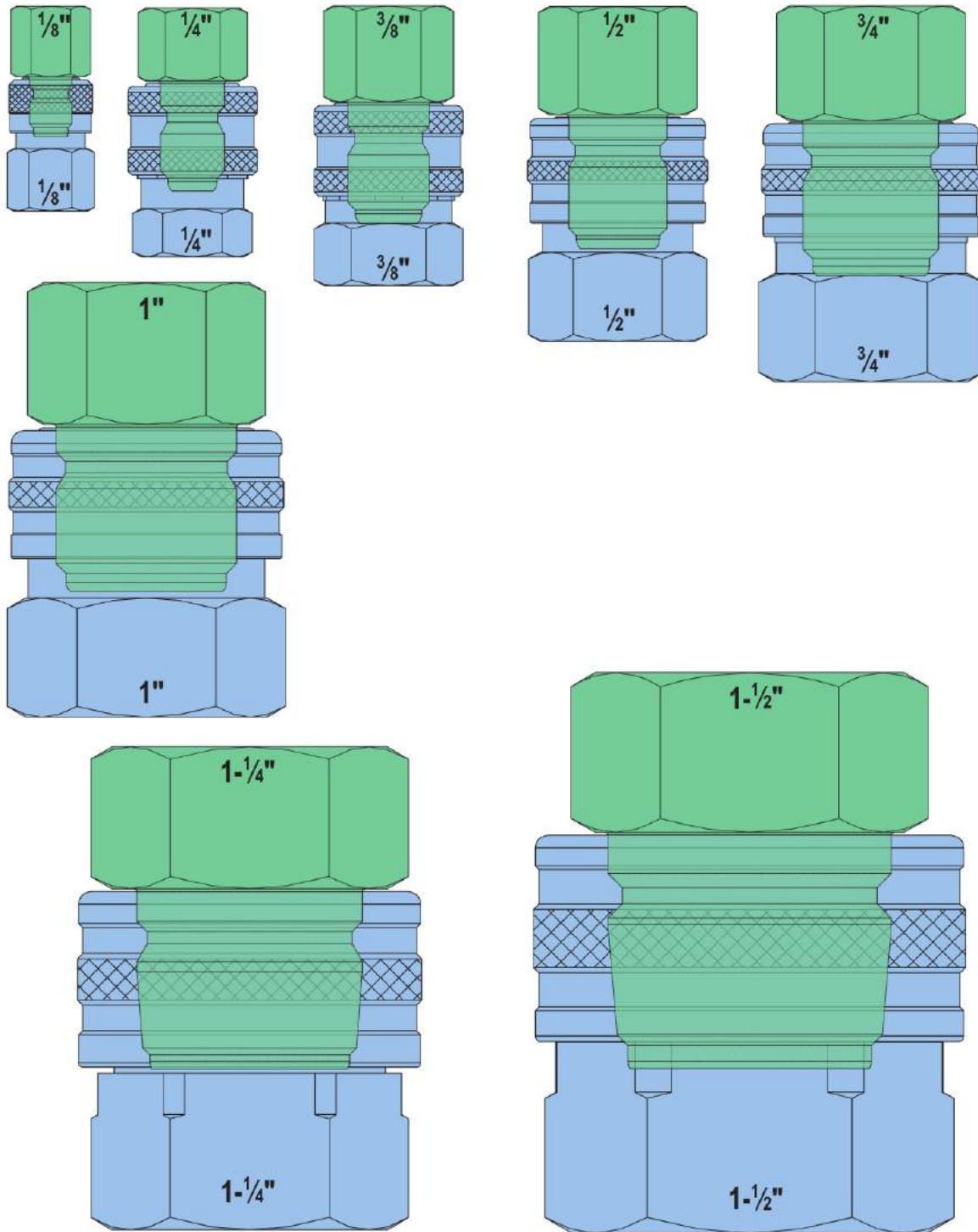
Technical Data

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Actual Size Layouts

FST & ST Series





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