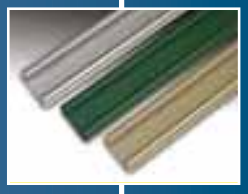
POWER-STRUT®

POWER-STRUT® Engineering Catalog



- Channels, Fittings, & Accessories
- Electrical Raceway Components
- Concrete Inserts
- Cush-A-Clamps®
- Power-Angles™
- Aickinstrut® Family of Fiberglass Channel & Accessories

ALLIED ELECTRICAL™ Group

Electrical Infrastructure Solutions™

www .alliedeg.com

POWER-STRUT®

The Power to Build!

The present line of Power-Strut continuous slot metal framing is the result of over one half century of experience in metal framing.

This complete line includes channels, fittings and accessories for any framing or support solution... large or small, heavy or light.

Power-Strut is proud of the exacting standards of research, design, engineering and manufacturing that go into production of the Power-Strut system.

Maximum recommended load ratings for channels have been established through testing and are based on allowable stresses applicable to the Power-Strut Material Specification. Electrical Power-Strut products are listed by the Underwriters' Laboratories, Inc. (U.L.) and certified by the Canadian Standards Association (CSA.)

The Power-Strut Connection, Easy as 1 - 2 - 3...

1. Insert the clamping nut anywhere along the continuous slot channel. A 90° clockwise turn positions the grooves and teeth in the nut with the inserted edges of the channel.

2. The Power-Strut fitting provides the connection of channels.

3. Tighten the bolt(s) to secure the connection.

POWER-STRUT®

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THE POWER TO BUILD

A Broad and Versatile Metal Framing Line Backed

More Than 8,000 Quality Products

The Power–Strut metal framing system can be regarded as a basic building material. Our metal framing system is an erector set concept, using channel and fittings to solve many applications. You can conceal metal framing in the basic structure of a building or run it along the surface of walls, ceilings and floors. An endless array of fittings provide freedom to work at virtually any angle along any surface to shape a support system that fits your exact needs.

Available finishes include hot–dipped galvanized, pregalvanized, electro–galvanized and painted, along with material choices of steel, stainless steel and aluminum.

Beyond its versatility as a basic building material, metal framing is popular for more exotic applications such as clean rooms, satellite dish supports, x–ray supports, storage racks, theater screens, tunnel stanchions and offshore platform catwalks. While the uses of metal framing are truly unlimited, they fall into three major categories.

Electrical Systems

Versatile metal framing is widely used by electrical contractors to support conduit, panel boxes, raceway systems and other electrical components. In addition, Power–Strut channel can be used as a wiring raceway. Products marked with the UL symbol in this catalog are listed by Underwriter's Laboratories for use in raceway applications.

Channel raceways or support systems can be attached to ceilings, wood or steel beams, inside columns or imbedded in concrete. Trapeze systems can support conduit from either the top or bottom.

As a lighting support system, metal framing helps assure proper alignment over long spans. As a raceway system, channel offers an opportunity to reduce construction costs through more efficient use of installation labor. The exceptional versatility of channel gives contractors more flexibility in solving miscellaneous problems which may arise at the job site.

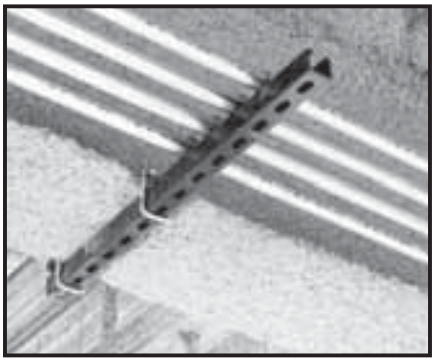
by a Leading Reputation for Quality and Service.

Mechanical Systems That Reduce Costs

For mechanical support of HVAC, plumbing and fire protection systems, the versatility of metal framing systems is unmatched. It is by far the most popular framing system with contractors because the wide variety of fittings and support devices available help solve virtually any support problem without expensive welding.

Piping stanchions, ceiling and wall-mounted supports and tunnel supports are common metal framing applications. Concrete insert, shelf bracket, wall and ceiling-mounted systems provide flexible solutions to any piping support applications.

In addition, pipe support products such as Power-Wrap and cushioned clamps provide insulation to prevent potential damage from noise, vibration, temperature variations and metal-to-metal contact.



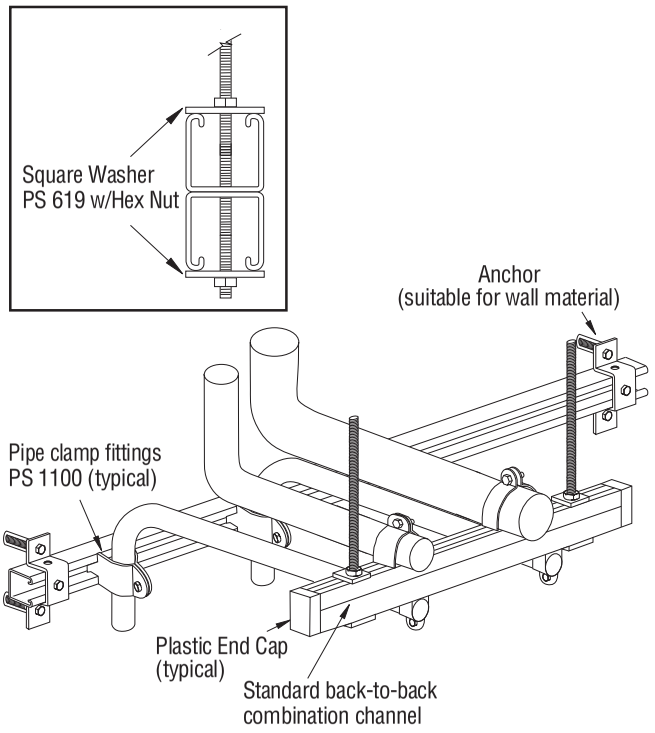
OEM Components and Maintenance

Metal Framing systems provide convenient solutions for maintenance and retrofit requirements in processing and manufacturing facilities. Also, Power-Strut products can be used as cost-effective components in OEM applications. For example, channel can be used as conveyor stands and side rails or provide framing for panel cabinetry products, or for generator, motor and pump supports.

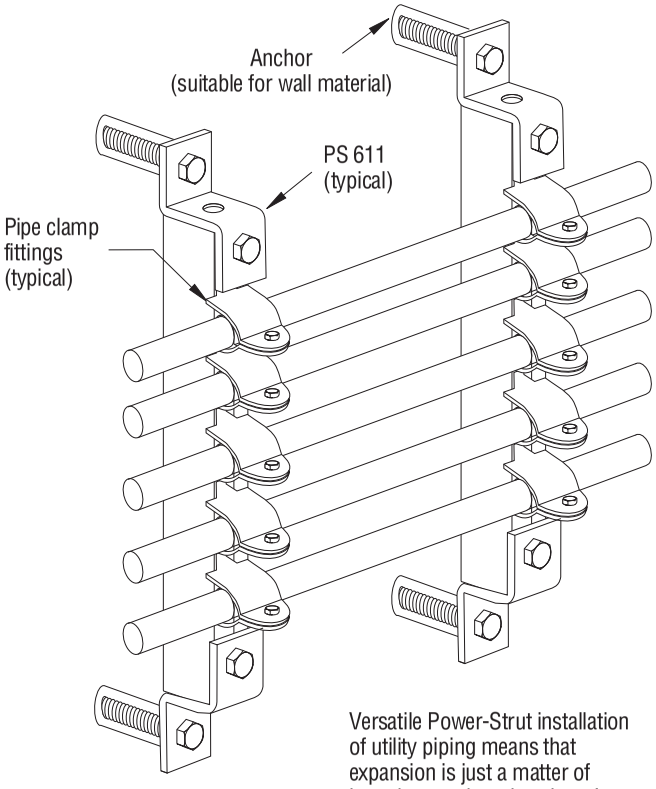
The complete line of products and leading reputation for quality and service make Power-Strut your practical choice for metal framing. Contact your local Power-Strut representative for additional information.

EXAMPLE APPLICATIONS

Overhead Support Vertical to Horizontal

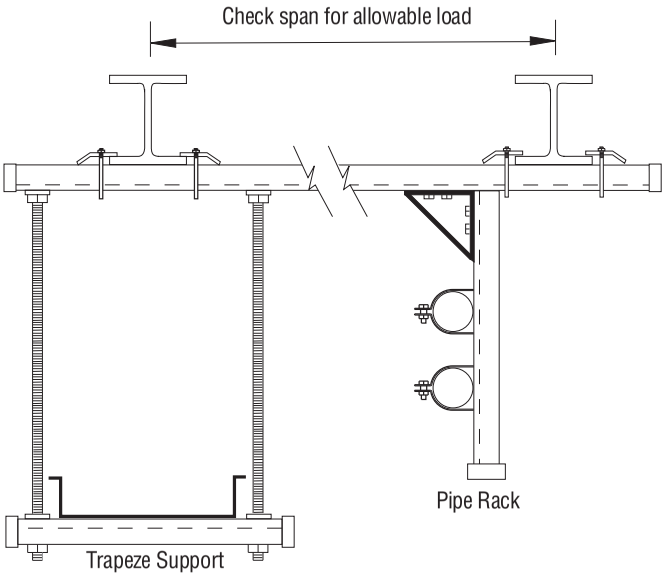


Wall Mount Organize & Control MultiShelf or Utility Support

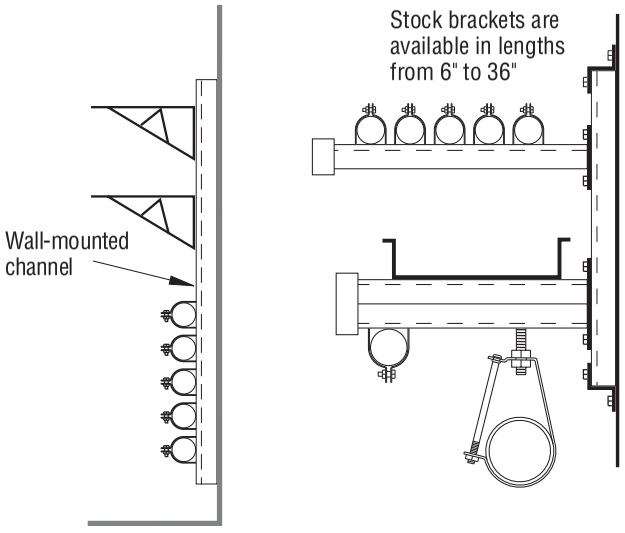


Versatile Power-Strut installation of utility piping means that expansion is just a matter of inserting another pipe clamp!

Overhead Multi-Use Support Systems Using Channel Attached to "I" Beams

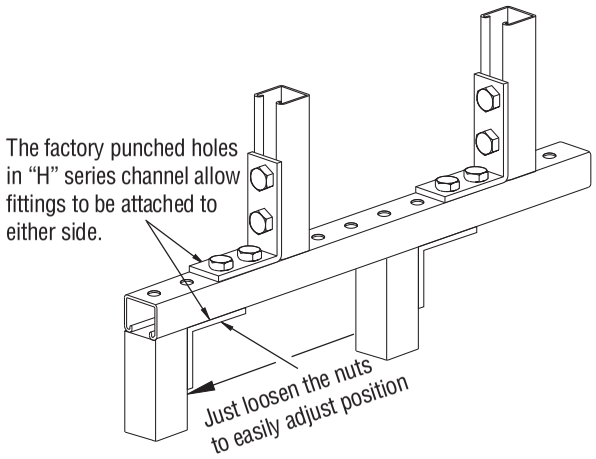


Wall Mounted Brackets

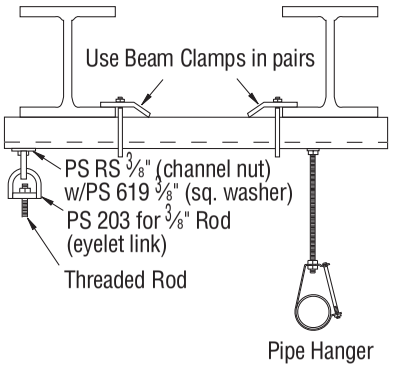


EXAMPLE APPLICATIONS

Standard Channel and Fitting Assembly

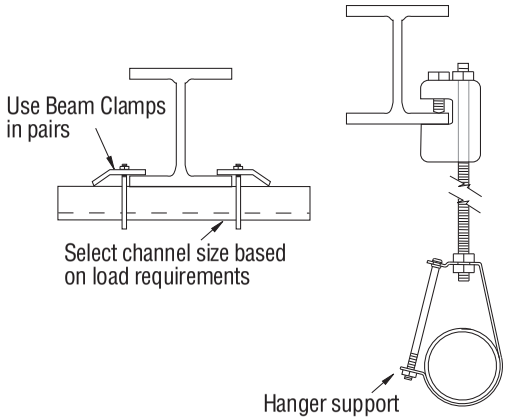


Supports for Threaded Rod Attachments Between Beams



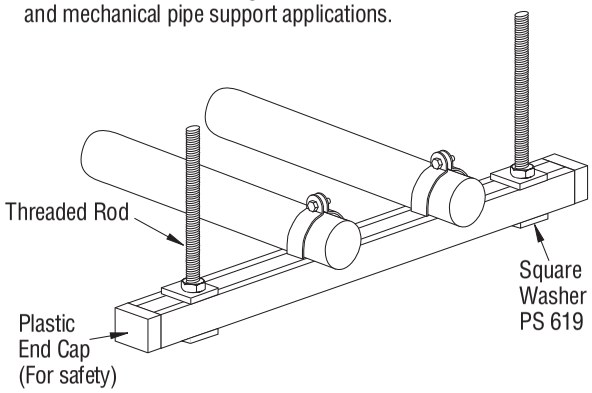
Select channel size based on load requirements

Supports for Threaded Rod Attachments to Single Beams

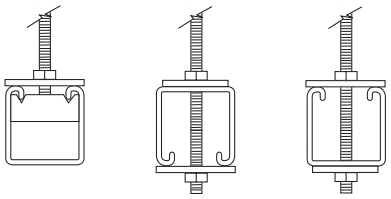


Trapeze Support System

Power-Strut metal framing is ideal for electrical and mechanical pipe support applications.

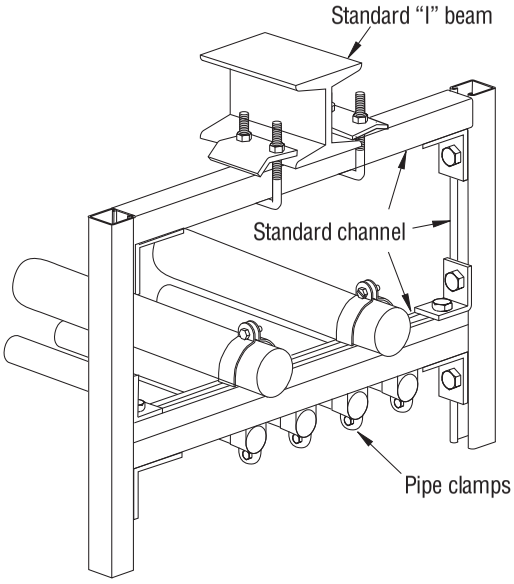


Acceptable Methods to Hang Channels



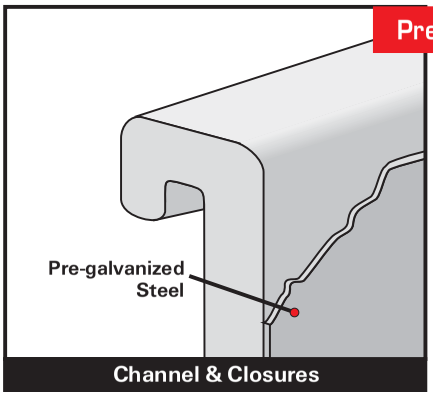
Pre-slotted channel allow through channel connections

Ganged Pipe Support



FINISHES

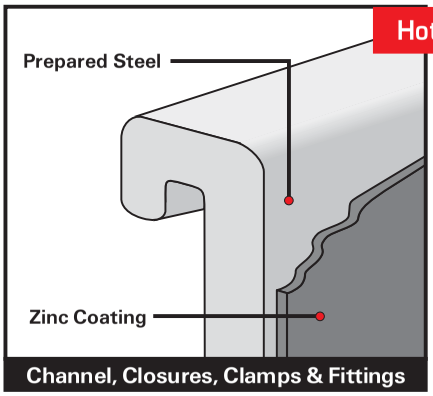
Pregalvanized (PG)



Material (steel strip) is coated with zinc by hot-dip process prior to roll-forming or press operations.

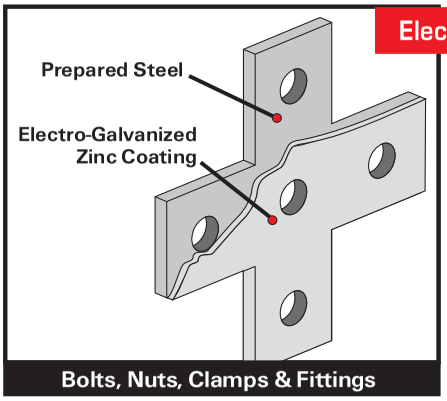
The zinc coating conforms to ASTM A653, Grade 90 General Requirement for Steel Sheet, Zinc–Coated (Galvanized) by Hot Dip Process.

Hot-Dipped Galvanized (HG)



Material is coated with zinc after being roll-formed or after all manufacturing operations are completed, conforming to ASTM specification No. A123 or A153.

Electro-Galvanized (EG)

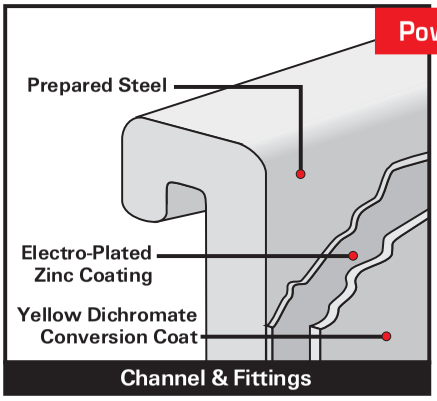


Fittings and hardware are electrolytically coated with zinc to commercial standards (ASTM-B633 Type III C1).

SC1 (mild) has a Zinc coating of 0.2 and is recommended for dry indoor use. SC1 is the standard finish thickness.

SC3 (Severe) has a Zinc coating of 0.5 mill and is the standard finish thickness only on UL Listed raceway products.

Power-Gold (ZD)



A Electro-galvanized zinc plate is applied with a cohesive molecular bond to the steel base metal, in compliance with the ASTM B633 standard. Yellow Dichromate is applied over the zinc and results in a gold appearance which acts as a nonporous barrier sealant.

SC1 (mild) has a Zinc coating of 0.2 and is recommended for dry indoor use. SC1 is the standard finish thickness

SC3 (Severe) has a Zinc coating of 0.5 mill and is the standard finish thickness only on UL Listed raceway products.

ZINC COATING

Power-Strut products are available in four types of zinc coatings:

- Electroplated (EG)
- Pregalvanized (PG)
- Hot-Dipped Galvanized (HG)
- Yellow Dichromate (ZD)

Zinc coatings offer two types of protection:

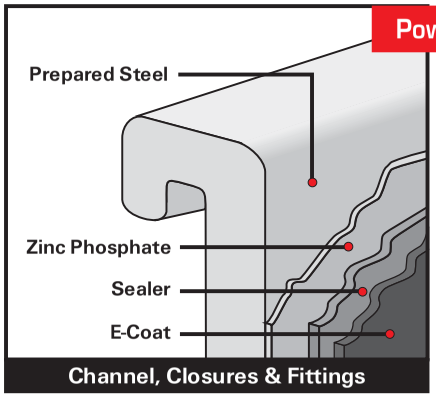
1. **Barrier:** The zinc coating protects the steel substrate from direct contact with the environment.
2. **Sacrificial:** The zinc coating will protect scratches, cut edges, etc. through an anodic sacrificial process.

The service life of zinc coating is directly related to the zinc coating thickness as shown below.

COMPARISON OF ZINC GALVANIZED FINISHES

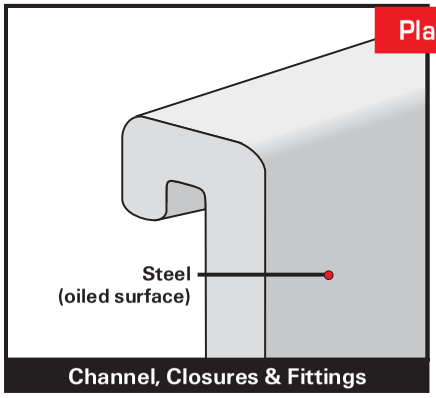
Finish	Zinc Thickness
Hot-Dipped Galvanized	2.6 MIL
Pregalvanized	0.75 MIL
Electro-Galvanized (SC1)	0.2 MIL
Electro-Galvanized (SC3)	0.5 MIL
Power-Gold (SC1)	0.2 MIL
Power-Gold (SC3)	0.5 MIL

Power-Green® (GR)



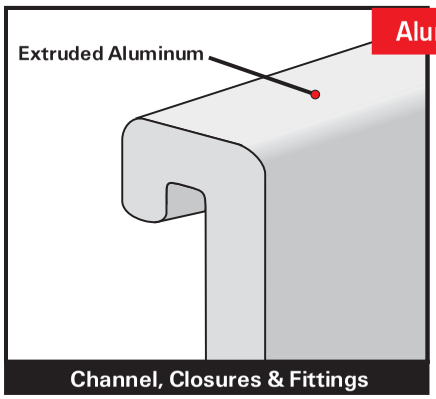
Channel and parts are cleaned and phosphated. Immediately afterward, a uniform coat of rust-inhibiting thermoset epoxy paint is applied by cathodic electro-deposition and thoroughly baked.

Plain (PL)



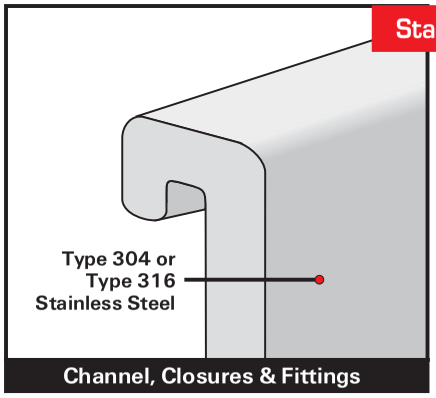
Plain finish designation means that the channel retains the oiled surface applied to the raw steel during the rolling process. The fittings have the original oiled surface of the bar-stock material.

Aluminum (AL)



Channel is extruded aluminum in accordance with ASTM B221 Type 6063-T6.

Stainless Steel (SS)



Material in accordance with ASTM A240 (Type 304 or type 316).

POWER-GREEN® TECHNICAL DATA

STEEL SUBSTRATE PREPARATION

Eight stage continuous cleaning, rinse, zinc phosphate conversion coating and sealer.

COATING

Thermoset epoxy

Color: Federal Highway Green Color Tolerance Chart PR Color No. 4.

Hardness: 2H+

Coating Process: Cathodic Electrodeposition.

PERFORMANCE

Salt Spray:

Scribed: exceeds 400 hrs per ASTM B117. (⅛ Creep)

Unscribed: exceeds 600 hours per ASTM B117. (6% Red Rust)

ENVIRONMENTAL ISSUES

Formulated as a "heavy metal"- free coating (trace elements only).

Outgassing in service: essentially none at 350°F for 24 hrs.

Finishes (Ordering):

When ordering, add the finish to the part number.

Examples: PS 200-10 PG
PS 200-10 ZD
PS 200-10 GR
PS 200-10 HG

SPECIFICATIONS

Materials:

Channel* & Closures – Pregalvanized
ASTM A653 Grade 33, Steel Sheet Zinc Coated by Hot Dip Process

Channel* – Plain, Painted or Hot Dip Galvanized
ASTM A–1011 Grade 33, Hot Rolled Carbon Steel Sheet and Strip, Structural Quality

Channel* – Stainless Steel
ASTM A–240, Type 304, Heat Resisting Chromium and Chromium–Nickel Stainless Steel Plate, Sheet, Strip for Pressure Vessel

Channel* – Aluminum
ASTM B–221, Type 6063 T6, Aluminum Alloy Extruded Bar, Rod, Wire, Shape and Tube

Closures – Plain, Painted or Hot Dip Galvanized
ASTM A1008, Steel, Strip, Carbon, Cold–Rolled

Fittings* – Steel
¼" Nominal Thickness – ASTM A–575 and A576†
⅜" Nominal Thickness – A36 (Structural Steel)

Fittings* – Aluminum
ASTM B–209

Accessories – Steel
Less than ¼" Nominal Thickness – ASTM A–569, 1008–1010 Grade, or (when Pre–Galvanized) ASTM A–527/ Coating Designation G90

Pipe Clamps – Steel
A–1011SS Grade 33

Pipe Clamps – Stainless Steel
ASTM A–240, Type 304

Pipe Clamps – Aluminum
ASTM B-209, 5052, H32 Grade, Sheet and Plate

Channel Nuts
ASTM (⅜" & ½") A-576 Grade 1015M, A–675 (¼") Grade 60, Case Hardened to RC25 min.

Hex Nuts and Bolts
ASTM A–563, Grade A and ASTM A–307, Grade A

Threaded
Low Carbon Steel
Yeild = 32 ksi min.
Tensile = 52 ksi min

* Channel referenced is 1⅝" wide, fittings referenced are for 1⅝" channel.
† Some ¼" fittings are produced from A-36 Structural Steel.

Product Load Testing

Product testing is an important Part of Power-Strut's Quality Assurance Program. We utilize our own testing facilities, as well as those of independent testing laboratories, to determine design loads with proper and adequate safety factors. These design loads are indicated, where applicable, throughout the catalog. Loads are based on AISI Specification For The Design Of Cold-Formed Steel Structural Members, 2001 Edition.

Destructive and non-destructive testing procedures are used to test for variables such as corrosion, conductivity, electro-static dissipation, ultra-violet resistance, wind resistance, dimensional accuracy, material integrity and slip resistance.

In short, if there's a specification to meet, Power-Strut will develop a test to quantify and verify it. Using design properties of the Power-Strut framing members, load data given in this catalog, and/or design procedures of the American Iron & Steel Institute Specification For The Design Of Cold-Formed Steel Structural Members, 2001 Edition, it is possible to design any type of structure within the capabilities of the system.

Assemblies or connections that cannot be calculated using provisions of the AISI specifications must be established by application-specific tests.

We reserve the right to make specification changes without notice.

While every effort has been made to assure the accuracy of information contained in this catalog at the time of publication, we cannot accept responsibility for inaccuracies resulting from undetected errors or omissions.

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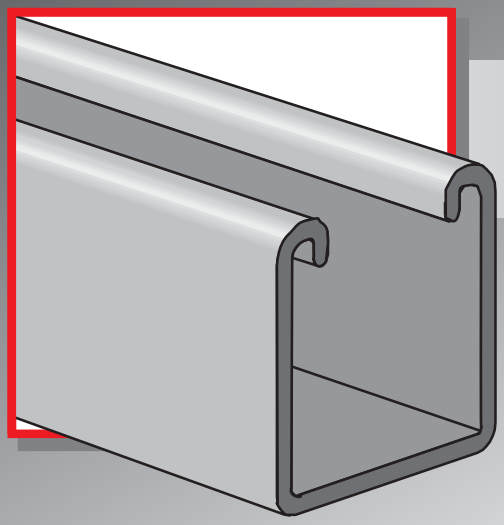
Fiberglass Aickinshapes®

Fiberglass Sealers, Coatings & Promotional Material

Fiberglass AickinGrate®



CHANNEL

Power-Strut channel sections are produced by multiple sets of forming rolls which cold-work strip steel into the channel configuration. This type of roll forming produces a uniform channel section held to the specifications of MFMA-4.

MATERIALS:

Plain and painted green channels are formed from structural quality strip steel which conforms to the requirements of ASTM A-1011 SS Grade 33. Pre-galvanized channel conforms to the requirements of ASTM A-653 Grade 33.

STANDARD LENGTHS:

Stock lengths are 10 and 20 feet. Special lengths are available upon request.

STANDARD FINISHES:

Standard Power-Strut channel is available in plain, painted green, zinc dichromate or pre-galvanized finishes.

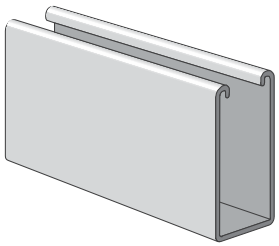
ORDERING INFORMATION:

When ordering, add the length or size and finish to the part number. See page 8 - 9 for finish abbreviations and an example.

Type of Load	Safety Factor to Yield Strength	Safety Factor to Ultimate Strength
Beam Loads	1.67	2.0
Column Load	1.80	2.2

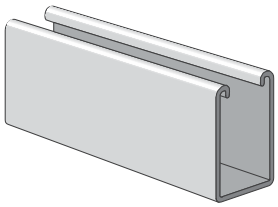
PS 100 – 1⅝" x 3¼" x 12 ga.

See Pages 22-23



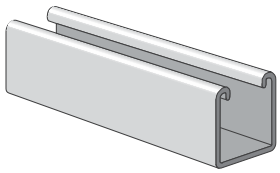
PS 150 – 1⅝" x 2⁷⁄₁₆" x 12 ga.

See Pages 24-25



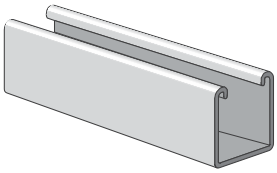
PS 200 – 1⅝" x 1⅝" x 12 ga.

See Pages 26-29



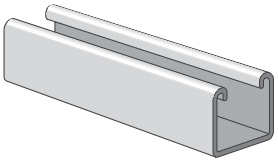
PS 210 – 1⅝" x 1⅝" x 14 ga.

See Pages 30-31



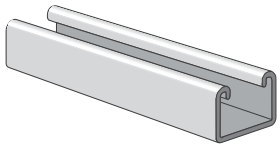
PS 300 – 1⅝" x 1⅜" x 12 ga.

See Pages 32 -33



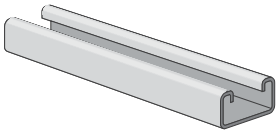
PS 400 – 1⅝" x 1" x 12 ga.

See Pages 34-35



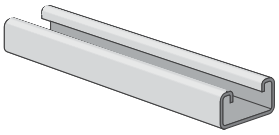
PS 500 – 1⅝" x ¹³⁄₁₆" x 14 ga.

See Pages 36-37



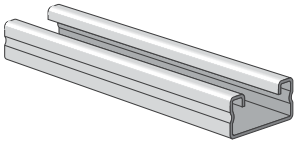
PS 520 – 1⅝" x ¹³⁄₁₆" x 12 ga.

See Pages 38-39



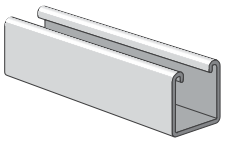
PS 560 – 1⅝" x ¹³⁄₁₆" x 16 ga.

See Pages 40-41



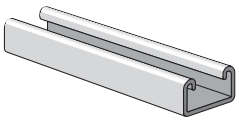
PS 600J – ¹³⁄₁₆" x ¹³⁄₁₆" x 19 ga.

See Junior Channel Page 96



PS 700J – ¹³⁄₁₆" x ¹³⁄₃₂" x 19 ga.

See Junior Channel Page 97



Maximum Allowable Pull-Out and Slip Loads

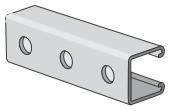
Channel Nut Size-Thread	Allowable Gauge Channel	Pull-Out Strength (Lbs.)	Resistance to Slip (Lbs.)	Torque Ft.-Lbs.
¾"-10	12 Gauge PS 100 PS 150 PS 200 PS 300	2,500	1,700	*125
⅝"-11		2,500	1,500	*100
½"-13		2,000	1,500	50
⁵⁄₁₆"-14		1,400	1,000	35
⅜"-16		1,000	800	19
⁵⁄₁₆"-18		800	500	11
¼"-20		600	300	6
½"-13	12 Gauge PS 400 PS 520	1,500	1,500	50
⅜"-16		1,000	800	19
⁵⁄₁₆"-18		800	500	11
¼"-20		600	300	6
½"-13	14 Gauge PS 210 PS 500	1,400	1,000	50
⅜"-16		1,000	750	19
⁵⁄₁₆"-18		800	400	11
¼"-20		600	300	6
½"-13	16 Gauge PS 560	1,000	1,000	50
⅜"-16		1,000	750	19
⁵⁄₁₆"-18		800	400	11
¼"-20		600	300	6

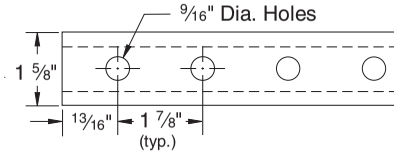
* May require ⅜" or ½ thick fitting.

Nut design loads include a minimum safety factor of 3.

Note: Refer to the Channel Nut Selection Chart on page 44 for the part number

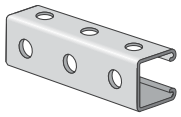
Channel with Holes (H)

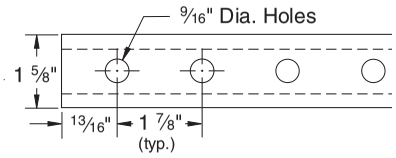




Available With These Select Channel Types:												
PS 100	PS 150	PS 150 2T3	PS 200	PS 200 2T3	PS 210	PS 300	PS 300 2T3	PS 400	PS 500	PS 500 2T3	PS 520	PS 560
■	■		■		■	■		■	■		■	

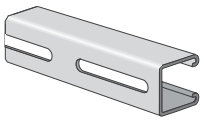
Channel with Holes on Three Sides (H3)

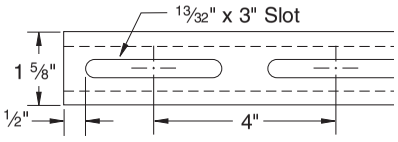




Available With These Select Channel Types:												
PS 100	PS 150	PS 150 2T3	PS 200	PS 200 2T3	PS 210	PS 300	PS 300 2T3	PS 400	PS 500	PS 500 2T3	PS 520	PS 560
			■									

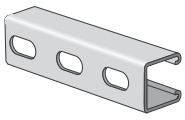
Channel with Slots (S)

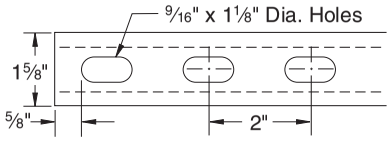




Available With These Select Channel Types:												
PS 100	PS 150	PS 150 2T3	PS 200	PS 200 2T3	PS 210	PS 300	PS 300 2T3	PS 400	PS 500	PS 500 2T3	PS 520	PS 560
■	■		■		■	■		■	■		■	■

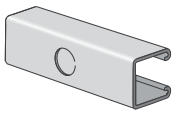
Channel with Elongated Holes (EH)

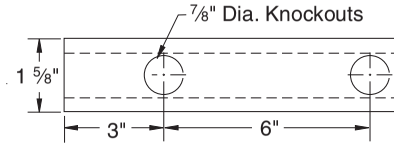




Available With These Select Channel Types:												
PS 100	PS 150	PS 150 2T3	PS 200	PS 200 2T3	PS 210	PS 300	PS 300 2T3	PS 400	PS 500	PS 500 2T3	PS 520	PS 560
■	■	■	■	■	■	■	■	■	■	■	■	■

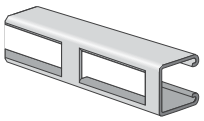
Channel with Knockouts (KO6)

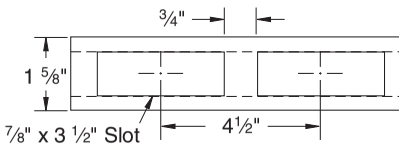




Available With These Select Channel Types:												
PS 100	PS 150	PS 150 2T3	PS 200	PS 200 2T3	PS 210	PS 300	PS 300 2T3	PS 400	PS 500	PS 500 2T3	PS 520	PS 560
■	■		■		■							

Channel with Slotted Back (SB)



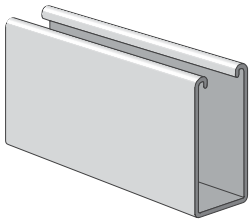


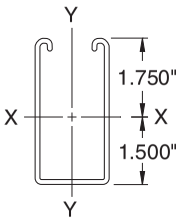
Available With These Select Channel Types:												
PS 100	PS 150	PS 150 2T3	PS 200	PS 200 2T3	PS 210	PS 300	PS 300 2T3	PS 400	PS 500	PS 500 2T3	PS 520	PS 560
			■									

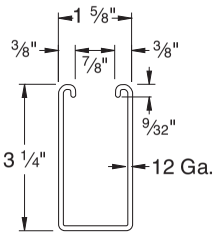
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

PS 100 - Steel Channel (1⅝" x 3¼" x 12 ga.)



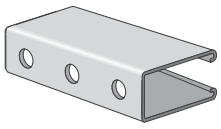


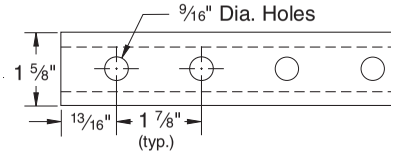


ELEMENTS OF SECTION – PS 100

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
305	0.897	1.098	0.627	1.107	0.433	0.533	0.695

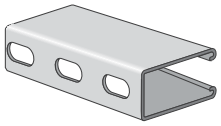
PS 100 H - Channel with Holes

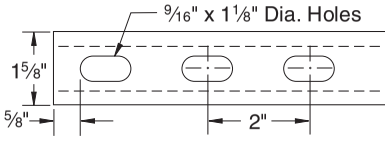




Weight: 300 lbs./100 ft.

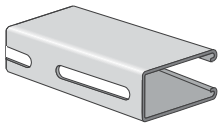
PS 100 EH – Channel with Elongated Holes

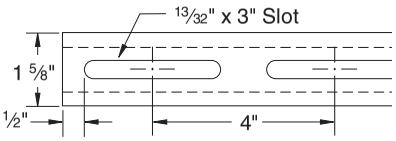




Weight: 300 lbs./100 ft.

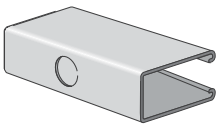
PS 100 S - Channel with Slots

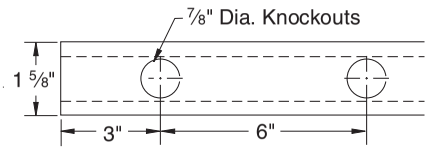




Weight: 300 lbs./100 ft.

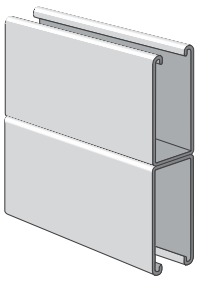
PS 100 K06 – Channel with Knockouts

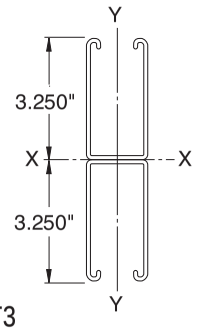


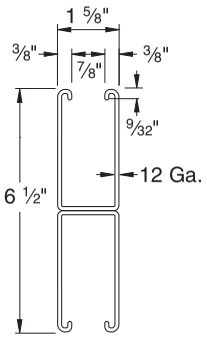


Weight: 305 lbs./100 ft.

PS 100 2T3 – Steel Channel (1⅝" x 6½" x 12 ga.)







ELEMENTS OF SECTION – PS 100 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
610	1.793	6.226	1.916	1.864	0.866	1.066	0.695

PS 100 & PS 100 2T3 - Load Data

BEAM LOADING – PS 100

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	5,260	0.03	5,260	5,260	5,260
36	3,500	0.07	3,500	3,500	3,500
48	2,630	0.12	2,630	2,630	2,630
60	2,100	0.18	2,100	2,100	1,920
72	1,750	0.26	1,750	1,750	1,330
84	1,500	0.36	1,500	1,470	980
96	1,310	0.47	1,310	1,120	750
108	1,170	0.59	1,170	890	590
120	1,050	0.73	960	720	480
144	880	1.06	670	500	330
168	750	1.43	490	370	240
192	660	1.88	370	280	190
216	580	2.35	300	220	150
240	530	2.95	240	180	120

* Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-100-EH 15% PS-100-S 15%
PS-100-H 10% PS-100-KO6 5%

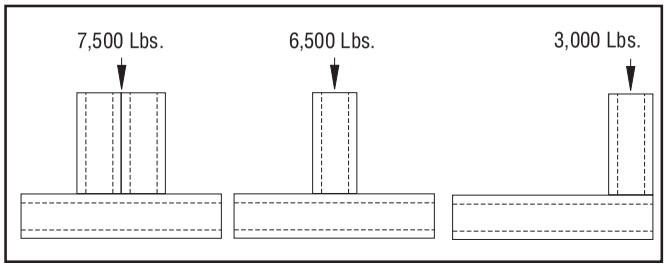
COLUMN LOADING – PS 100

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	5,650	16,870	15,180	12,850	10,600
36	4,690	13,140	10,600	7,650	5,660
48	3,560	9,550	6,860	4,790	3,660
60	2,730	6,680	4,790	3,450	2,710
72	2,160	4,980	3,660	2,710	2,170
84	1,760	3,950	2,960	2,240	1,820
96	1,500	3,270	2,500	1,930	1,580
108	1,310	2,800	2,170	1,690	1,390
120	1,170	2,450	1,930	1,510	**
144	980	1,980	1,580	**	**
168	850	1,670	1,340	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS100 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when ½" PS NS channel nuts are used.

Pull Out Strength – 2,000 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 100 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	6,890 *	0.01	6,890 *	6,890 *	6,890 *
36	6,890 *	0.02	6,890 *	6,890 *	6,890 *
48	6,890 *	0.05	6,890 *	6,890 *	6,890 *
60	6,420	0.10	6,420	6,420	6,420
72	5,350	0.14	5,350	5,350	5,350
84	4,590	0.19	4,590	4,590	4,590
96	4,020	0.25	4,020	4,020	4,020
108	3,570	0.32	3,570	3,570	3,360
120	3,210	0.39	3,210	3,210	2,720
144	2,680	0.57	2,680	2,680	1,890
168	2,290	0.77	2,290	2,080	1,390
192	2,010	1.01	2,010	1,590	1,060
216	1,780	1.27	1,680	1,260	840
240	1,610	1.58	1,360	1,020	680

* Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 100 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	10,670	39,230	38,030	36,210	34,240
36	10,350	36,450	34,240	31,200	28,260
48	9,940	33,220	30,200	26,430	23,190
60	9,290	29,950	26,430	22,470	19,380
72	8,560	26,880	23,190	19,380	16,450
84	7,860	24,140	20,520	17,040	12,090
96	7,220	21,790	18,370	13,330	9,250
108	6,600	19,790	16,450	10,530	7,310
120	5,760	18,130	13,330	8,530	**
144	4,390	14,020	9,250	**	**
168	3,420	10,300	6,800	**	**

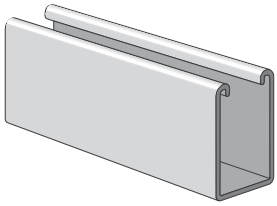
** $KL/r > 200$

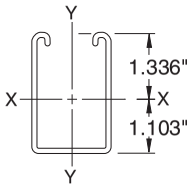
Column loads are for allowable axial loads and must be reduced for eccentric loading.

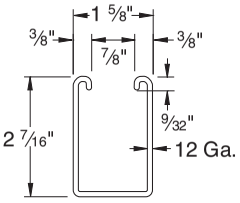
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

PS 150 – Steel Channel (1⅝" x 2⁷⁄₁₆" x 12 ga.)



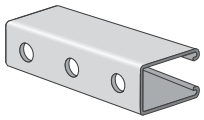


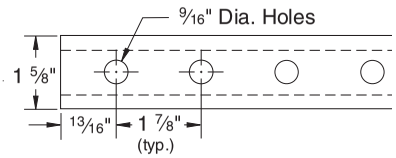


ELEMENTS OF SECTION – PS 150

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
247	0.726	0.522	0.390	0.848	0.334	0.411	0.679

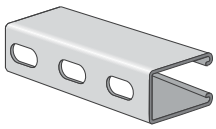
PS 150 H - Channel with Holes

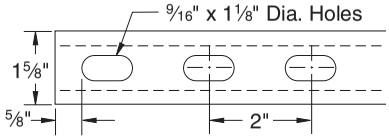




Weight: 242 lbs./100 ft.

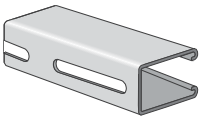
PS 150 EH – Channel with Elongated Holes

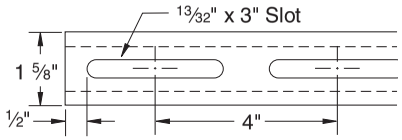




Weight: 242 lbs./100 ft.

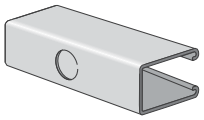
PS 150 S - Channel with Slots

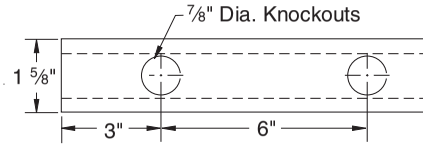




Weight: 242 lbs./100 ft.

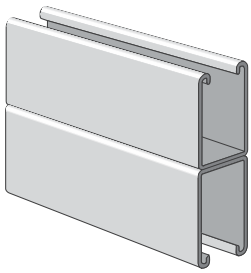
PS 150 K06 – Channel with Knockouts

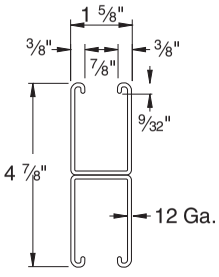


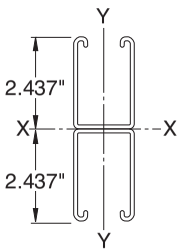


Weight: 247 lbs./100 ft.

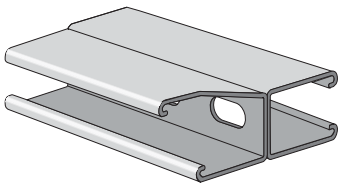
PS 150 2T3 – Steel Channel (1⅝" x 4⅞" x 12 ga.)

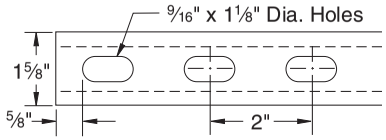






PS 150 2T3 EH – Channel with Elongated Holes





Weight: 494 lbs./100 ft.

ELEMENTS OF SECTION – PS 150 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
494	1.452	2.805	1.151	1.390	0.669	0.823	0.679

PS 150 & PS 150 2T3 - Load Data

BEAM LOADING – PS 150

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	3,270	0.04	3,270	3,270	3,270
36	2,180	0.09	2,180	2,180	2,180
48	1,640	0.15	1,640	1,640	1,420
60	1,310	0.24	1,310	1,310	910
72	1,090	0.34	1,090	950	630
84	940	0.47	930	700	470
96	820	0.61	710	530	360
108	730	0.78	560	420	280
120	650	0.95	460	340	230
144	550	1.39	320	240	160
168	470	1.89	230	170	120
192	410	2.46	180	130	90
216	360	3.07	140	110	70
240	330	3.86	110	90	60

* Bearing load may govern capacity.

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-150-EH 15%
PS-150-S 15%
PS-150-H 10%
PS-150-KO6 5%

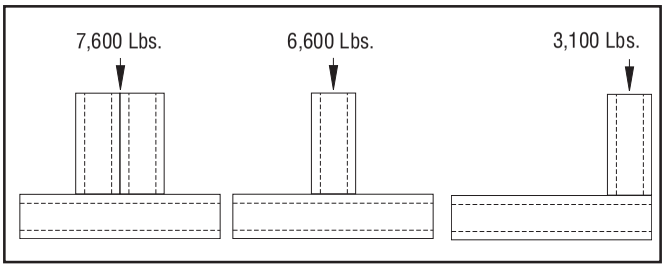
COLUMN LOADING – PS 150

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	4,640	13,840	12,570	10,840	9,190
36	3,970	11,050	9,190	7,030	5,370
48	3,180	8,420	6,390	4,620	3,630
60	2,550	6,250	4,620	3,450	2,780
72	2,120	4,790	3,630	2,780	2,260
84	1,810	3,890	3,010	2,330	1,910
96	1,580	3,290	2,580	2,020	1,650
108	1,400	2,860	2,260	1,770	1,440
120	1,270	2,530	2,020	1,580	**
144	1,060	2,070	1,650	**	**
168	920	1,750	1,380	**	**

** KL/r>200

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS150 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when ½" PS NS channel nuts are used.
Pull Out Strength – 2,000 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 150 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	5,220 *	0.01	5,220 *	5,220 *	5,220 *
36	5,220 *	0.04	5,220 *	5,220 *	5,220 *
48	4,820	0.08	4,820	4,820	4,820
60	3,860	0.13	3,860	3,860	3,860
72	3,220	0.19	3,220	3,220	3,220
84	2,760	0.26	2,760	2,760	2,500
96	2,410	0.34	2,410	2,410	1,920
108	2,140	0.42	2,140	2,140	1,510
120	1,930	0.52	1,930	1,840	1,230
144	1,610	0.76	1,610	1,280	850
168	1,380	1.03	1,250	940	630
192	1,210	1.35	960	720	480
216	1,070	1.70	760	570	380
240	960	2.09	610	460	310

*Load limited by spot weld shear.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 150 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	8,580	31,810	30,880	29,520	28,100
36	8,350	29,700	28,100	26,000	24,070
48	8,080	27,390	25,330	22,910	20,940
60	7,720	25,170	22,910	20,510	17,170
72	7,270	23,190	20,940	17,170	12,700
84	6,780	21,510	18,740	13,430	9,330
96	6,130	20,110	15,630	10,290	7,150
108	5,450	17,750	12,700	8,130	5,650
120	4,800	15,260	10,290	6,590	**
144	3,760	10,830	7,150	**	**
168	2,970	7,950	5,250	**	**

** KL/r>200

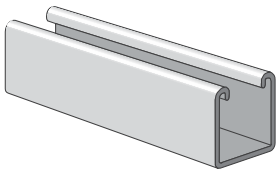
Column loads are for allowable axial loads and must be reduced for eccentric loading.

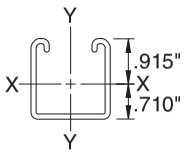
For Pierced Channels, reduce beam load values as follows:
PS-150 2T3-EH 15%

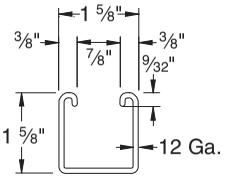
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

PS 200 – Steel Channel (1⅝" x 1⅝" x 12 ga.)



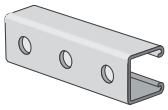


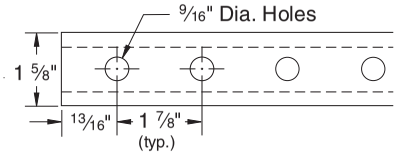


ELEMENTS OF SECTION – PS 200

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
189	0.555	0.185	0.202	0.577	0.236	0.290	0.651

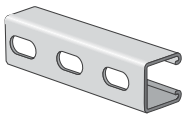
PS 200 H - Channel with Holes

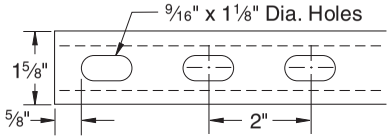




Weight: 186 lbs./100 ft.

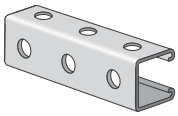
PS 200 EH – Channel with Elongated Holes

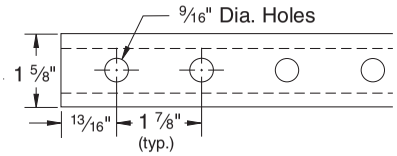




Weight: 185 lbs./100 ft.

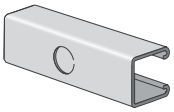
PS 200 H3 - Channel with Holes

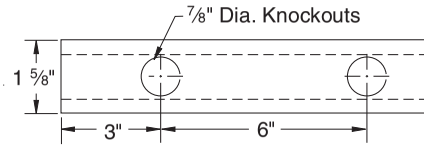




Weight: 175 lbs./100 ft.

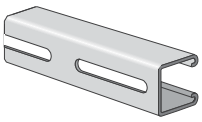
PS 200 K06 – Channel with Knockouts

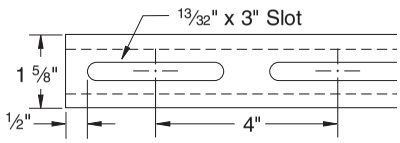




Weight: 189 lbs./100 ft.

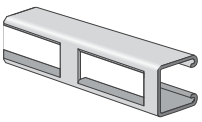
PS 200 S - Channel with Slots

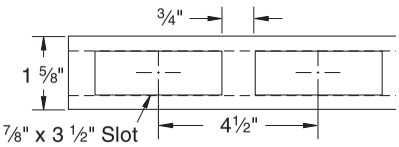




Weight: 185 lbs./100 ft.

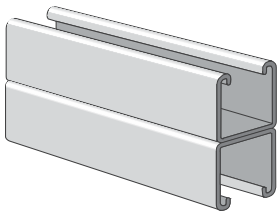
PS 200 SB – Channel with Slotted Back

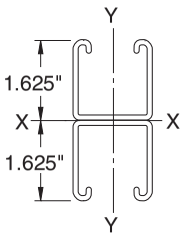


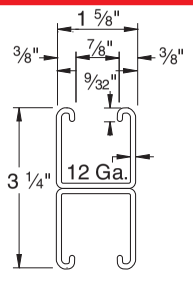


Weight: 173 lbs./100 ft.

PS 200 2T3 – Steel Channel (1⅝" x 3¼" x 12 ga.)







ELEMENTS OF SECTION – PS 200 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
378	1.111	0.928	0.571	0.914	0.471	0.580	0.651

PS 200 & PS 200 2T3 – Load Data

BEAM LOADING – PS 200

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1,690	0.06	1,690	1,690	1,690
36	1,130	0.13	1,130	1,130	900
48	850	0.22	850	760	500
60	680	0.35	650	480	320
72	560	0.50	450	340	220
84	480	0.68	330	250	160
96	420	0.89	250	190	130
108	380	1.14	200	150	100
120	340	1.40	160	120	80
144	280	2.00	110	80	60
168	240	2.72	80	60	40
192	210	3.55	60	50	NR
216	190	4.58	50	40	NR
240	170	5.62	40	NR	NR

* Bearing load may govern capacity.

NR - Not Recommended

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-200-EH 15% PS-200-S 15%
PS-200-H 10% PS-200-KO6 5%
PS-200-SB 30%

For Extruded Aluminum Channels, reduce beam load values 38%.

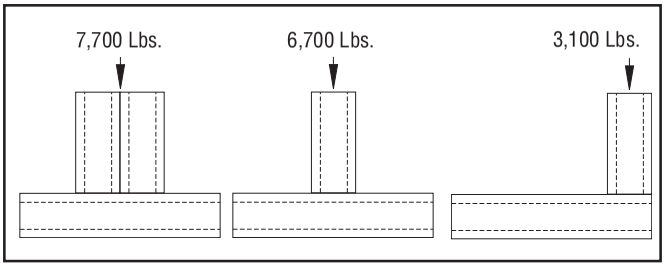
COLUMN LOADING – PS 200

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	3,550	10,740	9,890	8,770	7,740
36	3,190	8,910	7,740	6,390	5,310
48	2,770	7,260	6,010	4,690	3,800
60	2,380	5,910	4,690	3,630	2,960
72	2,080	4,840	3,800	2,960	2,400
84	1,860	4,040	3,200	2,480	1,980
96	1,670	3,480	2,750	2,110	1,660
108	1,510	3,050	2,400	1,810	**
120	1,380	2,700	2,110	**	**
144	1,150	2,180	1,660	**	**

** KL/r>200

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS200 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when ½" PS NS channel nuts are used.
Pull Out Strength – 2,000 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 200 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	3,500 *	0.02	3,500 *	3,500 *	3,500 *
36	3,190	0.07	3,190	3,190	3,190
48	2,390	0.13	2,390	2,390	2,390
60	1,910	0.20	1,910	1,910	1,620
72	1,600	0.28	1,600	1,600	1,130
84	1,370	0.39	1,370	1,240	830
96	1,200	0.51	1,200	950	630
108	1,060	0.64	1,000	750	500
120	960	0.79	810	610	410
144	800	1.14	560	420	280
168	680	1.53	410	310	210
192	600	2.02	320	240	160
216	530	2.54	250	190	130
240	480	3.16	200	150	100

*Load limited by spot weld shear.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 200 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	6,430	24,280	23,610	22,700	21,820
36	6,290	22,810	21,820	20,650	19,670
48	6,160	21,410	20,300	18,670	16,160
60	6,000	20,210	18,670	15,520	12,390
72	5,620	18,970	16,160	12,390	8,950
84	5,170	16,950	13,630	9,470	6,580
96	4,690	14,890	11,190	7,250	5,040
108	4,170	12,850	8,950	5,730	3,980
120	3,690	10,900	7,250	4,640	**
144	2,930	7,630	5,040	**	**

** KL/r>200

Column loads are for allowable axial loads and must be reduced for eccentric loading.

For Pierced Channels, reduce beam load values as follows:

PS 200 2T3 EH 15%

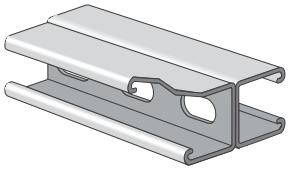
(See PS 200 2T3 EH on page28.)

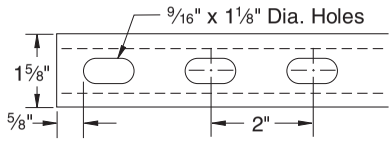
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

POWER-STRUT®

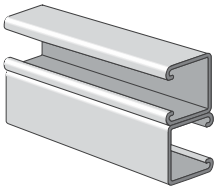
PS 200 2T3 EH – Channel with Elongated Holes

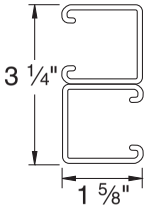


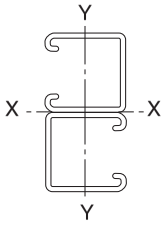


Weight: 370 lbs./100 ft.

PS 200 2T2 – Welded Steel Channel (1 5/8" x 3 1/4" x 12 ga.)

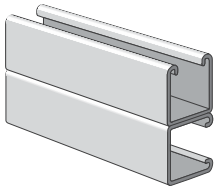


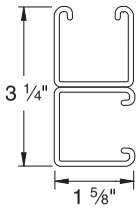


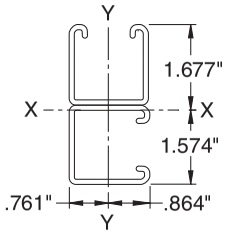


Weight: 378 lbs./100 ft.
Allowable Moment 18,640 In-Lbs

PS 200 2T4 – Welded Steel Channel (1 5/8" x 3 1/4" x 12 ga.)

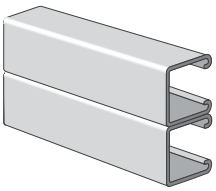


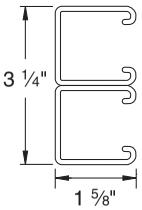


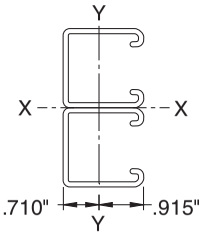


Weight: 378 lbs./100 ft.
Allowable Moment 15,950 In-Lbs

PS 200 2T5 – Welded Steel Channel (1 5/8" x 3 1/4" x 12 ga.)

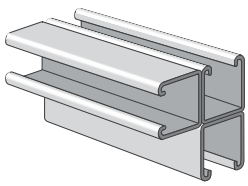


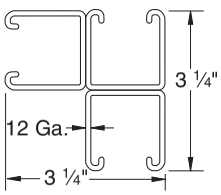


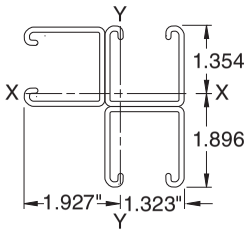


Weight: 378 lbs./100 ft.
Allowable Moment 18,640 In-Lbs

PS 200 3T6 – Welded Steel Channel (3 1/4" x 3 1/4" x 12 ga.)

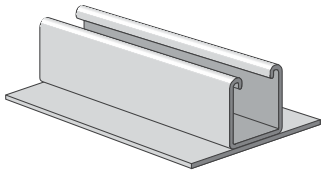


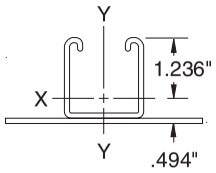


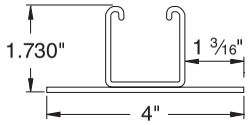


Weight: 566 lbs./100 ft.
Allowable Moment 18,680 In-Lbs

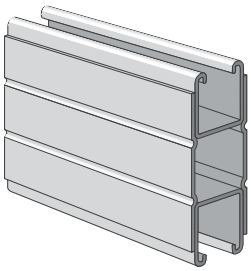
PS 200 PLA – Welded Steel Channel & Plate

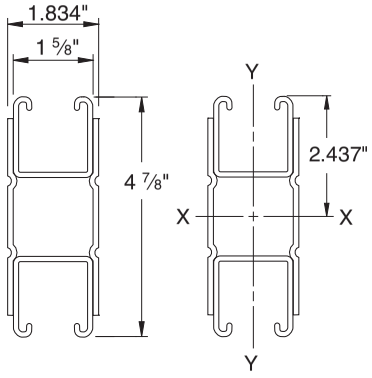






PS 200 PLC – Welded Steel Channel & Plate





ELEMENTS OF SECTION

Part No.	Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
			Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
PS 200 PLA	333	0.739	0.287	0.248	0.623	0.617	0.290	0.914
PS 200 PLC	668	1.965	4.068	1.669	1.439	1.092	1.190	0.745

PS 200 PLC – Load Data

BEAM LOADING – PS 200 PLC

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	9,100 *	0.01	9,100 *	9,100 *	9,100 *
36	9,100 *	0.05	9,100 *	9,100 *	9,100 *
48	7,000	0.08	7,000	7,000	7,000
60	5,600	0.13	5,600	5,600	5,600
72	4,660	0.19	4,660	4,660	4,660
84	4,000	0.26	4,000	4,000	3,630
96	3,500	0.34	3,500	3,500	2,780
108	3,110	0.43	3,110	3,110	2,200
120	2,800	0.52	2,800	2,670	1,780
144	2,330	0.75	2,330	1,850	1,230
168	2,000	1.03	1,810	1,360	910
192	1,750	1.34	1,390	1,040	690
216	1,550	1.69	1,100	820	550
240	1,400	2.10	890	670	440

*Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 200 PLC

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	11,420	36,800	33,890	30,440	27,600
36	10,600	30,840	27,600	24,400	22,160
48	9,860	26,400	23,560	21,060	19,470
60	9,160	23,370	21,060	19,160	18,020
72	8,610	21,310	19,470	18,020	17,140
84	8,170	19,890	18,410	17,260	15,240
96	7,790	18,890	17,670	16,760	11,670
108	7,460	18,160	17,140	13,280	9,220
120	7,150	17,590	16,760	10,750	7,470
144	5,660	16,840	11,670	7,470	**
168	4,520	12,990	8,570	**	**

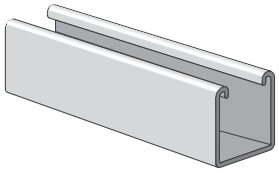
** $KL/r > 200$

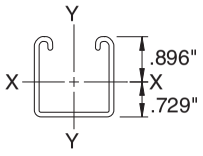
Column loads are for allowable axial loads and must be reduced for eccentric loading.

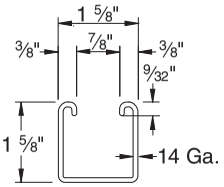
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

PS 210 – Steel Channel (1⅝" x 1⅝" x 14 ga.)



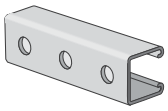


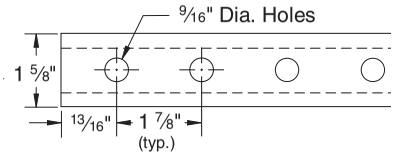


ELEMENTS OF SECTION – PS 210

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
142	0.418	0.145	0.162	0.589	0.176	0.217	0.650

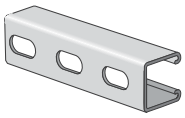
PS 210 H - Channel with Holes

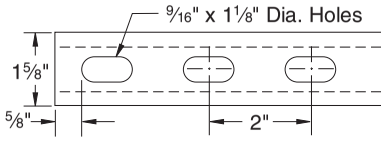




Weight: 137 lbs./100 ft.

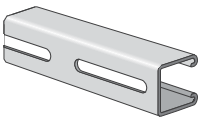
PS 210 EH – Channel with Elongated Holes

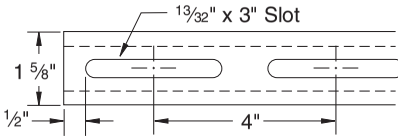




Weight: 137 lbs./100 ft.

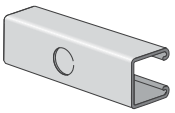
PS 210 S - Channel with Slots

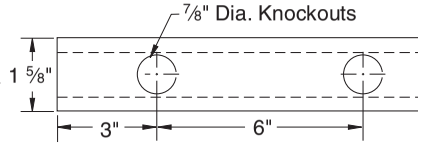




Weight: 137 lbs./100 ft.

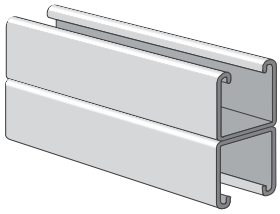
PS 210 K06 – Channel with Knockouts

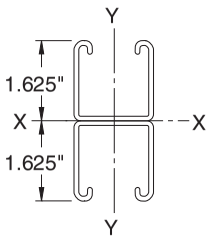


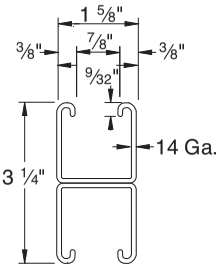


Weight: 141 lbs./100 ft.

PS 210 2T3 – Steel Channel (1⅝" x 3¼" x 14 ga.)







ELEMENTS OF SECTION – PS 210 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
284	0.835	0.733	0.451	0.937	0.353	0.434	0.650

PS 210 & PS 210 2T3 – Load Data

BEAM LOADING – PS 210

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1,350	0.06	1,350	1,350	1,350
36	900	0.13	900	900	700
48	680	0.23	680	590	400
60	540	0.36	510	380	250
72	450	0.51	350	260	180
84	390	0.70	260	190	130
96	340	0.92	200	150	100
108	300	1.15	160	120	80
120	270	1.42	130	90	60
144	230	2.09	90	70	40
168	190	2.75	60	50	30
192	170	3.67	50	40	NR
216	150	4.61	40	30	NR
240	140	5.90	30	NR	NR

* Bearing load may govern capacity.

NR - Not Recommended

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-210-EH 15%
PS-210-S 15%
PS-210-H 10%
PS-210-KO6 5%

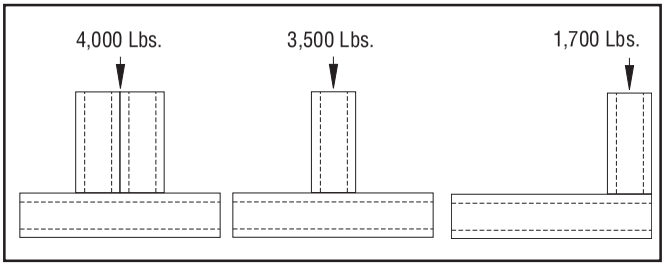
COLUMN LOADING – PS 210

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	2,800	8,040	7,330	6,360	5,430
36	2,410	6,480	5,430	4,190	3,210
48	1,940	4,990	3,830	2,760	2,160
60	1,550	3,740	2,760	2,050	1,640
72	1,290	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	1,180	950
108	840	1,690	1,320	1,030	**
120	760	1,490	1,180	**	**
144	630	1,210	950	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS210 – Crush Loads



Resistance to Slip – 1,000 lbs. per bolt when ½" PS NS channel nuts are used.
Pull Out Strength – 1,400 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 210 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	2,180 *	0.02	2,180 *	2,180 *	2,180 *
36	2,180 *	0.06	2,180 *	2,180 *	2,180 *
48	1,890	0.13	1,890	1,890	1,890
60	1,510	0.20	1,510	1,510	1,280
72	1,260	0.28	1,260	1,260	890
84	1,080	0.39	1,080	980	650
96	950	0.51	950	750	500
108	840	0.64	790	590	400
120	760	0.79	640	480	320
144	630	1.13	440	330	220
168	540	1.54	330	250	160
192	470	2.00	250	190	130
216	420	2.55	200	150	100
240	380	3.16	160	120	80

*Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 210 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	5,010	18,250	17,700	16,880	16,030
36	4,860	16,990	16,030	14,770	13,620
48	4,700	15,610	14,380	12,930	11,750
60	4,480	14,280	12,930	11,490	9,290
72	4,210	13,100	11,750	9,290	6,700
84	3,880	12,090	10,220	7,090	4,930
96	3,480	11,170	8,390	5,430	3,770
108	3,060	9,640	6,700	4,290	2,980
120	2,680	8,170	5,430	3,480	**
144	2,090	5,710	3,770	**	**

** $KL/r > 200$

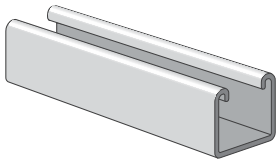
Column loads are for allowable axial loads and must be reduced for eccentric loading.

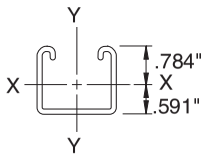
CHANNEL

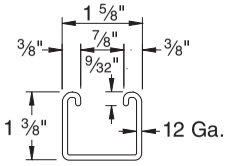
Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

POWER-STRUT®

PS 300 – Steel Channel (1⅝" x 1⅜" x 12 ga.)



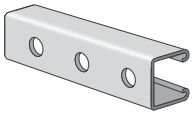


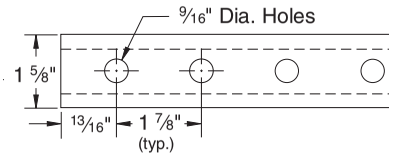


ELEMENTS OF SECTION – PS 300

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
170	0.500	0.120	0.153	0.489	0.203	0.250	0.638

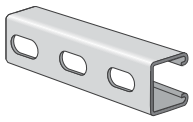
PS 300 H - Channel with Holes

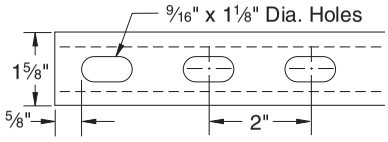




Weight: 165 lbs./100 ft.

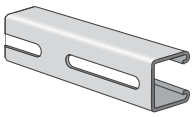
PS 300 EH – Channel with Elongated Holes

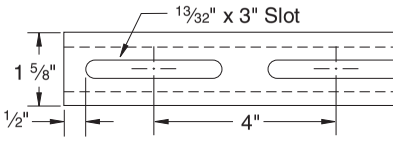




Weight: 165 lbs./100 ft.

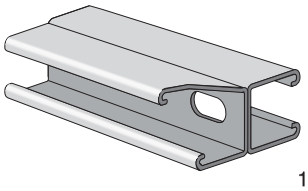
PS 300 S - Channel with Slots

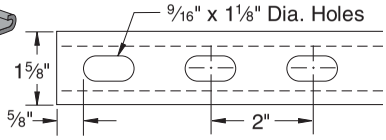




Weight: 165 lbs./100 ft.

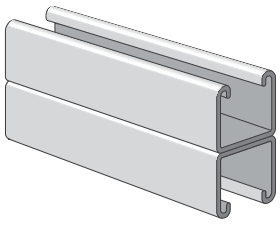
PS 300 2T3 EH – Channel with Elongated Holes

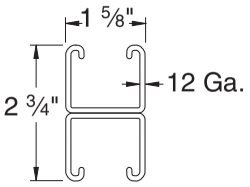


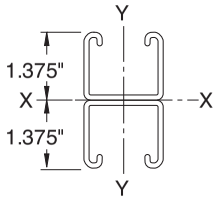


Weight: 340 lbs./100 ft.

PS 300 2T3 – Steel Channel (1⅝" x 2¾" x 12 ga.)







ELEMENTS OF SECTION – PS 300 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
340	1.000	0.591	0.430	0.769	0.407	0.501	0.638

PS 300 & PS 300 2T3 – Load Data

BEAM LOADING – PS 300

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1,280	0.07	1,280	1,280	1,280
36	850	0.15	850	850	580
48	640	0.26	640	490	330
60	510	0.41	420	310	210
72	430	0.59	290	220	150
84	370	0.81	210	160	110
96	320	1.05	160	120	80
108	280	1.30	130	100	60
120	260	1.66	100	80	50
144	210	2.32	70	50	40
168	180	3.15	50	40	30
192	160	4.18	40	30	NR
216	140	5.21	NR	NR	NR
240	130	6.64	NR	NR	NR

* Bearing load may govern capacity.

NR - Not Recommended

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-300-EH 15%
PS-300-S 15%
PS-300-H 10%

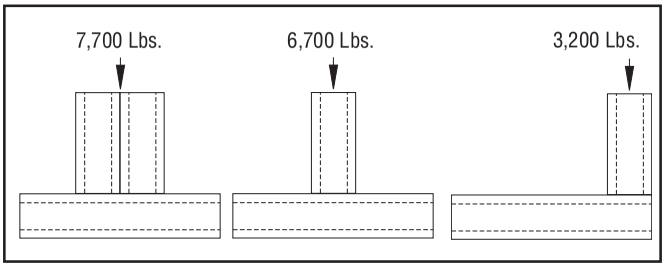
COLUMN LOADING – PS 300

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	3,180	9,690	8,980	8,050	7,210
36	2,920	8,160	7,210	6,130	5,240
48	2,590	6,820	5,810	4,730	3,860
60	2,300	5,740	4,730	3,690	2,990
72	2,040	4,850	3,860	2,990	2,270
84	1,830	4,100	3,240	2,400	**
96	1,650	3,530	2,770	1,840	**
108	1,450	3,080	2,270	**	**
120	1,250	2,710	1,840	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS300 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when ½" PS NS channel nuts are used.
Pull Out Strength – 2,000 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 300 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	2,960 *	0.03	2,960 *	2,960 *	2,960 *
36	2,400	0.08	2,400	2,400	2,400
48	1,800	0.15	1,800	1,800	1,610
60	1,440	0.23	1,440	1,440	1,030
72	1,200	0.33	1,200	1,080	720
84	1,030	0.46	1,030	790	530
96	900	0.59	810	610	400
108	800	0.75	640	480	320
120	720	0.93	520	390	260
144	600	1.34	360	270	180
168	510	1.81	260	200	130
192	450	2.38	200	150	100
216	400	3.01	160	120	80
240	360	3.72	130	100	NR

*Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 300 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	5,740	21,780	21,200	20,430	19,720
36	5,620	20,520	19,720	18,830	17,680
48	5,520	19,400	18,570	16,570	14,260
60	5,330	18,510	16,570	13,670	10,810
72	5,030	16,850	14,260	10,810	7,730
84	4,630	14,990	11,930	8,180	5,680
96	4,190	13,090	9,720	6,260	4,350
108	3,720	11,230	7,730	4,950	**
120	3,300	9,460	6,260	4,010	**
144	2,620	6,590	4,350	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

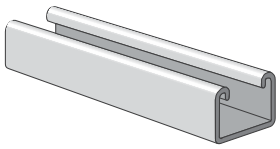
For Pierced Channels, reduce beam load values as follows:

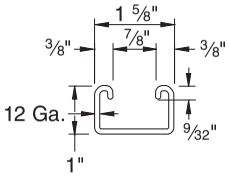
PS-300 2T3 EH 15%

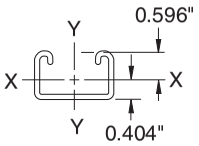
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

PS 400 – Steel Channel (1⅝" x 1" x 12 ga.)



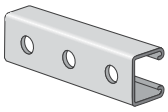


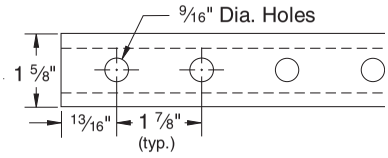


ELEMENTS OF SECTION – PS 400

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
144	0.424	0.053	0.092	0.354	0.161	0.198	0.616

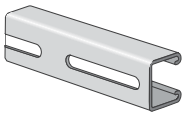
PS 400 H - Channel with Holes

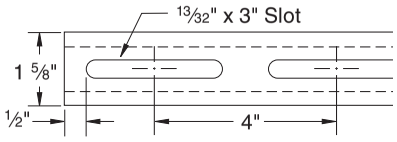




Weight: 136 lbs./100 ft.

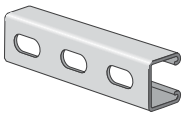
PS 400 S - Channel with Slots

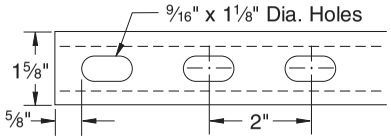




Weight: 136 lbs./100 ft.

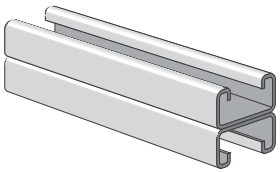
PS 400 EH – Channel with Elongated Holes

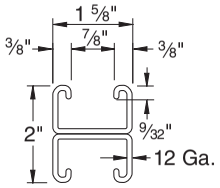


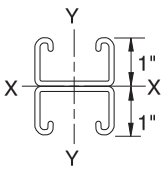


Weight: 136 lbs./100 ft.

PS 400 2T3 – Steel Channel (1⅝" x 2" x 12 ga.)







ELEMENTS OF SECTION – PS 400 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
288	0.849	0.255	0.255	0.548	0.322	0.396	0.616

PS 400 & PS 400 2T3 – Load Data

BEAM LOADING – PS 400

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	770	0.09	770	770	580
36	510	0.20	510	390	260
48	380	0.35	290	220	150
60	310	0.56	190	140	90
72	260	0.80	130	100	60
84	220	1.08	90	70	50
96	190	1.39	70	50	40
108	170	1.78	60	40	30
120	150	2.15	50	30	20
144	130	3.22	30	20	20
168	110	4.32	NR	NR	NR
192	100	5.87	NR	NR	NR
216	90	7.52	NR	NR	NR

* Bearing load may govern capacity.

NR - Not Recommended

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-400-EH 15%
PS-400-S 15%
PS-400-H 10%

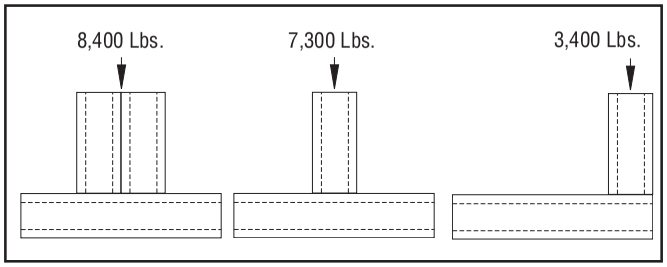
COLUMN LOADING – PS 400

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	2,620	8,280	7,760	7,140	6,580
36	2,470	7,210	6,580	5,310	4,030
48	2,180	6,200	4,870	3,280	2,280
60	1,770	4,760	3,280	2,100	**
72	1,420	3,450	2,280	**	**
84	1,150	2,530	1,670	**	**
96	**	1,940	**	**	**

** KL/r>200

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS400 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when ½" PS NS channel nuts are used.
Pull Out Strength – 2,000 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 400 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	2,140 *	0.05	2,140 *	2,140 *	2,140 *
36	1,420	0.11	1,420	1,420	1,240
48	1,070	0.20	1,070	1,040	700
60	850	0.32	850	670	450
72	710	0.46	620	460	310
84	610	0.63	450	340	230
96	530	0.81	350	260	170
108	470	1.03	280	210	140
120	430	1.29	220	170	110
144	360	1.86	150	120	80
168	310	2.54	110	90	60
192	270	3.31	90	70	NR
216	240	4.19	70	NR	NR
240	210	5.03	60	NR	NR

*Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 400 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	4,720	18,310	17,840	17,300	16,760
36	4,640	17,360	16,760	15,260	13,610
48	4,470	16,280	14,720	12,460	10,170
60	4,230	14,590	12,460	9,610	6,980
72	3,930	12,750	10,170	6,980	4,840
84	3,520	10,880	7,990	5,130	3,560
96	3,070	9,050	6,130	3,920	**
108	2,690	7,340	4,840	3,100	**
120	2,360	5,940	3,920	**	**

** KL/r>200

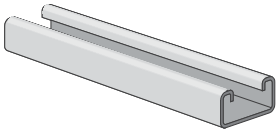
Column loads are for allowable axial loads and must be reduced for eccentric loading.

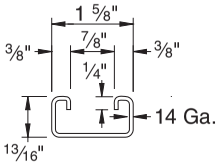
CHANNEL

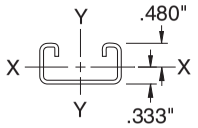
Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

POWER-STRUT®

PS 500 – Steel Channel (1⅝" x 13/16" x 14 ga.)



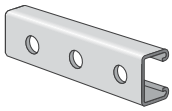


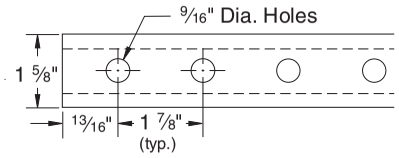


ELEMENTS OF SECTION – PS 500

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
98	0.290	0.026	0.054	0.298	0.107	0.132	0.609

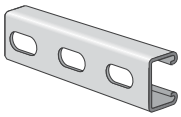
PS 500 H - Channel with Holes

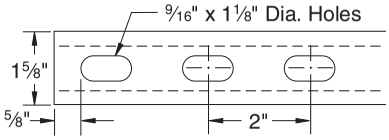




Weight: 87 lbs./100 ft.

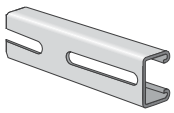
PS 500 EH – Channel with Elongated Holes

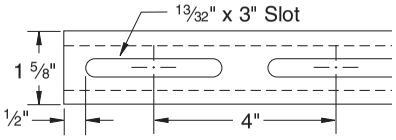




Weight: 87 lbs./100 ft.

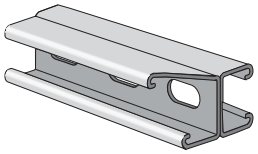
PS 500 S - Channel with Slots

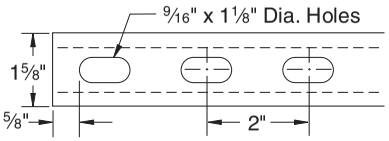




Weight: 87 lbs./100 ft.

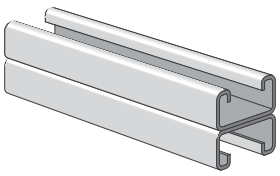
PS 500 2T3 EH – Channel with Elongated Holes

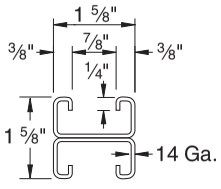


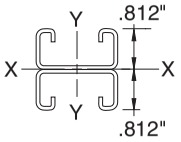


Weight: 174 lbs./100 ft.

PS 500 2T3 – Steel Channel (1⅝" x 1⅝" x 14 ga.)







ELEMENTS OF SECTION – PS 500 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
197	0.579	0.117	0.143	0.449	0.214	0.264	0.608

PS 500 & PS 500 2T3 – Load Data

BEAM LOADING – PS 500

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	450	0.11	450	420	280
36	300	0.24	250	190	130
48	230	0.44	140	110	70
60	180	0.67	90	70	50
72	150	0.96	60	50	30
84	130	1.32	50	30	20
96	110	1.67	40	30	20
108	100	2.16	30	20	10
120	90	2.67	20	20	10

* Bearing load may govern capacity.

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-500-EH 15%
PS-500-S 15%
PS-500-H 10%

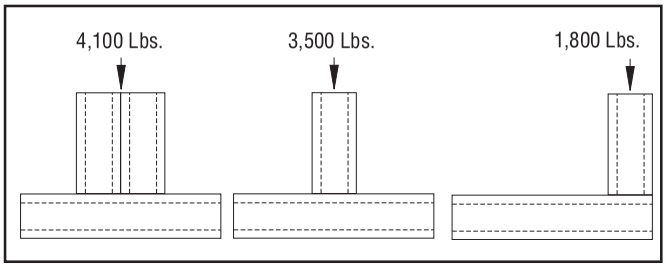
COLUMN LOADING – PS 500

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	1,840	5,610	5,210	4,570	3,850
36	1,640	4,660	3,850	2,800	1,960
48	1,310	3,490	2,480	1,590	1,100
60	1,000	2,400	1,590	**	**
72	770	1,670	1,100	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS500 – Crush Loads



Resistance to Slip – 1,000 lbs. per bolt when ½" PS NS channel nuts are used.

Pull Out Strength – 1,400 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 500 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1,090 *	0.06	1,090 *	1,090 *	1,090 *
36	800	0.14	800	800	570
48	600	0.25	600	480	320
60	480	0.39	410	310	200
72	400	0.57	280	210	140
84	340	0.76	210	160	100
96	300	1.00	160	120	80
108	270	1.29	130	90	60
120	240	1.57	100	80	50

*Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 500 2T3

Unbraced Height	Max Allowable Load at Slot Face	Max. Column Load Applied at C.G.			
		K = 0.65	K = 0.80	K =1.0	K = 1.2
24	3,240	12,370	11,950	11,370	10,540
36	3,120	11,470	10,540	9,160	7,720
48	2,940	10,090	8,680	6,770	4,980
60	2,680	8,560	6,770	4,590	3,190
72	2,310	7,010	4,980	3,190	2,220
84	1,950	5,530	3,660	2,340	**
96	1,650	4,250	2,800	**	**
108	1,410	3,360	2,220	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

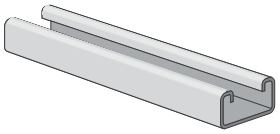
For Pierced Channels, reduce beam load values as follows:

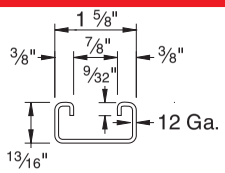
PS-500 2T3 EH 15%

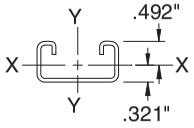
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

PS 520 – Steel Channel (1⅝" x 13/16" x 12 ga.)



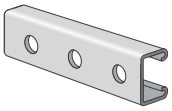


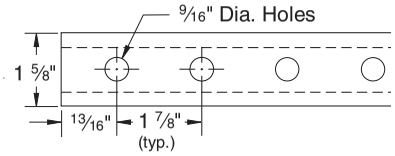


ELEMENTS OF SECTION – PS 520

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
131	0.384	0.031	0.064	0.283	0.138	0.170	0.599

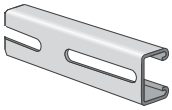
PS 520 H - Channel with Holes

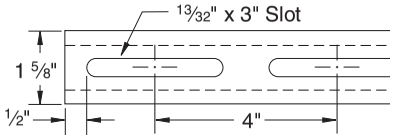




Weight: 120 lbs./100 ft.

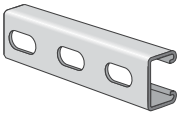
PS 520 S - Channel with Slots

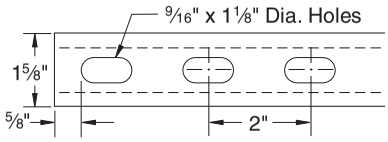




Weight: 118 lbs./100 ft.

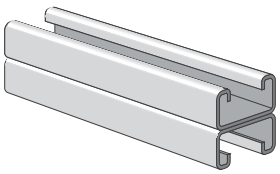
PS 520 EH – Channel with Elongated Holes

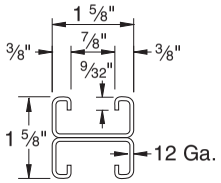


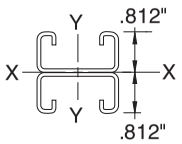


Weight: 120 lbs./100 ft.

PS 520 2T3 – Steel Channel (1⅝" x 1⅝" x 12 ga.)







ELEMENTS OF SECTION – PS 520 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
262	0.770	0.146	0.180	0.436	0.277	0.340	0.599

PS 520 – Steel Channel (1⅝" x 13/16" x 12 ga.)

BEAM LOADING – PS 520

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	540	0.11	540	510	340
36	360	0.24	300	220	150
48	270	0.43	170	130	80
60	220	0.68	110	80	50
72	180	0.96	70	60	40
84	150	1.27	60	40	30
96	130	1.65	40	30	20
108	120	2.16	30	20	20
120	110	2.72	30	20	NR
144	90	3.84	20	NR	NR
168	80	5.43	NR	NR	NR
192	70	7.09	NR	NR	NR

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-520-EH 15%
PS-520-H 10%
PS-520-S 15%

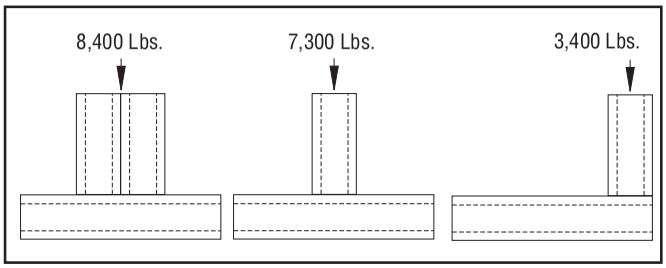
COLUMN LOADING – PS 520

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	2,250	7,480	6,800	5,820	4,810
36	1,980	5,950	4,810	3,380	2,350
48	1,580	4,310	2,970	1,900	**
60	1,210	2,880	1,900	**	**
72	**	2,000	**	**	**

** KL/r>200

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS520 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when ½" PS NS channel nuts are used.

Pull Out Strength – 1,500 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 520 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1,510	0.06	1,510	1,510	1,510
36	1,010	0.14	1,010	1,010	710
48	760	0.25	760	600	400
60	610	0.40	510	380	260
72	500	0.56	360	270	180
84	430	0.77	260	200	130
96	380	1.01	200	150	100
108	340	1.29	160	120	80
120	300	1.56	130	100	60
144	250	2.25	90	70	40
168	220	3.14	70	50	NR
192	190	4.05	50	NR	NR
216	170	5.16	NR	NR	NR
240	150	6.24	NR	NR	NR

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.
For Pierced Channels, reduce beam load values as follows:

COLUMN LOADING – PS 520 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	4,140	16,490	15,980	14,970	13,810
36	3,980	15,100	13,810	11,910	9,940
48	3,730	13,190	11,260	8,650	6,270
60	3,390	11,090	8,650	5,780	4,010
72	2,950	8,970	6,270	4,010	2,790
84	2,510	6,980	4,610	2,950	**
96	2,130	5,340	3,530	**	**
108	1,820	4,220	2,790	**	**
120	**	3,420	**	**	**

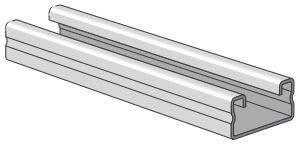
** KL/r>200

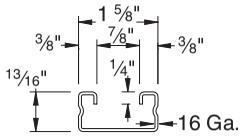
Column loads are for allowable axial loads and must be reduced for eccentric loading.

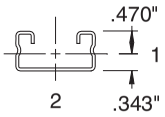
CHANNEL

Finish: Plain, Painted Green, or Pregalvanized **Order By:** No., Length and Finish

PS 560 – Steel Channel (1⅝" x 13/16" x 16 ga.)



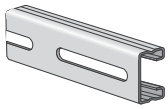


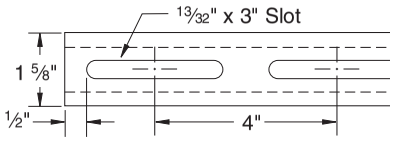


ELEMENTS OF SECTION – PS 560

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
83	0.244	0.023	0.049	0.306	0.092	0.113	0.613

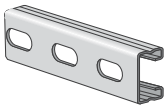
PS 560 S - Channel with Slots

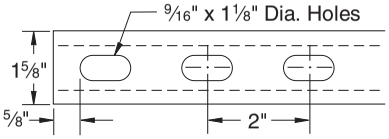




Weight: 79 lbs./100 ft.

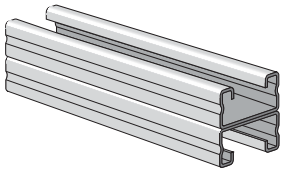
PS 560 EH – Channel with Elongated Holes

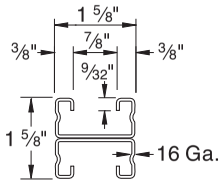


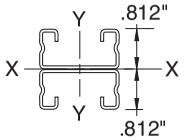


Weight: 79 lbs./100 ft.

PS 560 2T3 – Steel Channel (1⅝" x 1⅝" x 16 ga.)







ELEMENTS OF SECTION – PS 560 2T3

Weight (lbs./100 ft.)	Area of Section (Inch²)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)	Moment of Inertia (Inch⁴)	Section Modulus (Inch³)	Radius of Gyration (Inch)
166	0.478	0.104	0.128	0.462	0.183	0.225	0.613

PS 560 – Steel Channel (1⅝" x 13/16" x 16 ga.)

BEAM LOADING – PS 560

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	410	0.11	410	370	250
36	270	0.24	220	170	110
48	200	0.43	120	90	60
60	160	0.67	80	60	40
72	140	1.01	60	40	30
84	120	1.38	40	30	20
96	100	1.72	30	20	20
108	90	2.20	20	20	10
120	80	2.68	20	10	10

* Bearing load may govern capacity.

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-520-EH 15%
PS-520-S 15%

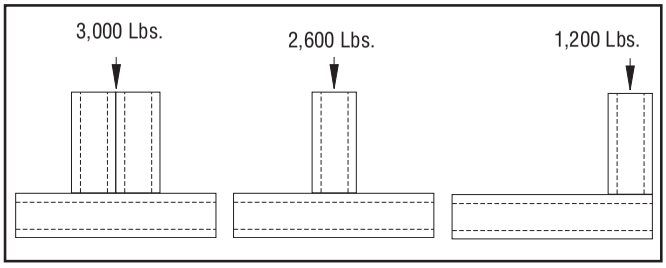
COLUMN LOADING – PS 560

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	1,630	4,670	4,290	3,780	3,310
36	1,450	3,840	3,310	2,460	1,730
48	1,160	3,030	2,190	1,400	970
60	870	2,120	1,400	900	**
72	670	1,470	970	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS560 – Crush Loads



Resistance to Slip – 1,000 lbs. per bolt when ½" PS NS channel nuts are used.

Pull Out Strength – 1,000 lbs. per bolt when ½" PS NS channel nuts are used.

BEAM LOADING – PS 560 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	810 *	0.05	810 *	810 *	810 *
36	710	0.14	710	710	500
48	540	0.25	540	430	280
60	430	0.40	360	270	180
72	360	0.57	250	190	130
84	310	0.78	190	140	90
96	270	1.02	140	110	70
108	240	1.29	110	80	60
120	210	1.54	90	70	50
144	180	2.29	60	50	30

*Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

COLUMN LOADING – PS 560 2T3

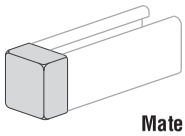
Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
24	2,830	10,390	10,000	9,470	8,960
36	2,740	9,530	8,960	7,870	6,700
48	2,590	8,620	7,480	5,910	4,440
60	2,340	7,380	5,910	4,090	2,840
72	2,020	6,110	4,440	2,840	1,970
84	1,700	4,880	3,260	2,090	**
96	1,440	3,780	2,500	**	**
108	1,230	2,990	1,970	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

PS 6153 - Strut Safety End Cap

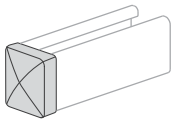
(For OSHA Req'd End of Hand Rail)



Material: Red Colored PVC

Part No.	Use With	Wt./100 pcs.
PS-6153-1	PS-100, PS200 2T3	5.0
PS-6153-2	PS-200,PS-210	2.8
PS-6153-3	PS-300	2.5
PS-6153-5	PS-500, PS-520, PS560	2.0

PS 6152 – Decorative End Cap



Finish: Electro-galvanized
Use With: PS-200, PS-210

Weight: 10 lbs./100 pcs.

PS 9050 – Green Touch-up Spray Paint

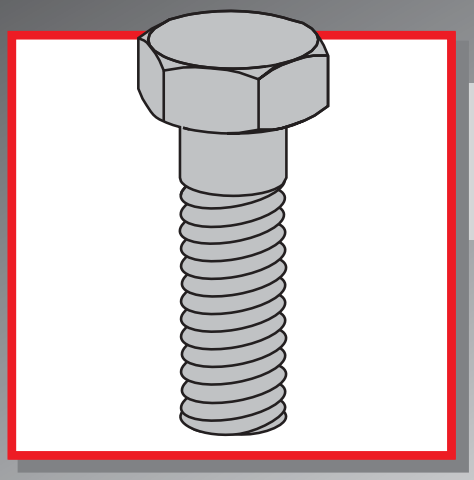
Aerosol can may be subject to shipping restrictions

Weight: 253 lbs./100 boxes

Lateral Bracing Load Reduction Charts

Lateral Bracing Factors										
Span		Single Channel								
Ft.	In	PS 100	PS 150	PS 200	PS 210	PS 300	PS 400	PS 500	PS 520	PS 560
2	24	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	36	0.85	0.89	0.94	0.89	0.96	1.00	0.98	1.00	0.94
4	48	0.70	0.77	0.88	0.78	0.91	0.98	0.94	1.00	0.88
5	60	0.55	0.67	0.82	0.68	0.88	0.96	0.91	1.00	0.83
6	72	0.44	0.58	0.78	0.59	0.84	0.94	0.89	0.98	0.79
7	84	0.38	0.51	0.75	0.52	0.82	0.92	0.86	0.97	0.75
8	96	0.33	0.46	0.71	0.47	0.79	0.91	0.84	0.96	0.72
9	108	0.30	0.42	0.69	0.43	0.77	0.89	0.82	0.95	0.69
10	120	0.28	0.40	0.66	0.40	0.75	0.87	0.80	0.93	0.66
12	144	0.24	0.36	0.61	0.36	0.70	0.84	0.76	0.91	0.60
14	168	0.22	0.32	0.55	0.32	0.66	0.81	0.73	0.89	0.55
16	192	0.21	0.30	0.51	0.30	0.62	0.78	0.69	0.86	0.50
18	216	0.19	0.28	0.47	0.28	0.58	0.75	0.65	0.84	0.47
20	240	0.18	0.26	0.44	0.26	0.54	0.72	0.61	0.81	0.43

Lateral Bracing Factors										
Span		Double Channel								
Ft.	In	PS 100 2T3	PS 150 2T3	PS 200 2T3	PS 210 2T3	PS 300 2T3	PS 400 2T3	PS 500 2T3	PS 520 2T3	PS 560 2T3
2	24	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	48	0.97	0.98	1.00	0.98	1.00	1.00	1.00	1.00	0.98
5	60	0.90	0.93	0.97	0.93	0.98	1.00	0.96	1.00	0.93
6	72	0.83	0.87	0.93	0.87	0.95	0.97	0.92	0.97	0.88
7	84	0.76	0.81	0.89	0.82	0.92	0.95	0.89	0.95	0.83
8	96	0.68	0.76	0.85	0.76	0.88	0.92	0.85	0.92	0.79
9	108	0.61	0.70	0.81	0.70	0.85	0.90	0.81	0.90	0.74
10	120	0.54	0.64	0.78	0.65	0.82	0.87	0.78	0.87	0.69
12	144	0.43	0.53	0.70	0.54	0.76	0.82	0.71	0.83	0.60
14	168	0.35	0.45	0.63	0.45	0.70	0.77	0.64	0.78	0.51
16	192	0.30	0.39	0.56	0.39	0.64	0.72	0.57	0.73	0.44
18	216	0.27	0.34	0.49	0.34	0.58	0.67	0.50	0.68	0.39
20	240	0.24	0.30	0.44	0.31	0.52	0.62	0.45	0.63	0.35



FASTENERS

Power-Strut Clamping Nuts are cold formed, with two grooves, each with six sharp teeth and then case hardened. These sharp hardened teeth bite into the inturned edges of the Power-Strut channel forming a strong vise-like connection giving greater strength and resistance to slippage.

MATERIAL:

Channel clamping nuts meet ASTM A576 GR1015M, and are case hardened. Hex head bolts meet SAE J429 GR 2. Square and hex nuts meet ASTM A563 GR A.

SCREW THREADS DATA:

All Power-Strut nuts and bolts are manufactured to meet the Unified Screw Threads standard, ANSI B1.1, Coarse Series UNC, class 2. Continuous Threaded Rod: Meets ASTM A-510.

STANDARD FINISH:

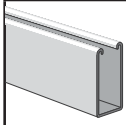
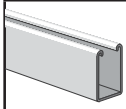
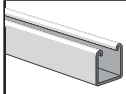
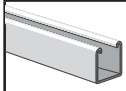
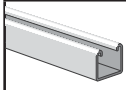
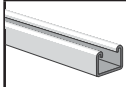
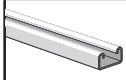
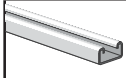
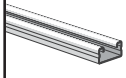
All fasteners have an electro-galvanized finish.

RECOMMENDED BOLT TORQUE:

Bolt Size	1/4"–20	5/16"–18	3/8"–16	1/2"–13	5/8"–11	3/4"–10
Rec. Torque Ft/Lbs	6	11	19	50	100	125
Max. Torque Ft/Lbs	7	15	25	70	125	135

POWER-STRUT®

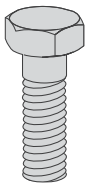
Channel Nut Selection Chart

Nuts / Channel	PS LS	PS SS	PS RS	PS NS	PS NS S	PS 517	PS TG	PS 3281	PS 3500	PS ML	PS KW
 PS 100 1⅝ x 3¼ x 12 ga.	✓			✓			✓	✓		✓	✓
 PS 150 1⅝ x 2⁷⁄₁₆ x 12 ga.	✓			✓			✓	✓		✓	✓
 PS 200 1⅝ x 1⅝ x 12 ga.			✓	✓		✓	✓	✓	✓	✓	✓
 PS 210 1⅝ x 1⅝ x 14 ga.			✓	✓		✓	✓	✓	✓	✓	✓
 PS 300 1⅝ x 1⅜ x 12 ga.			✓	✓		✓	✓	✓	✓	✓	✓
 PS 400 1⅝ x 1 x 12 ga.		✓		✓	✓		✓	✓		✓	✓
 PS 500 1⅝ x ¹³⁄₁₆ x 14 ga.		✓		✓*	✓		✓	✓		✓	✓
 PS 520 1⅝ x ¹³⁄₁₆ x 12 ga.		✓		✓*	✓		✓	✓		✓	✓
 PS 560 1⅝ x ¹³⁄₁₆ x 16 ga.		✓		✓*	✓		✓	✓		✓	✓

✓ Indicates Nuts To Be Used With The Channel

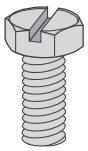
* ⅜" or smaller

PS 6024 – Hex Head Cap Screw



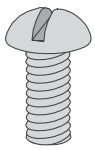
Size	Wt./100 pcs
¼ x ¾"	1.5
¼ x 1"	1.8
¼ x 1¼"	2.1
¼ x 1½"	2.4
⅜ x ¾"	3.6
⅜ x 1"	4.2
⅜ x 1¼"	4.9
⅜ x 1½"	5.6
⅜ x 2"	7.2
½ x ¾"	8.1
½ x 1"	9.2
½ x 1¼"	10.4
½ x 1½"	11.6
½ x 1¾"	13.0
½ x 2"	14.4

PS 6075 – Slotted Hex Head Machine Screw



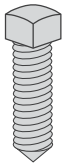
Size	Wt./100 pcs
¼ x ¾"	1.7
5⁄16 x 1"	2.6
5⁄16 x 1¼"	3.0
5⁄16 x 1½"	3.4
⅜ x 1¼"	5.3

PS 6072 – Round Head Machine Screw



Size	Wt./100 pcs
¼ x ¾"	1.3
¼ x 1"	1.6
¼ x 1¼"	1.9
⅜ x 1"	4.4
⅜ x 1¼"	5.0
⅜ x 1½"	5.6

PS 6064 – Square Head Cone Point Set Screw



Size	Wt./100 pcs
⅜ x 1½"	4.5
⅜ x 2"	6.1
½ x 1½"	8.5
½ x 2"	11.4

Hanger rod stiffener assembly for ⅜" thru ⅝" threaded rod.

PS 83 – Hexagon Nut

Size	Wt./100 pcs
¼"	0.7
⅜"	1.6
½"	3.8
⅝"	7.3
¾"	11.9

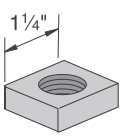
PS 6108 – Square Nut

Size	Wt./100 pcs
¼"	.9
5⁄16"	1.6
⅜"	2.6
½"	5.8

PS 209 – Flat Washer

Size Pcs.	Outside Diameter	Wt./100 pcs
¼"	¾"	0.7
⅜	1"	1.5
½"	1⅜"	3.9
⅝"	1¾"	7.7
¾"	2"	11

PS 6112 - Oversize Square Nut



Size	Wt./100 pcs
¼"-20	13
⅜"-16	14
½"-13	14
⅝"-11	12
¾"-16	11
⅞"-11	10

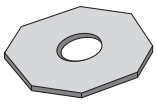
PS 230 – Fender Washer

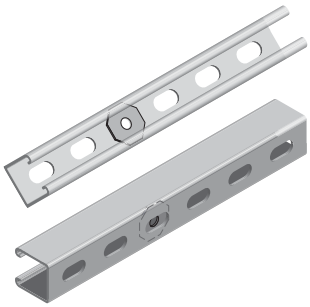
Size	Wt./100 pcs
¼"	3.3
⅜"	3.0
½"	2.8

PS 211 – Lock Washer

Size	Wt./ 100 pcs
¼"	0.3
⅜"	0.7
½"	1.5

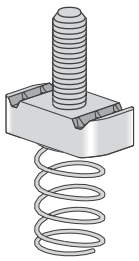
PS 231 – Slot Adapter





Size	Wt./100 pcs
¼"	1.0
⅜"	1.5

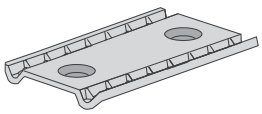
PS 517 – Channel Nut with Stud



Use With: PS 200, PS 210 and PS 300 channel.

Size	Wt./100 pcs
¼" x 1"	8.1
¼" x 1¼"	8.3
¼" x 1½"	8.6
¼" x 2"	9.1
⅜" x 1"	13.0
⅜" x 1¼"	14.0
⅜" x 1½"	14.0
⅜" x 2"	15.0
½" x 1"	15.0
½" x 1¼"	16.0
½" x 1½"	17.0
½" x 2"	19.0

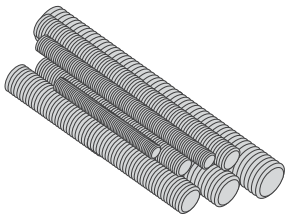
PS 3281 – Double Conveyor Adjusting Nut



Size	Threads	Wt./100 pcs
⅜"	16	17.5

Use With: All 1⅝" channel.

PS 146 – Continuous Thread Rod



Finish: Plain or Electro-galvanized

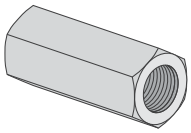
Standard Length: 6' or 10'; Other lengths available

Low Carbon Steel
Fy = 32,000 psi minimum
Ft = 52,000 psi minimum

Rod Size	Wt./100 pcs.		
	6' Lengths	10' Lengths	12' Lengths
¼"	73	121	146
⅜"	175	292	350
½"	319	531	638
⅝"	504	840	1,008
¾"	740	1,234	1,480

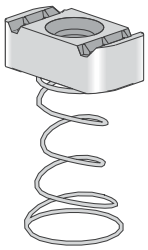
Load Information: See the technical data section, page 158

PS 135 – Rod Coupling



Rod Size	Max Load lbs.	Wt./ 100 pcs.
¼"	240	2
⅜"	610	9
½"	1,130	10
⅝"	1,810	18
¾"	2,710	28

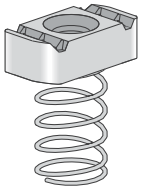
PS LS – Clamping Nut with Long Spring



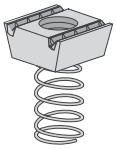
Size	Threads	Wt./100 pcs
¼"	20	7.5
⅜"	16	10.2
½"	13	12.3
⅝"	11	15.8
¾"	10	14.1

Use With: PS 100 and PS 150 Channel.

PS RS – Clamping Nut with Long Spring



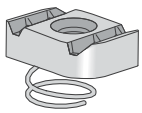
Size	Threads	Wt./100 pcs
#8-32	32	7.0
#10-24	24	7.2
#10-32	32	7.2
¼"	20	7.1
5⁄16"	18	7.0
⅜"	16	9.9
½"	13	11.9



Size	Threads	Wt./100 pcs
⅝"	11	15.5
¾"	10	13.8
⅞"	9	14.3

Use With: PS 200, PS 210 and PS 300 Channel.

PS SS – Clamping Nut with Short Spring

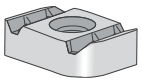


Size	Threads	Wt./100 pcs
#8-32	32	7.0
#10-24	24	7.0
#10-32	32	7.0
¼"	20	6.9
5⁄16"	18	6.7
⅜"	16	9.6
½"	13*	8.8
⅝"	11*	11.5
¾"	10*	10.0

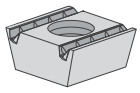
Use With: PS 400, PS 500, PS 520, and PS 560 channel.

*PS SS ½" and PS SS ⅝" nuts have ⅜" body thickness.

PS NS – Clamping Nut without Spring



Size	Threads	Wt./100 pcs
#8-32	32*	8.0
#10-32		6.6
#10-24	24*	6.7
¼"	20*	6.6
5⁄16"	18*	6.4
⅜"	16*	9.3
½"	13	11.4



Size	Threads	Wt./100 pcs
⅝"	11	15.2
¾"	10	13.0
⅞"	9	14.0

Use With: PS 100, PS 150, PS 200, PS 210 and PS 300 channel.

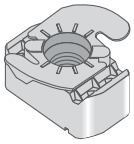
*Can be used with PS 400, PS 500, PS 520 and PS 560 channel.

PS NS S – Shallow Clamping Nut without Spring

Size	Threads	Wt./100 pcs
½"	13	6.9
⅝"	11	9.7
¾"	10	8.4

Use With: PS 500, PS 520, and PS 560 channel.

PS TG – Top Grip™ Nut

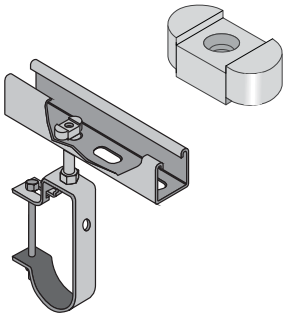


Part No.	Size	Threads	Wt./100 pcs
PSTG ¼	¼"	20	7
PSTG ⅜	⅜"	16	10
PSTG ½*	½"	13	8

Use With: All 1⅝" Channel.

*PS TG ½" nut has a ⅜" body thickness

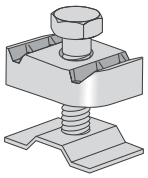
PS ML – Missing Link Multi-Purpose Strut Fastener



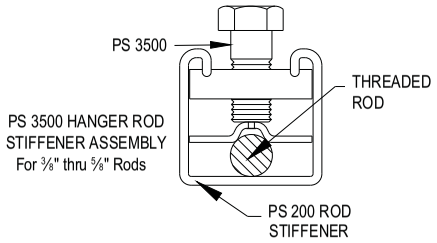
Use With: Any slotted channel.

Size	Threads	Wt./100 pcs
½"	13	6.9
⅝"	11	9.7
¾"	10	8.4

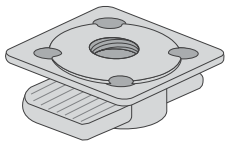
PS 3500 3/8" - 5/8" – Seismic Rod Stiffener



Part No.	Wt./100 pcs
PS 3500 3/8"–5/8"	16

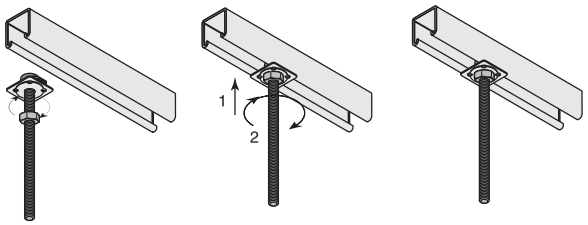


PS KW – Kwik Washer™

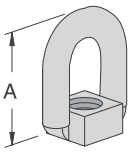


Use With: Any channel.

Size	Load Lbs	Wt./100 pcs
1/4"	250	1.2
3/8"	610	2.6
1/2"	1,130	9.3

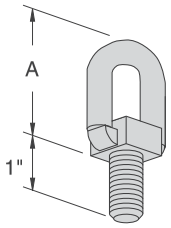


PS 202 – Eyelet



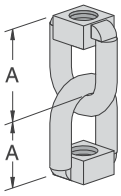
Rod Size	A	Stock Dia.	Max. Load lbs.	Wt. 100 pcs
3/8"	1 3/4"	3/8"	610	15
1/2"				18

PS 205 – Eyelet with Stud



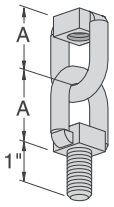
Thread Size	A	Stock Dia.	Max. Load lbs.	Wt./ 100 pcs
3/8"	1 13/16"	3/8"	610	16
1/2"	1 3/4"			20

PS 204 – Linked Eyelets

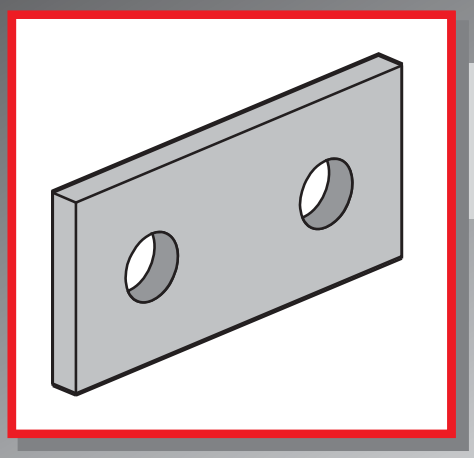


Rod Size	A	Stock Dia.	Max. Load lbs.	Wt./100 pcs
3/8"	1 7/16"	3/8"	610	23
1/2"	1 3/8"			32

PS 203 – Linked Eyelet with Stud



Rod Size	A	Stock Dia.	Max. Load lbs.	Wt./100 pcs
3/8"	1 7/16"	3/8"	610	27
1/2"	1 3/8"			45



FITTINGS

Power-Strut has a wide variety of fittings to meet all of your application requirements

MATERIAL:

All Power-Strut fittings are formed in punch press dies from mild, pickled and oiled, bar or strip steel. Plain or electro-galvanized fittings meet the requirements for ASTM A575 and A-576, or ASTM A-36.

STANDARD DIMENSIONS:

Standard dimensions on all fittings are as follows except where otherwise indicated:

Fitting Thickness:	1/4"
Fitting Width:	1 5/8"
Hole Diameter:	9/16"
Hole Spacing:	1 7/8" on centers and 13/16" from ends.

STANDARD FINISH:

All Power-Strut fittings are available in painted green or electro-galvanized finish.

ORDERING INFORMATION:

When ordering, add the length or size and finish to the part number. See pages 8-9 for finish abbreviations and an example.

SET SCREW TORQUE:

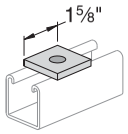
BOLT SIZE	1/4"-20	5/16"-18	3/8"-16	1/2"-13	5/8"-11	3/4"-10
Set Screw Torque In/Lbs	40	60	125	250	400	665

Note: Caution should be taken not to overtighten the set screw

FITTINGS

Finish: Painted Green or Electro-galvanized **Order By:** No., Size and Finish

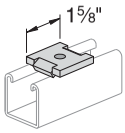
PS 619 – Square Washer



Rod Size	Hole Size	Wt./100 pcs
¼"	11/32"	18
⅜"	7/16"	18
½"	9/16"	17
⅝"	11/16"	16
¾"	13/16"	15

Note: Indicate rod size when ordering.
For example, PS 619 ½.

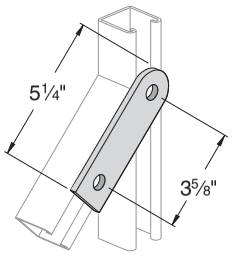
PS 2504 – Guided Square Washer



Rod Size	Hole Size	Wt./100 pcs
¼"	11/32"	18
⅜"	7/16"	18
½"	9/16"	17

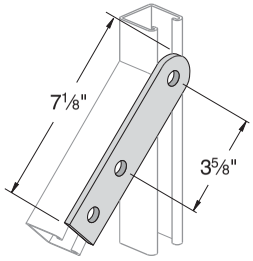
Note: Indicate rod size when ordering.
For example, PS 2504 ½.

PS 618 – Two-Hole Swivel Plate



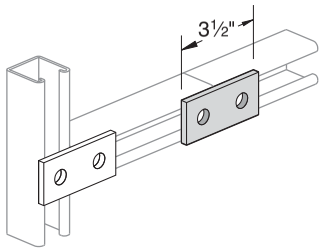
Weight/100 pcs: 55 lbs.

PS 617 – Three-Hole Swivel Plate



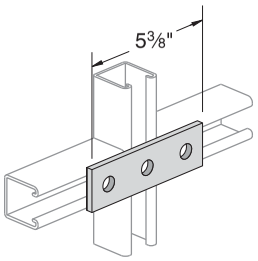
Weight/100 pcs: 75 lbs.

PS 601 – Two-Hole Splice Plate



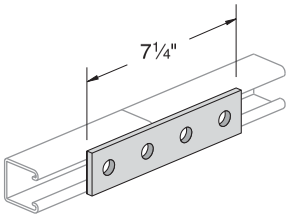
Weight/100 pcs: 38 lbs.

PS 602 – Three-Hole Splice Plate



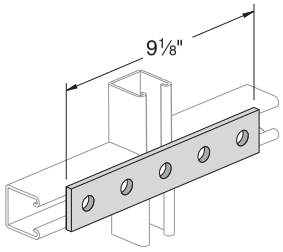
Weight/100 pcs: 50 lbs.

PS 888 – Four-Hole Splice Plate



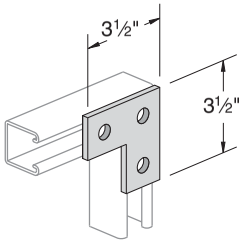
Weight/100 pcs: 78 lbs.

PS 889 – Five-Hole Splice Plate



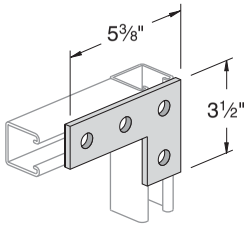
Weight/100 pcs: 94 lbs.

PS 718 – Flat Angle Plate



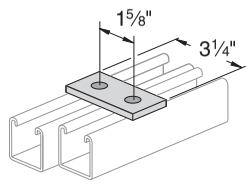
Weight/100 pcs: 58 lbs.

PS 719 – Flat Angle Plate



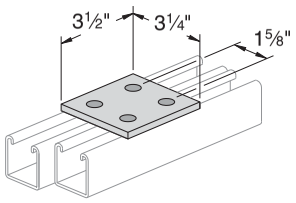
Weight/100 pcs: 80 lbs.

PS 620 – Two-Hole Connecting Plate



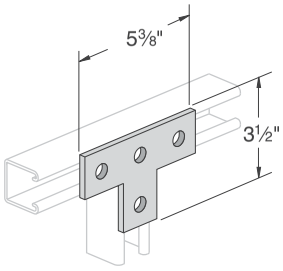
Weight/100 pcs: 35 lbs.

PS 621 – Four-Hole Connecting Plate



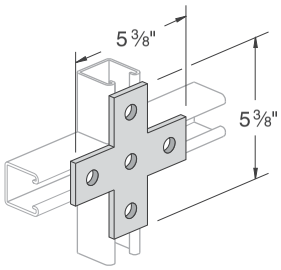
Weight/100 pcs: 73 lbs.

PS 714 – Tee Plate



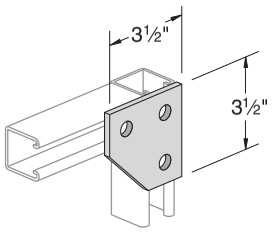
Weight/100 pcs: 80 lbs.

PS 712 – Cross Plate



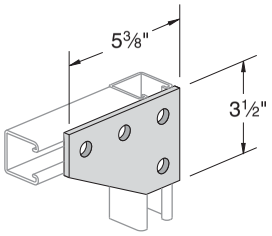
Weight/100 pcs: 105 lbs.

PS 744 – Flat Corner Connector



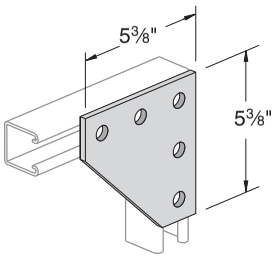
Weight/100 pcs: 70 lbs.

PS 750 – Four-Hole Corner Connector



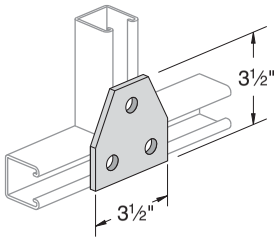
Weight/100 pcs: 105 lbs.

PS 2190 – Flat Corner Connector



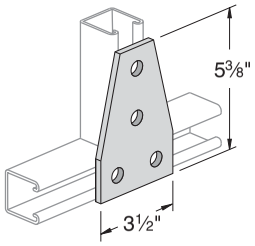
Weight/100 pcs: 150 lbs.

PS 925 – Three-Hole Joint Connector



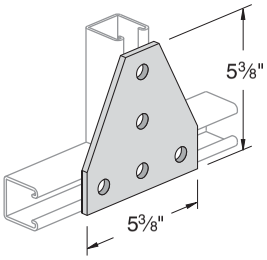
Weight/100 pcs: 70 lbs.

PS 747 – Symmetrical Four-Hole Connector



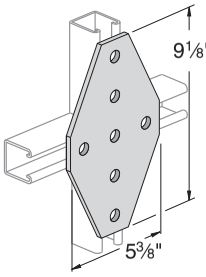
Weight/100 pcs: 105 lbs.

PS 854 – Flat Connector



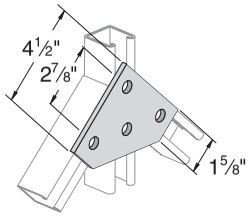
Weight/100 pcs: 148 lbs.

PS 2112 – Cross Connector



Weight/100 pcs: 240 lbs.

PS 822 – Double 45° Connector



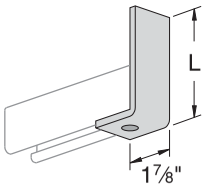
Weight/100 pcs: 112 lbs.

FITTINGS

Finish: Painted Green or Electro-galvanized **Order By:** No., Size and Finish

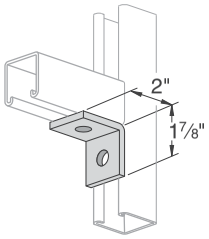
POWER-STRUT®

PS 921 – One-Hole Angle



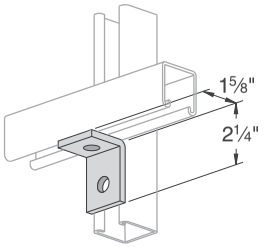
Part No.	L	Wt./100 pcs
PS 921 A	3⅞"	61
PS 921 B	5⅞"	84
PS 921 C	7⅞"	107
PS 921 D	9⅞"	130

PS 603 – Two-Hole End Angle



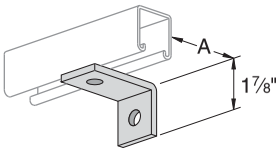
Weight/100 pcs: 38 lbs.

PS 604 – Two-Hole Corner Angle



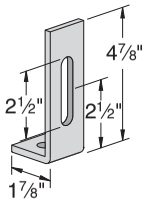
Weight/100 pcs: 38 lbs.

PS 2144 – Corner Angle



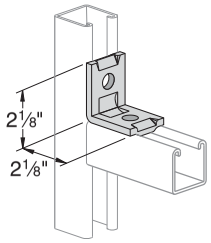
A	Wt./100 pcs
3"	49
3½"	54
4"	61

PS 763 – Slotted Adjustment Angle



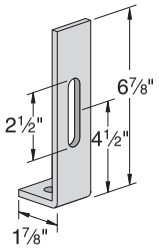
Weight/100 pcs: 65 lbs.

PS 806 – Self-Aligning Two-Hole Angle



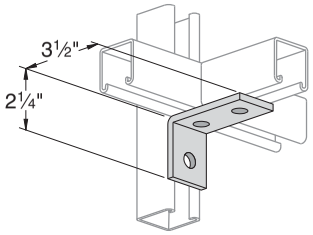
Weight/100 pcs: 40 lbs.

PS 764 – Slotted Adjustment Angle



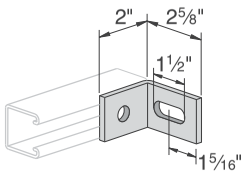
Weight/100 pcs: 85 lbs.

PS 605 – Three-Hole Corner Angle



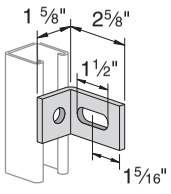
Weight/100 pcs: 58 lbs.

PS 2520 – Slotted 90° Angle



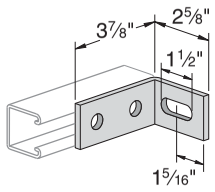
Weight/100 pcs: 42 lbs.

PS 2545 – Slotted 90° Angle



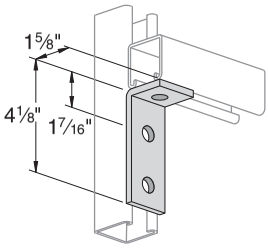
Weight/100 pcs: 38 lbs.

PS 3049 – Two-Hole Slotted 90˚ Angle



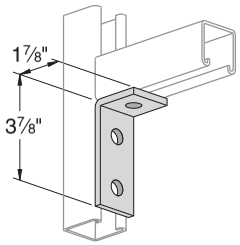
Weight/100 pcs: 66 lbs.

PS 606 – Three-Hole Corner Angle



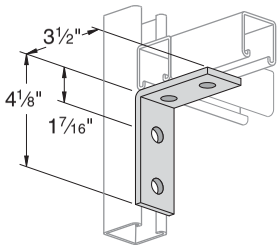
Weight/100 pcs: 58 lbs.

PS 745 – Three-Hole Corner Angle



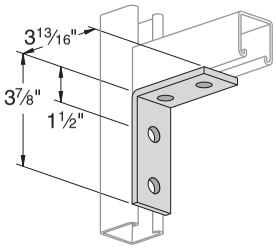
Weight/100 pcs: 58 lbs.

PS 607 – Four-Hole Corner Angle



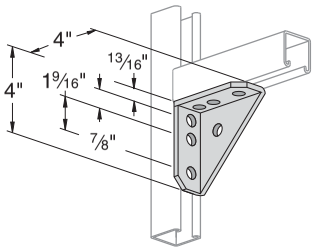
Weight/100 pcs: 78 lbs.

PS 660 – Four-Hole Corner Angle



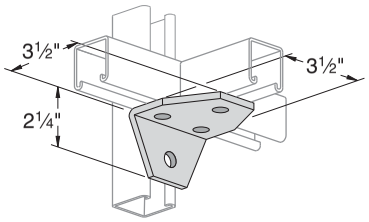
Weight/100 pcs: 78 lbs.

PS 3373 – Universal Corner Connector



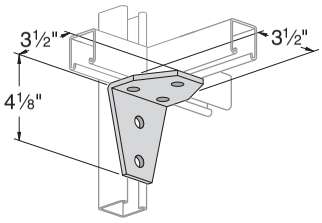
Weight/100 pcs: 134 lbs.

PS 614 – Four-Hole Joint Angle Connector



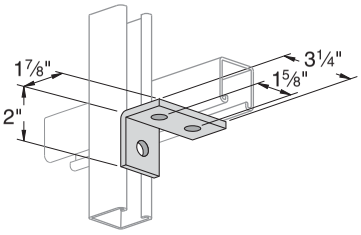
Weight/100 pcs: 103 lbs.

PS 615 – Five-Hole Joint Angle Connector



Weight/100 pcs: 135 lbs.

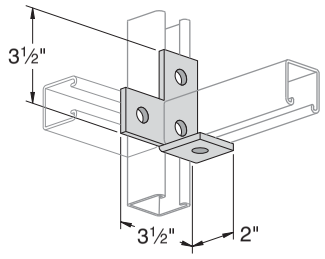
PS 720 R OR L – Angle Plate Connector



Note:
Specify R (Right) or L (Left) Right Hand Illustrated

Weight/100 pcs: 55 lbs.

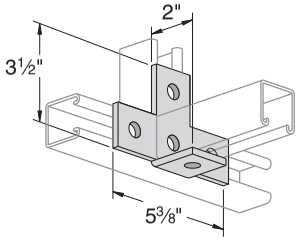
PS 716 R OR L – Angle Tee Plate



Note:
Specify R (Right) or L (Left) Right Hand Illustrated

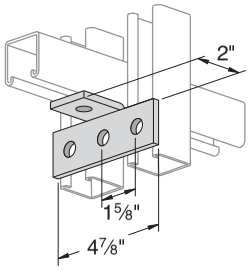
Weight/100 pcs: 80 lbs.

PS 713 – Cross Plate Angle



Weight/100 pcs: 105 lbs.

PS 715 – Tee Plate 90˚ Angle

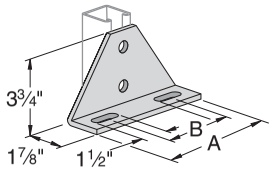


Weight/100 pcs: 71 lbs.

FITTINGS

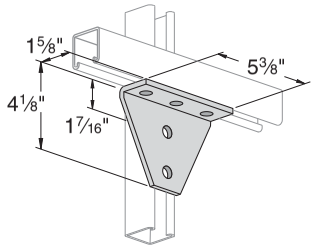
Finish: Painted Green or Electro-galvanized **Order By:** No., Size and Finish

PS 689A, PS 689B – Double-Slotted Corner Connector



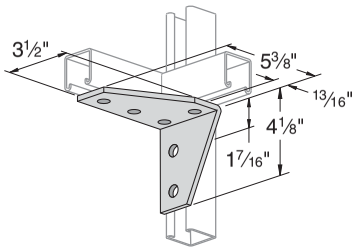
Part No.	A	B	Wt./100 pcs
PS 689 A	6⅝"	4"	190
PS 689 B	8⅝"	6"	242

PS 927 – Five-Hole Corner Connector



Weight/100 pcs: 154 lbs.

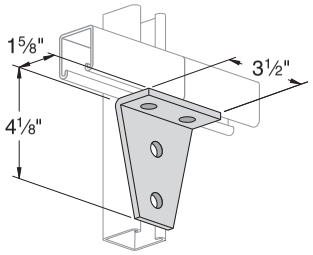
PS 2007 R OR L – Six-Hole Corner Connector



Note:
Specify R (Right) or L (Left) Right Hand Illustrated

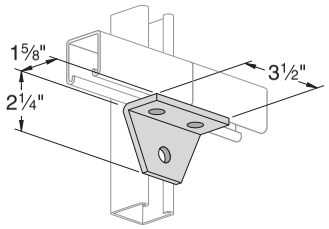
Weight/100 pcs: 160 lbs.

PS 748 – Four-Hole Corner Joint Connector



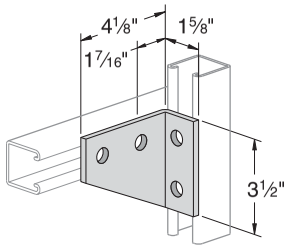
Weight/100 pcs: 105 lbs.

PS 746 – Three-Hole Corner Joint Connector



Weight/100 pcs: 70 lbs.

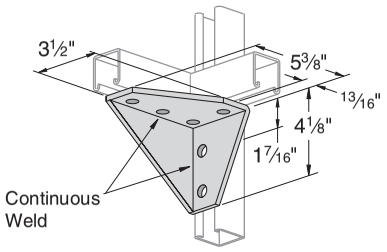
PS 752 R OR L – Four-Hole Corner Connector



Note:
Specify R (Right) or L (Left) Right Hand Illustrated

Weight/100 pcs: 105 lbs.

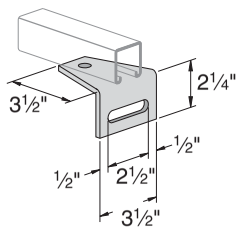
PS 3326 R OR L – Six-Hole Gussetted Corner Connector



Note:
Specify R (Right) or L (Left) Right Hand Illustrated

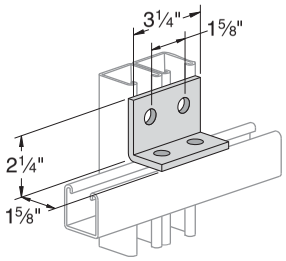
Weight/100 pcs: 230 lbs.

PS 2113 – Slotted Corner Connector



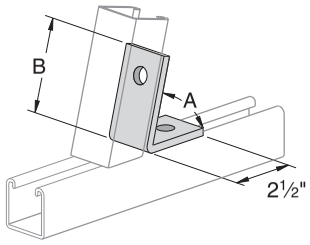
Weight/100 pcs: 97 lbs.

PS 622 – Four-Hole Corner Connector



Weight/100 pcs: 75 lbs.

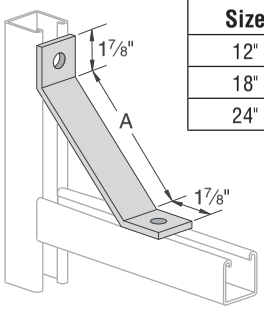
PS 624 – Two-Hole Closed Angle Connector



"B" In.	"A" Angle
3"	37½°
3⅛"	45°
3 1⁄16"	52½°
3⅛"	60°
3⅛"	67½°
3 3⁄16"	75°
3 3⁄16"	82½°

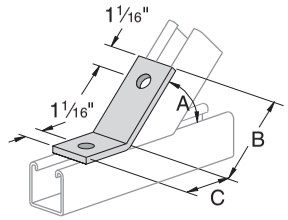
Weight/100 pcs: 58 lbs.

PS 926 – Strut Brace



A Size	Wt./100 pcs
12"	160
18"	218
24"	280

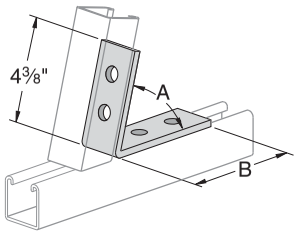
PS 633 – Two-Hole Open Angle Connector



"A" Degree	"B" In.	"C" In.
82½°	3 9/16"	1 11/16"
75°	3 9/16"	
67½°	3½"	1¾"
60°	3⅜"	1⅞"
52½°	3¼"	2 1/16"
45°	3"	2 5/16"
37½°	2 11/16"	2⅝"
30°	3¼"	2 1/16"
22½°	3 5/16"	
15°	3 5/16"	
7½°	3 5/16"	

Weight/100 pcs: 58 lbs.

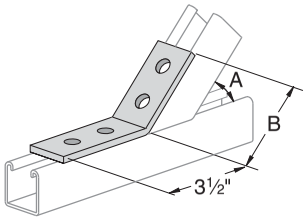
PS 793 – Four-Hole Closed Angle Connector



"A" Angle	"B" In.
37½°	4⅞"
45°-	4 15/16"
52½°	
60°	5"
67½°	5 1/16"
75°	
82½°	

Weight/100 pcs: 100 lbs.

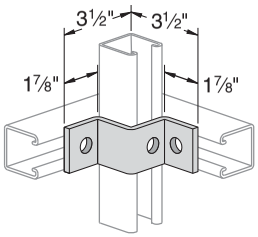
PS 781 – Four-Hole Open Angle Connector



"A" Angle	"B" In.
7½°	3¾"
15°	
22½°	
30°	3 11/16"
37½°	
45°	
52½°	
60°	
67½°	3⅝"
75°	
82½°	

Weight/100 pcs: 78 lbs.

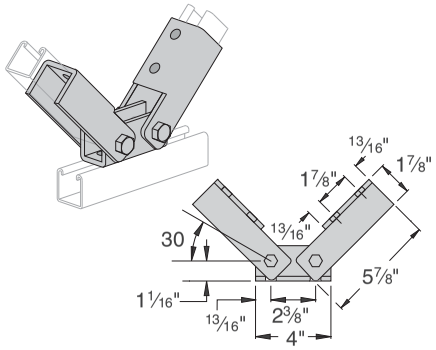
PS 2054 – Corner Connector



Use With: PS 200, PS 210

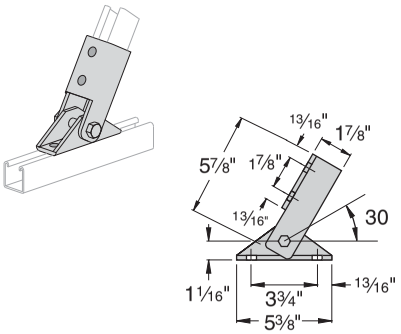
Weight/100 pcs: 66 lbs.

PS 9401 – Double Adjustable Brace



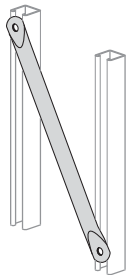
Weight/100 pcs: 307 lbs.

PS 9400 – Adjustable Brace



Weight/100 pcs: 307 lbs.

PS 810 – Diagonal Tube Brace

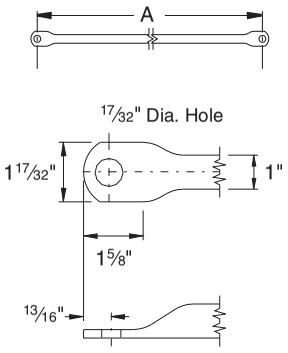


Part No.	A Size	Wt./100 pcs
PS 810 36	3'–0"	205
PS 810 42	3'–6"	237
PS 810 48	4'–0"	270

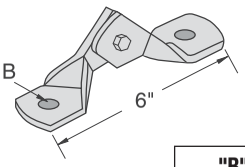
Note:
30° to 60° angle between the brace and channel is recommended for maximum effect.

Material: 1" dia. electric welded tubing

Stock Thickness: (.075) 14 ga.

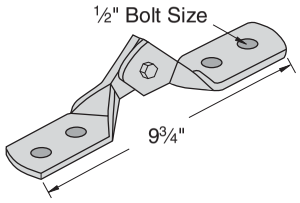


PS 9402 – Two-Hole Hinge Connector



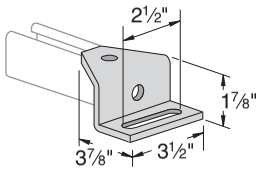
"B" Bolt Size	Wt./100 pcs
½"	108
⅝"	107
¾"	106

PS 9404 – Four-Hole Hinge Connector



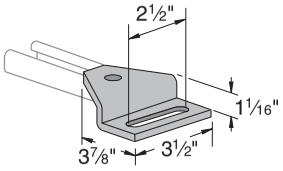
Part No.	Wt./100 pcs
PS 9404-½"	126

PS 692 – 1⅝" Offset Zee Connector



Weight/100 pcs: 102 lbs.

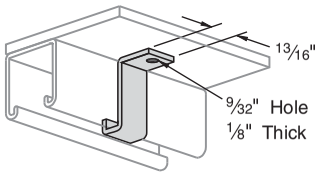
PS 2523 – Offset Adjustable Zee Connector



Use With: PS 500, PS 520, & PS 560

Weight/100 pcs: 70 lbs.

PS 2532 – Shelf Attachment Zee

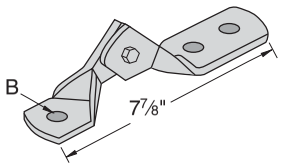


Stock Thickness: ⅛"

Use With: PS 200, PS 210

Weight/10 0 pcs: 9 lbs.

PS 9403 – Three-Hole Hinge Connector



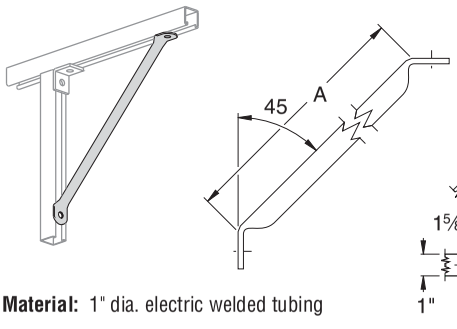
"B" Bolt Size	Wt./100 pcs
½"	108
⅝"	107
¾"	106

Hinge Connect or Auto-Alignment Guides -

The unique edges of the two hinges have been designed to provide an alignment guide for 0°, 45° and 90° as shown in the drawings below.
This eliminates the need for measuring gages.

- Each half of the hinge is formed and welded for maximum strength.
- Hinged with Grade 5 bolt for superior strength.
- The nylon insert locknut prevents loosening of the hinge.

PS 812 – 45° Diagonal Tube Brace



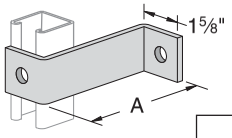
A Size	Wt./100 pcs
12"	88
18"	116
24"	149
30"	181
36"	214

Material: 1" dia. electric welded tubing

Stock Thickness: (.075) 14 ga.

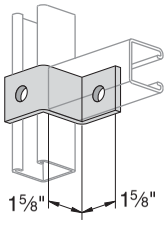
Design Load:
Tension = 300 lbs.
Conp. = 1,500 lbs.

PS 3060 – Offset Connector



A	Wt./100 pcs
4"	81
5"	92
6"	104
7"	115
8"	127

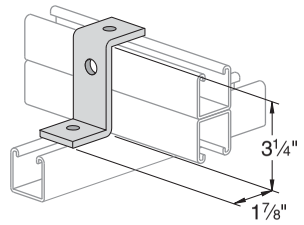
PS 647 – 1⅞" Offset Zee Connector



Use With: PS 200, PS 210

Weight/100 pcs: 55 lbs.

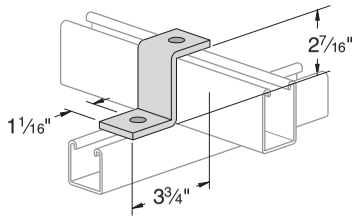
PS 756 – Zee Support



Use With: PS 100, PS 200 2T3, PS 210 2T3

Weight/100 pcs: 70 lbs.

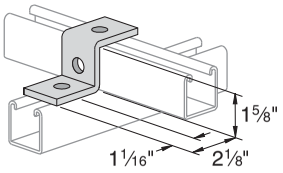
PS 2601 – Zee Support



Use With: PS 150

Weight/100 pcs: 70 lbs.

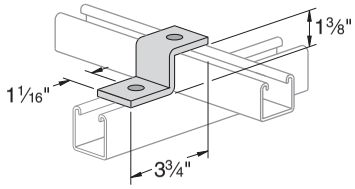
PS 611 – Zee Support



Use With: PS 200, PS 210

Weight/100 pcs: 55 lbs.

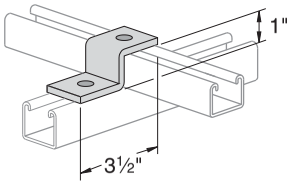
PS 711 – Zee Support



Use With: PS 300

Weight/100 pcs: 53 lbs.

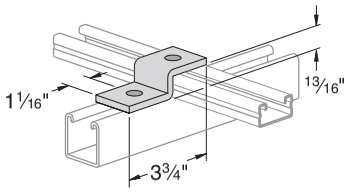
PS 612 – Zee Support



Use With: PS 400

Weight/100 pcs: 47 lbs.

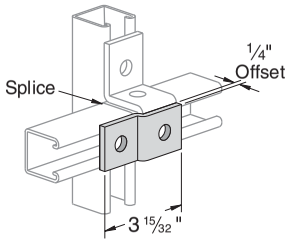
PS 928 – Zee Support



Use With: PS 500, PS 520 and PS 560

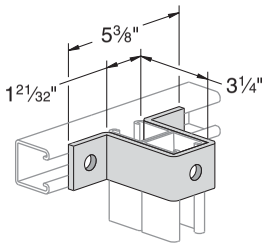
Weight/100 pcs: 47 lbs.

PS 609 – Two-Hole Offset Plate Connector



Weight/100 pcs: 38 lbs.

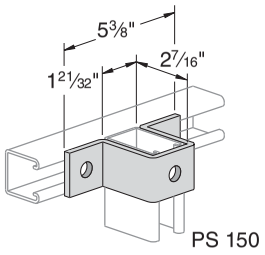
PS 679 – "U" Support



Use With: PS 100, PS 200 2T3, PS 210 2T3

Weight/100 pcs: 128 lbs.

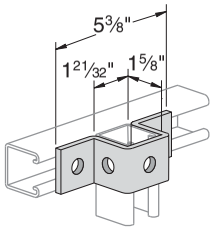
PS 2648 – "U" Support



Use With: PS 150

Weight/100 pcs: 108 lbs.

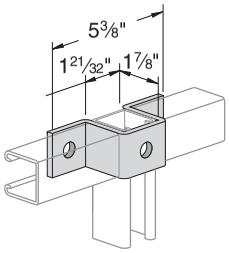
PS 613 – "U" Support



Use With: PS 200, PS 210

Weight/100 pcs: 88 lbs.

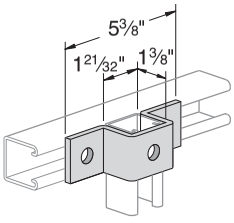
PS 2119 – "U" Support



Use With: PS 200, PS 210

Weight/100 pcs: 95 lbs.

PS 710 – "U" Support



Use With: PS 300

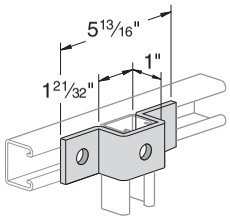
Weight/100 pcs: 84 lbs.

FITTINGS

Finish: Painted Green or Electro-galvanized **Order By:** No., Size and Finish

POWER-STRUT®

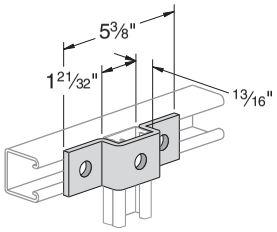
PS 978 – "U" Support



Use With: PS 400

Weight/100 pcs: 71 lbs.

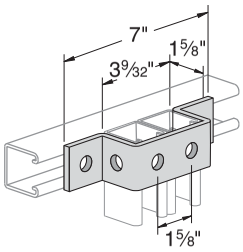
PS 929 – "U" Support



Use With: PS 500, PS 520 and PS 560

Weight/100 pcs: 71 lbs.

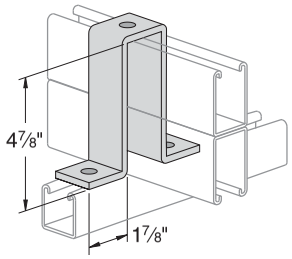
PS 721 – "U" Support



Use With: PS 100, PS 200 2T3, PS 210 2T3

Weight/100 pcs: 105 lbs.

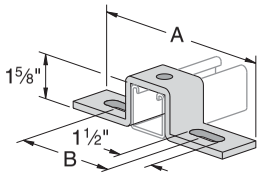
PS 678 – Three-Hole "U" Support



Use With: PS 150 2T3

Weight/100 pcs: 197 lbs.

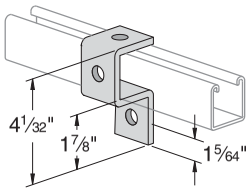
PS 687A, PS 687B & PS 687C – Slotted "U" Support



Order No.	'A' Length	'B' Length	Wt./100 pcs
PS 687A	7 1/4"	4 1/8"	105
PS 687B	8 1/2"	5 3/8"	120
PS 687C	10 3/8"	7 1/4"	130

Use With: PS 200, PS 210

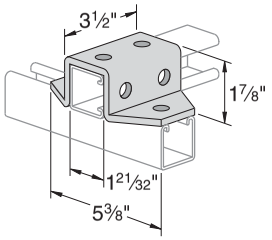
PS 677 – Cup Support for Standard Single Strut



Use With: PS 200, PS 210

Weight/100 pcs: 76 lbs.

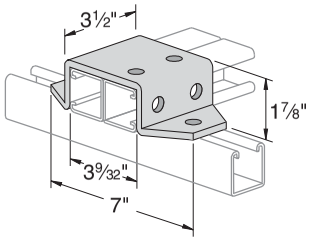
PS 733 – Six-Hole "U" Support



Use With: PS 200, PS 210

Weight/100 pcs: 171 lbs.

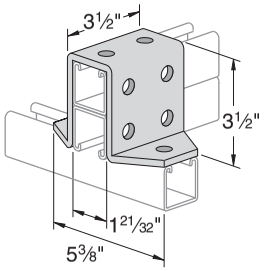
PS 734 – Eight-Hole "U" Support



Use With: PS 200 2T3

Weight/100 pcs: 209 lbs.

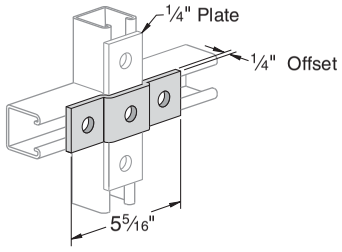
PS 735 – Eight-Hole "U" Support



Use With: PS 200 2T3

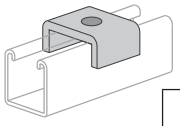
Weight/100 pcs: 257 lbs.

PS 709 – Three-Hole Offset Plate Connection



Weight/100 pcs: 58 lbs.

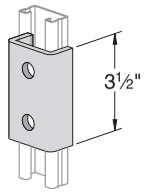
PS 623 – Saddle Washer



Bolt Size	Wt./100 pcs
1/4"	14
3/8"	
1/2"	13
5/8"	
3/4"	

Weight/100 pcs: 265 lbs.

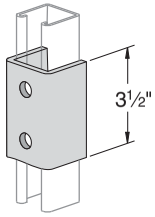
PS 644 – Two-Hole Splice Clevis



Use With: PS 500, PS 520 and PS 560

Weight/100 pcs: 85 lbs.

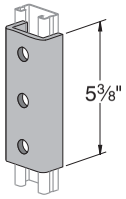
PS 631 – Two-Hole Splice Clevis



Use With: PS 200, PS 210

Weight/100 pcs: 128 lbs.

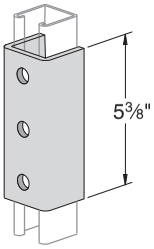
PS 645 – Three-Hole Splice Clevis



Use With: PS 500, PS 520 and PS 560

Weight/100 pcs: 130 lbs.

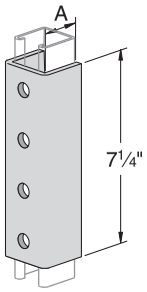
PS 629 – Three-Hole Splice Clevis



Use With: PS 200 and PS 210

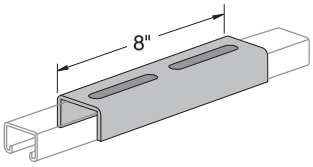
Weight/100 pcs: 197 lbs.

PS 616, PS 646 – Four-Hole Splice Clevis



Part No.	A	For Use With	Wt./100 pcs
PS 616	1⁹⁄₁₆"	PS 200, PS 210	265
PS 646	1³⁄₁₆"	PS 500, PS 560	176
PS 616-100	3³⁄₁₆"	PS 100	390
PS 616-150	2⅜"	PS 150	390

PS 804 – Slotted Joiner



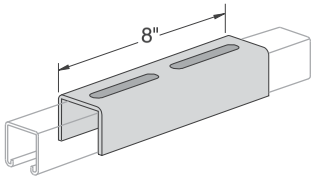
Stock Thickness: (.105)

Use With:
PS 400S, PS 500S, PS 520S and PS 560S

Note: Order PS 6072 screws & PS 6108 nuts separately.

Weight/100 pcs: 80 lbs.

PS 704 – Slotted Joiner



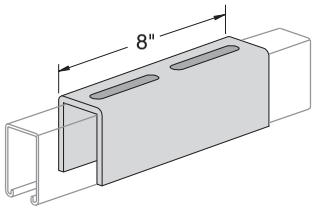
Stock Thickness: (.105)

Use With: PS 200S, PS 210S

Note: Order PS 6072 screws & PS 6108 nuts separately.

Weight/100 pcs: 197 lbs.

PS 1004 – Slotted Joiner



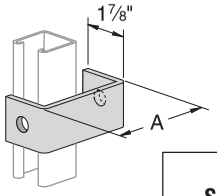
Stock Thickness: (.105)

Use With: PS 150S

Note: Order PS 6072 screws & PS 6108 nuts separately.

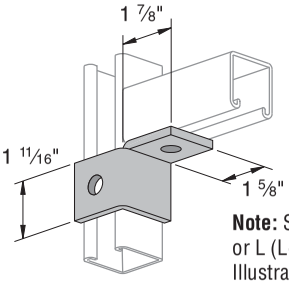
Weight/100 pcs: 140 lbs.

PS 993 – Inside Clevis Hanger



A Size	Wt./100 pcs
4"	78
5"	89
6"	101
7"	112
8"	124

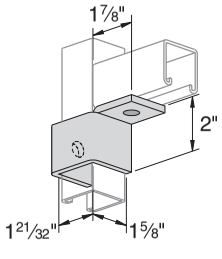
PS 922 R OR L – Two-Hole Corner Connector



Note: Specify R (Right) or L (Left) Right Hand Illustrated

Weight/100 pcs: 60 lbs.

PS 2117 R OR L – Wrap-Around Corner Connector



Note: Specify R (Right) or L (Left) Right Hand Illustrated

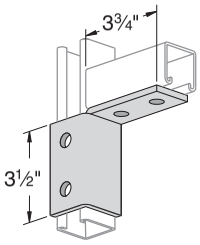
Weight/100 pcs: 75 lbs.

FITTINGS

Finish: Painted Green or Electro-galvanized **Order By:** No., Size and Finish

POWER-STRUT®

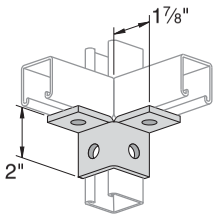
PS 2128 R OR L – Four-Hole Corner Connector



Note:
Specify R (Right) or L (Left) Right Hand Illustrated

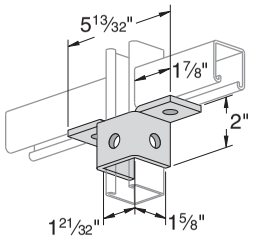
Weight/100 pcs: 119 lbs.

PS 665 – Four-Hole Double Corner Connector



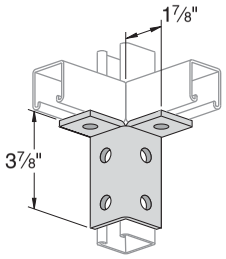
Weight/100 pcs: 76 lbs.

PS 923 – Five-Hole Double Wing Connector



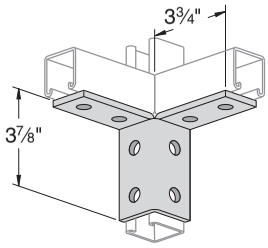
Weight/100 pcs: 93 lbs.

PS 666 – Six-Hole Double Corner Connector



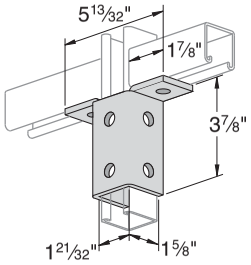
Weight/100 pcs: 115 lbs.

PS 667 – Eight-Hole Double Corner Connector



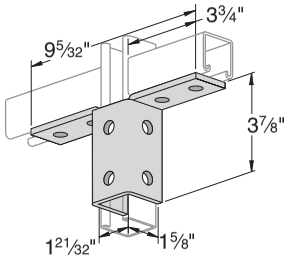
Weight/100 pcs: 155 lbs.

PS 821 – Eight-Hole Double Wing Connector



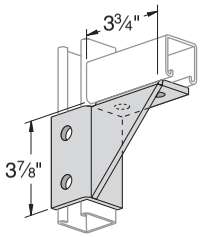
Weight/100 pcs: 150 lbs.

PS 913 – Ten-Hole Double Wing Connector



Weight/100 pcs: 193 lbs.

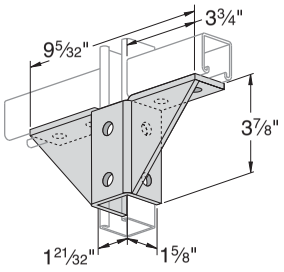
PS 2129 R OR L – Single Corner Gussetted Connector



Note:
Specify R (Right) or L (Left) Right Hand Illustrated

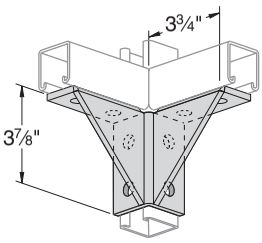
Weight/100 pcs: 176 lbs.

PS 945 – Ten-Hole Gussetted Double Wing Connector



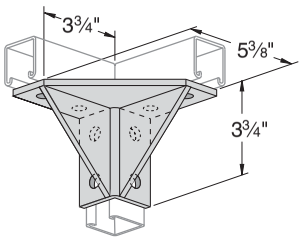
Weight/100 pcs: 274 lbs.

PS 943 – Eight-Hole Gussetted Double Corner Connector



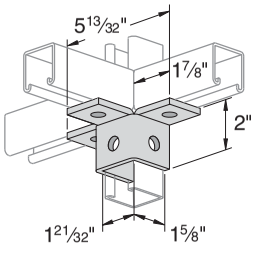
Weight/100 pcs: 217 lbs.

PS 2514 – Eight-Hole Gussetted Double Corner Connector



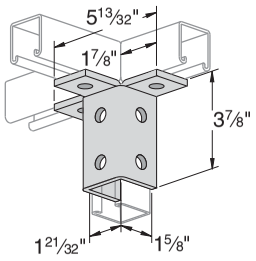
Weight/100 pcs: 315 lbs.

PS 668 – Six-Hole Triple Wing Connector



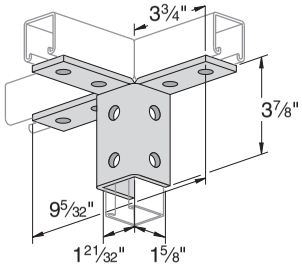
Weight/100 pcs: 113 lbs.

PS 670 – Nine-Hole Triple Wing Connector



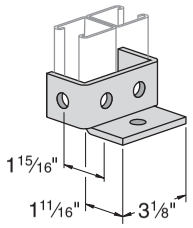
Weight/100 pcs: 177 lbs.

PS 669 – Twelve-Hole Triple Wing Connector



Weight/100 pcs: 230 lbs.

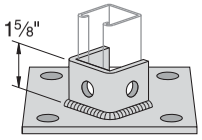
PS 3041 – Double-Column Post Base

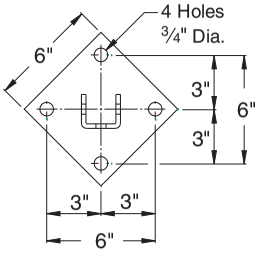


Use With: PS 100, PS 200 2T3, and PS 210 2T3.

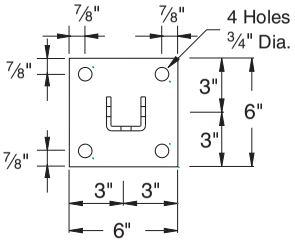
Weight/100 pcs: 116 lbs

PS 3013, PS 3013 SQ – Post Base





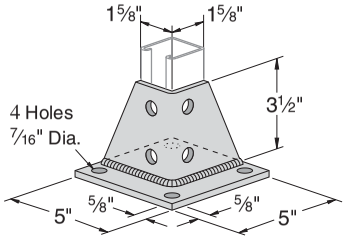
(PS 3013)



(PS 3013 SQ)

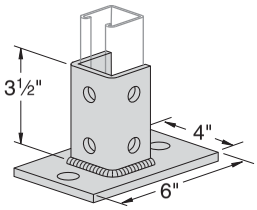
Weight/100 pcs: 307 lbs.

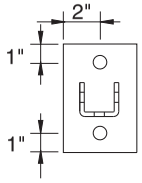
PS 3040 – Post Base



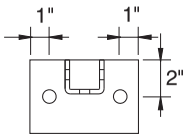
Weight/100 pcs: 297 lbs.

PS 3025, PS 3025 FL – Post Base





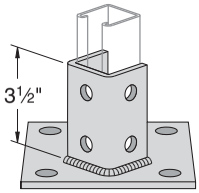
(PS 3025)

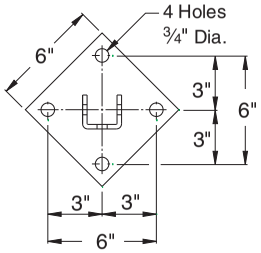


(PS 30 25 FL)

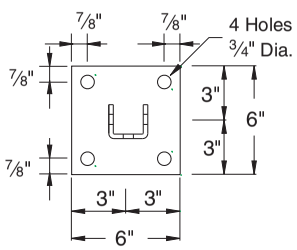
Weight/100 pcs: 358 lbs.

PS 3033, PS 3033 SQ – Post Base





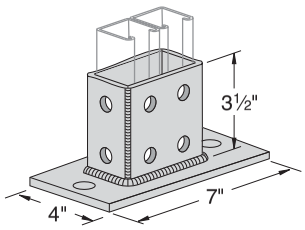
(PS 3033)

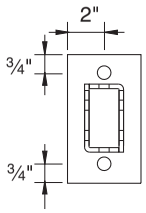


(PS 3033 SQ)

Weight/100 pcs: 373 lbs.

PS 2064 – Double-Column Post Base





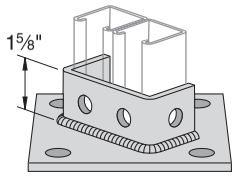
Use With: PS 100, PS 200 2T2, PS 200 2T3, PS 200 2T4 and PS 200 2T5

Weight/100 pcs: 311 lbs.

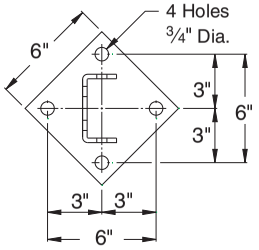
FITTINGS

Finish: Painted Green or Electro-galvanized **Order By:** No., Size and Finish

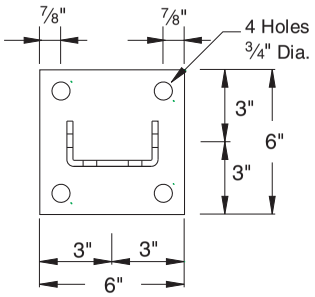
PS 3029 – Double-Column Post Base



Use With: PS 100, PS 200 2T3, PS 210 2T3



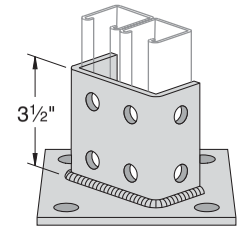
(PS 3029)



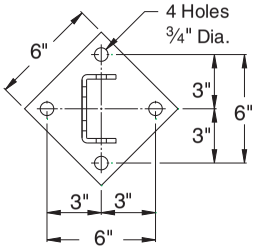
(PS 3029 SQ)

Weight/100 pcs: 325 lbs.

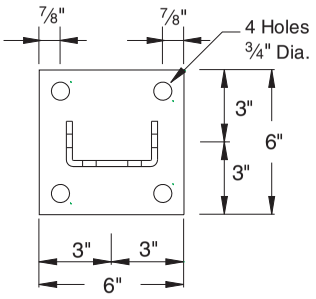
PS 3064 – Double-Column Post Base



Use With: PS 100, PS 200 2T2, PS 200 2T3, PS 200 2T4 and PS 200 2T5



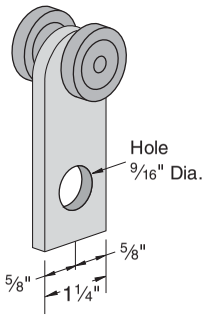
(PS 3064)

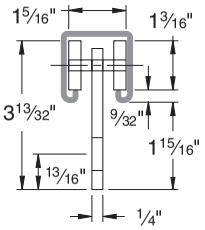


(PS 3064 SQ)

Weight/100 pcs: 408 lbs.

PS 2521 – Two-Wheel Trolley





Material: Carbon Steel Wheels have stainless steel ball bearings

Finish: Electro-Galvanized

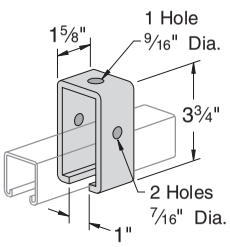
Use With: PS 200

Load Rating: 300 lbs.

FPM	RPM	Design Load In PS 200 Lbs
180	600	150
90	300	225
30	100	437

Weight/100 pcs: 46 lbs.

PS 2528 – Trolley Beam Standard Support

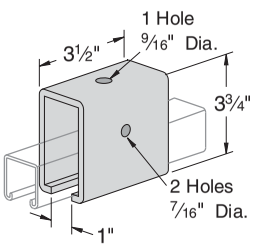


Use With: PS 200, PS 210

Load Rating: 600 lbs.

Weight/100 pcs: 102 lbs.

PS 2528 1 – Trolley Beam Heavy Support and Track Joiner



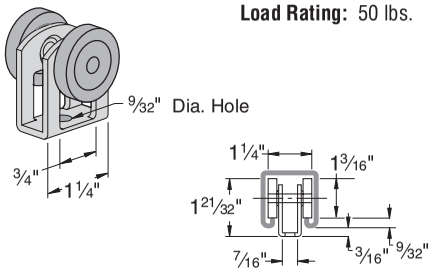
Use With: PS 200, PS 210

Load Rating: 2,500 lbs.

Weight/100 pcs: 220 lbs.

PS 2524 – Two-Bearing Light Duty Trolley

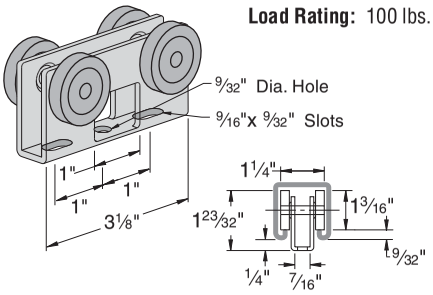
Load Rating: 50 lbs.



Weight/100 pcs: 21 lbs.

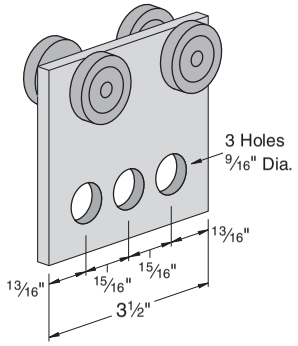
PS 2525 – Four-Bearing Light Duty Trolley

Load Rating: 100 lbs.



Weight/100 pcs: 55 lbs.

PS 2522 – Four-Wheel Trolley



Material: Carbon Steel Wheels have stainless steel ball bearings

Finish: Electro-Galvanized

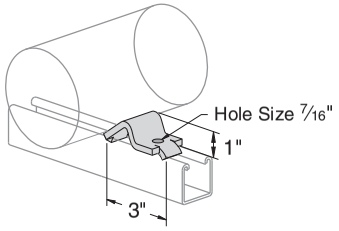
Use With: PS 200

Load Rating: 600 lbs.

FPM	RPM	Design Load In PS 200 Lbs
180	600	300
90	300	450
30	100	600

Weight/100 pcs: 110 lbs.

PS 626 – Pipe Stop

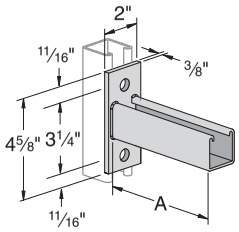


Clamp Requires bolt and channel nut sold seperately.

Note: For use with 2" to 8" Pipe

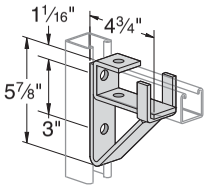
Weight/100 pcs: 40 lbs.

PS 651 – Reversible Channel Bracket



A Size	Uniform Load*	Wt./100 pcs
6"	1,200	185
12"	600	293
18"	400	401
24"	300	509
*Mounted on 12 Ga. Channel		

PS 708 – Single Channel Bracket Support



Use With: PS 200,
PS 210,
PS 500 2T3

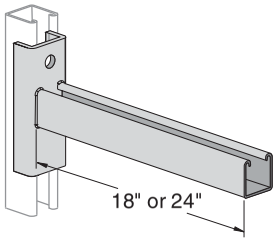
Design Moment on Upright Channel:

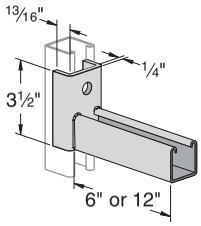
16 ga. channel 3,200 in.-lbs.,
14 ga. channel 4,400 in.-lbs.
12 ga. channel 5,100 in.-lbs.

Note:
Moment is for fitting only.
Channel may determine overall capacity.

Weight/100 pcs: 235 lbs.

PS 661 T1, PS 661 T2 – Wrap-Around Channel Bracket

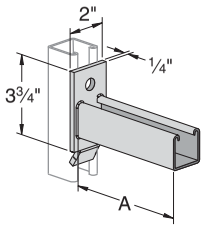




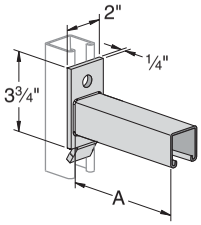
Size	Uniform Load*	Wt./100 pcs
6"	1,600	191
12"	800	292
18"	600	436
24"	450	536
*Mounted on 12 Ga. Channel		

Note:
PS 661 T1 (Slot up) illustrated
PS 661 T2 (Slot down) not shown

PS 808 T1, PS 808 T2 – Interlocking Channel Bracket



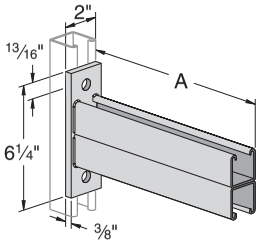
(PS 808 T1 - Slot Up)



(PS 808 T2 - Slot Down)

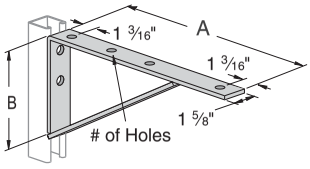
A Size	Uniform Load*	Wt./100 pcs
6"	1,200	161
12"	600	261
18"	400	361
24"	300	461
*Mounted on 12 Ga. Channel		

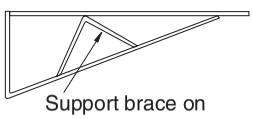
PS 809 – Double Channel Bracket



A Size	Uniform Load*	Wt./100 pcs
12"	2,000	502
18"	1,300	692
24"	1,000	882
30"	800	1,072
36"	650	1,262
*Mounted on 12 Ga. Channel		

PS 732 – Shelf Bracket





Support brace on 18" and 20" only.

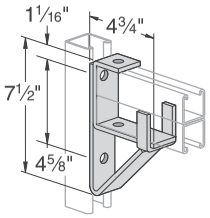
Size	A	B	# of Holes	Uniform Load*	Wt./100 pcs
8"	8½"	4"	2	800	168
10"	10½"		3		202
12"	12½"	6"	4	900	258
14"	14½"		4		292
16"	16½"		4	1,200	381
18"	18½"		4		416
20"	20½"		4	1,000	461
*Mounted on 12 ga. channel					

BRACKETS

Finish: Painted Green, or Electro-galvanized **Order By:** No., Size and Finish

POWER-STRUT®

PS 3164 – Double Channel Bracket Support



Use With: PS 200 2T3, PS 210 2T3

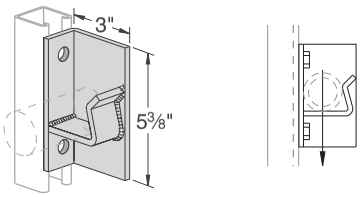
Design Moment on Upright Channel:

16 ga. channel 6,500 in.-lbs.
14 ga. channel 9,100 in.-lbs.
12 ga. channel 13,000 in.-lbs.

Note:
Moment is for fitting only.
Channel may determine overall capacity.

Weight/100 pcs: 273 lbs.

PS 825 R or L – Single Pipe Axle Support



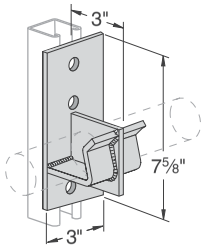
Right Hand Illustrated

Load Rating: 2,000 lbs.

Note:
Specify R (Right) or L (Left) when ordering.

Weight/100 pcs.: 220 lbs.

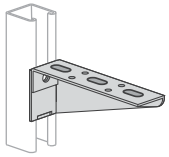
PS 826 – Double Pipe Axle Support



Load Rating: 4,000 lbs.

Weight/100 pcs.: 310 lbs.

PS 838 R or L – Shelf Bracket



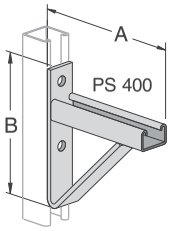
Stock Thickness: .105

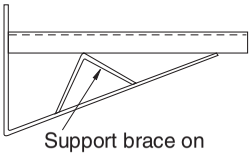
Note: Specify R (Right) or L (Left) when ordering.
Right Hand Illustrated

Uniform Load Rating:
275 Lbs. when mounted on 12 ga. channel.

A Size	Stamped Ident. No.	B	Wt./100 pcs
6"	121892	1 15/16"	58
8"	121893	2 7/16"	83
10"	121894	2 15/16"	114
12"	121895	3 7/16"	49
14"	121896	3 15/16"	174
16"	121897	4 7/16"	225
18"	121898	4 15/16"	255
20"	121899	5 7/16"	295
22"	121900	5 15/16"	361
24"	121901	6 7/16"	396
26"	121902	6 15/16"	456
28"	121903	7 7/16"	479
30"	121904	7 15/16"	544

PS 3282 – Cable Tray Strut Bracket



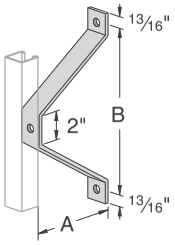


Support brace on 24", 30" and 36" only.

Note:
PS 400 channel welded to 1/4" stock

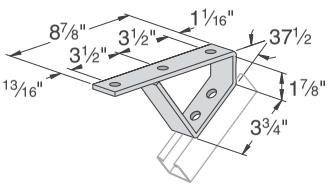
A	B	Uniform Load*	Wt./100 pcs
12"	8 3/4"	1,900	388
18"		1,000	506
24"			763
30"	11 1/4"	900	1,012
36"		800	1,083
*Mounted on 12 ga. channel.			

PS 2404 thru PS 2408 – Wall Ladder Bracket



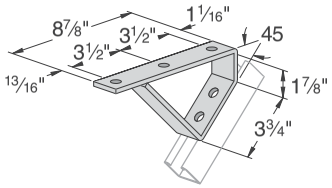
Part No.	A	B	Wt./100 pcs
PS 2404	2 3/8"	6"	113
PS 2405	4 3/8"	8"	164
PS 2406	6 3/8"	10"	216
PS 2407	8 3/8"	12"	267
PS 2408	10 3/8"	14"	318

PS 2422 – 37 1/2° Degree Stair Tread Support



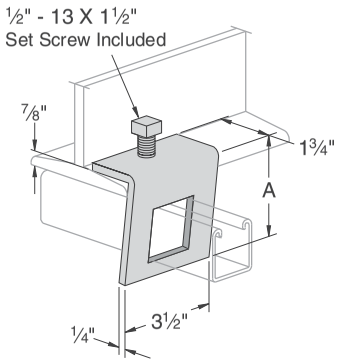
Weight/100 pcs: 213 lbs.

PS 2421 – 45° Degree Stair Tread Support



Weight/100 pcs: 220 lbs.

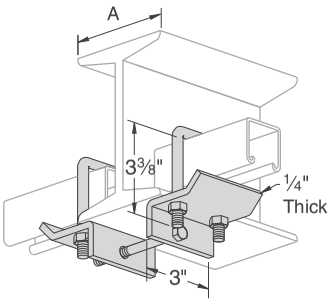
PS 855 – Angular "I" Beam Clamp



Part No.	Use With	A	Load Rating	Wt./100 pcs.
PS 855–1	PS 200, PS 210	3½"	500	107
PS 855–2	PS 500			98

Use in pairs only

PS 2657 – Double U Beam Clamp



Specify 6" or 12" max. flange width
(Example: PS 2657 T1-6")

T1 Use with:
PS 200, PS 210, PS 300, PS 400, PS 500, PS 520

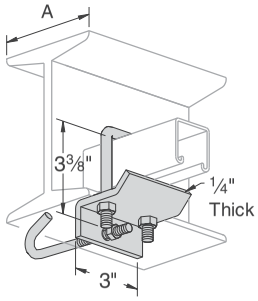
T2 Use with:
PS 100, PS 150, PS 200 2T3

T3 Use with:
PS 150 2T3, PS 100 2T3

Part No.	"A" Beam Flange Width
PS 2657 T1-6	4" - 6"
PS 2657 T1-9	6" - 9"
PS 2657 T1-12	9" - 12"
PS 2657 T1-15	12" - 15"
PS 2657 T1-18	15" - 18"
PS 2657 T2-6	4" - 6"
PS 2657 T2-9	6" - 9"
PS 2657 T2-12	9" - 12"
PS 2657 T2-15	12" - 15"
PS 2657 T2-18	15" - 18"
PS 2657 T3-6	4" - 6"
PS 2657 T3-9	6" - 9"
PS 2657 T3-12	9" - 12"
PS 2657 T3-15	12" - 15"
PS 2657 T3-18	15" - 18"

Weight/100 pcs: 280 lbs.

PS 2656 – U Bolt Beam Clamp With Hook



Specify 6" or 12" max. flange width
(Example: PS 2656 T1-6")

T1 Use with:
PS 200, PS 210, PS 300, PS 400, PS 500, PS 520

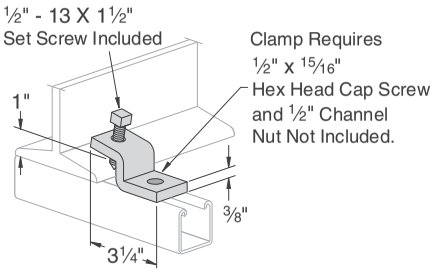
T2 Use with:
PS 100, PS 150, PS 200 2T3

T3 Use with:
PS 150 2T3, PS 100 2T3

Part No.	"A" Beam Flange Width
PS 2656 T1-6	4" - 6"
PS 2656 T1-9	6" - 9"
PS 2656 T1-12	9" - 12"
PS 2656 T1-15	12" - 15"
PS 2656 T1-18	15" - 18"
PS 2656 T2-6	4" - 6"
PS 2656 T2-9	6" - 9"
PS 2656 T2-12	9" - 12"
PS 2656 T2-15	12" - 15"
PS 2656 T2-18	15" - 18"
PS 2656 T3-6	4" - 6"
PS 2656 T3-9	6" - 9"
PS 2656 T3-12	9" - 12"
PS 2656 T3-15	12" - 15"
PS 2656 T3-18	15" - 18"

Weight/100 pcs: 143 lbs.

PS 685 – Beam Clamp



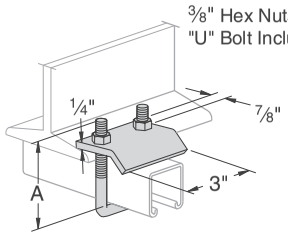
Stock Thickness: 3/8"

Load Rating: 450 lbs.

Use in pairs only

Weight/100 pcs: 63 lbs.

PS 2651 – Beam Clamp



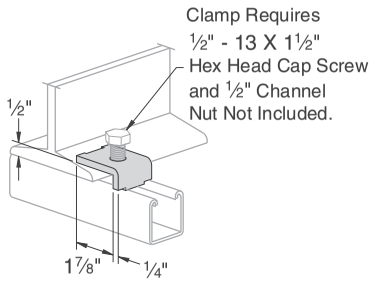
Part No.	Use With	A	Load Rating	Wt./100 pcs.
PS 2651 T1	PS 200, PS 210 PS 300, PS 400 PS 500, PS 520	3⅜"	1,000	83
PS 2651 T2	PS 100, PS 150 PS 200 2T3	5"		92
PS 2651 T3	PS 150 2T3 PS 100 2T3	8 ¼"		112

Use in pairs only

BEAM CLAMPS

Finish: Painted Green, or Electro-galvanized **Order By:** No. and Finish **Note:** Use in pairs or with other support

PS 686 – Beam Clamp

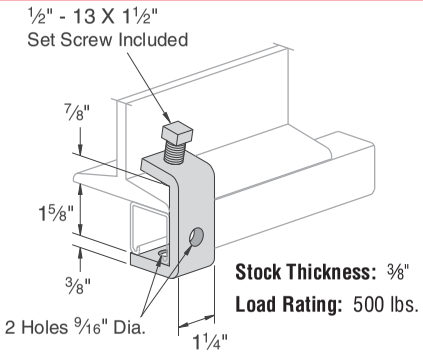


Use in pairs only

Load Rating:
600 lbs. with 12 ga. channel
500 lbs. with 14 ga. channel

Weight/100 pcs: 26 lbs.

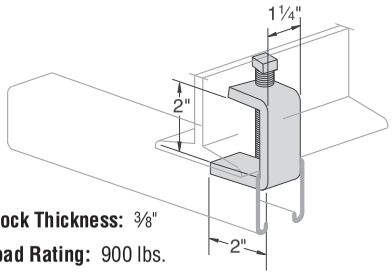
PS 684 – "I" Beam Clamp



Stock Thickness: ⅜"
Load Rating: 500 lbs.

Weight/100 pcs: 94 lbs.

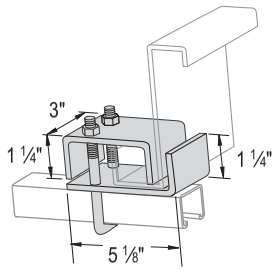
PS 916 – "I" Beam Clamp



Stock Thickness: ⅜"
Load Rating: 900 lbs.
Design loads are per pair of clamps

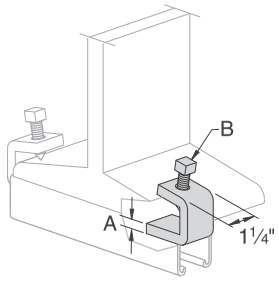
Weight/100 pcs: 72 lbs.

PS 2653 – Purlin Clamp



Part No.	Use With	Load Rating	Wt./100 pcs.
PS 2653 T1	PS 200, PS 210, PS 300	1,200	175
PS 2653 T2	PS 100, PS 150, PS 200 2T3		179
PS 2653 T3	PS 100 2T3		179

PS 907, PS 998 – "I" Beam Clamp

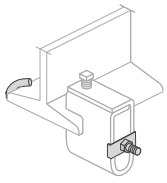


Part No.	Stock Thickness	Set Screw	Load Rating lbs.	Wt./100 pcs.
PS 907	¼"	⅜	450	26
PS 998	⅜"	½	1,000	64

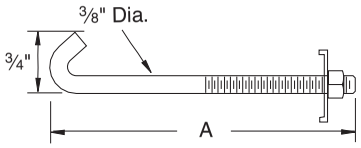
Load rating is based on 2 clamps
Use in pairs only

Maximum flange thickness is 1"

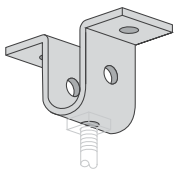
PS 736 – Hook Rod Assembly

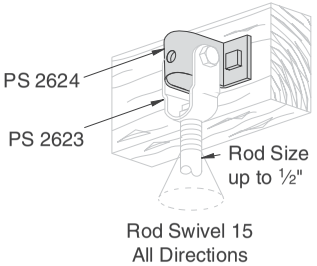


Part No.	Flange Width		A Size	Wt./100 pcs
	Max	Min		
PS 736 J6	7"	3"	8⅝"	24
PS 736 J10	11"	7"	12⅝"	33



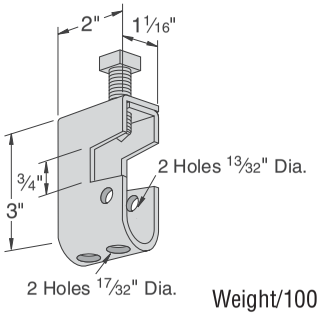
PS 2624 – Wood Beam Hanger





Weight/100 pcs: 22 lbs.

PS 2622 – Beam Clamp



Assembly including PS 736 also available.

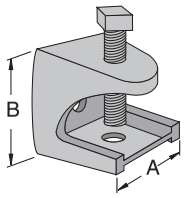
Order PS 2622/J6 or PS 2622/J10

Load Rating: 300 lbs.

Note:
Adaptable for ¼", ⅜" & ½" rod with PS 3201.

Weight/100 pcs: 41 lbs.

PS 85 – Rod or Insulator Support

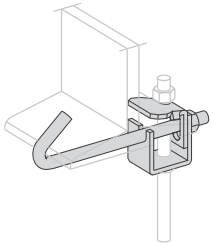


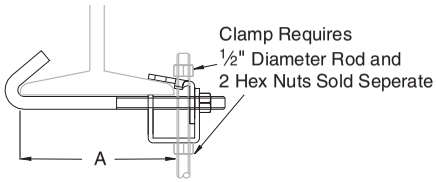
Rod Size	A	B	Load Ratings	Wt./100 pcs
¼"	1⅛"	1¼"	150	23
⅜"	2"	2"	350	95
½"	2⅝"	2¼"	400	195

Flange Thickness: ⅞" Maximum

Material: Malleable Iron

PS 2626 – Beam Clamp



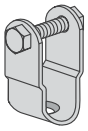


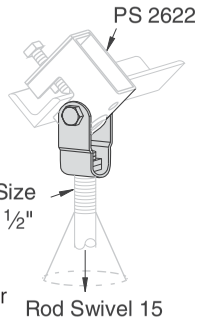
Finish: Plain, painted green or electro-galvanized

Load Rating: 500 lbs.

Part No.	"A" Range	Wt./100 pcs
PS 2626 6	2½ - 6"	125
PS 2626 9	5½ - 9"	140
PS 2626 12	8½ - 12"	171

PS 2623 – Swivel Adaptor

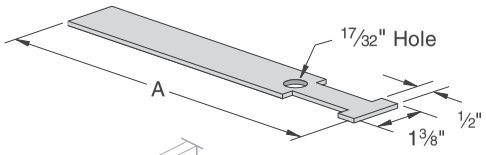


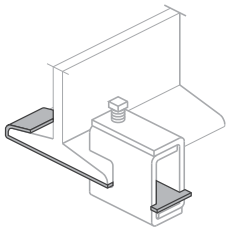


Use With:
PS 2622 Beam Clamp or
PS 2624 Wood Beam Hanger

Load Rating: 300 lbs.

PS 871 – Safety Anchor Strap

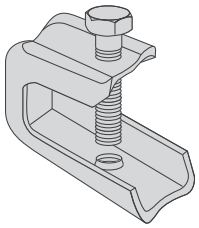




Use with:
PS 858,
PS 865
(Cannot be used with ⅝" rod size beam clamps and larger)

"A" Length	Wt./100 pcs
9"	33
12"	45
15"	57

PS 135X – Light Duty Beam Clamp



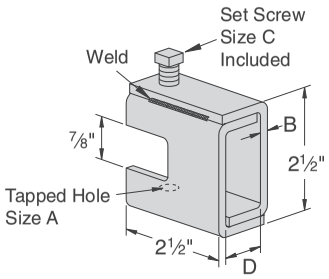
Material: Steel

Use With: ¼" rod

Load Rating: 75 lbs.

Weight/100 pcs: 14 lbs.

PS 858 – Heavy Duty Beam Clamp

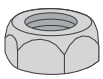


Weld is not continuous it is either 1¼" - 1¾" long or 2 spot welds.
All welds are on the top and bottom.

Part No.	"A" Rod Size	B	C	D	Load Ratings lbs.	Wt./100 pcs
PS 858 ¼	¼" - 20	⅛"	⅜" x 1½	⅞"	650	67
PS 858 5/16	5/16" - 18					67
PS 858 ⅜	⅜" - 16	3/16"	½" x 1½	15/16"	1,100	100
PS 858 ½	½" - 13	¼"			1,600	130
PS 858 ⅝	⅝" - 11	5/16"	⅝" x 1½	15/16"	2,400	160
PS 858 ¾	¾" - 10					160

For beams under ⅞" thick flange.

PS 3201 – Swivel Nut

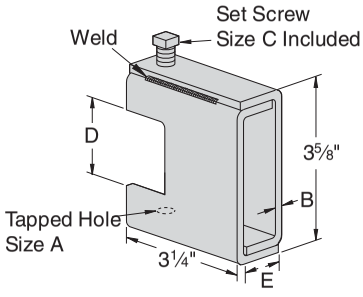


Use With:
PS 2622 Beam Clamp

Rod Size	Wt./100 pcs
¼"	4
⅜"	4
½"	3

Weight/100 pcs: 31 lbs.

PS 865 – Wide Throat Heavy Duty Beam Clamp



Part No.	Rod Size	B	C	D	E	Load Ratings lbs.	Wt./100 pcs
PS 865 ⅜	⅜"	3/16"	½"	1 11/16"	29/32"	1,100	151
PS 865 ½	½"	¼"			15/16"	1,600	195
PS 865 ⅝	⅝"	5/16"	⅝"		1 5/16"	2,400	225

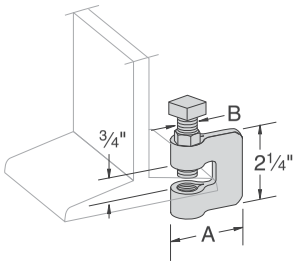
For beams between ¾" (19) to 1⅝" (41) thick flanges.

Weld is not continuous it is either 1¼" - 1¾" long or 2 spot welds. All welds are on the top and bottom.

BEAM CLAMPS

Finish: Painted Green, or Electro-galvanized **Order By:** No. and Finish **Note:** Use in pairs or with other support

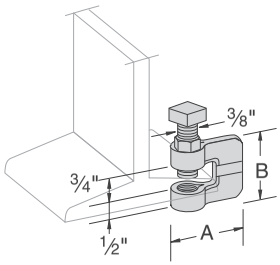
PS 95 – "C" Clamp



Rod Size	A	B	Load Rating	Wt./100 pcs
3/8"	2 5/16"	3/8"	330	35
1/2"	2 1/4"	1/2"	380	41
5/8"	2 3/8"	5/8"	450	67
3/4"	2 1/4"	1/2"	500	72

Material: Steel

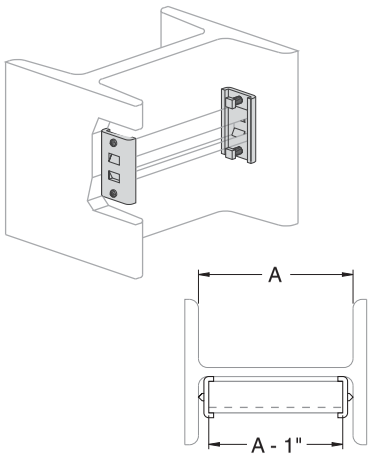
PS 86 – "C" Clamp



Rod Size	A	B	Load Rating	Wt./100 pcs
3/8"	1 11/16"	1 3/4"	400	38
1/2"	1 23/32"			52
5/8"	1 15/16"	2"	450	68
3/4"	2 1/32"		600	128

Material: Malleable Iron, Steel Set Screw

PS 2654 & PS 2654A – Column Attachment



PS 2654 Use with PS 200

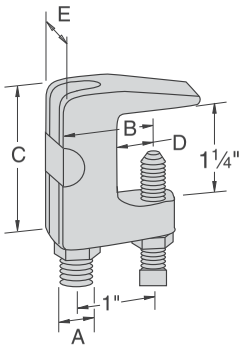
PS 2654A Use with PS 500

Slip Rating: 800 lbs.

Note: Column attachment can only be used in pairs.

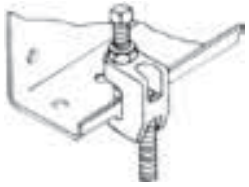
Weight/100 pcs: 41 lbs.

PS 93 – Universal "C" Clamp



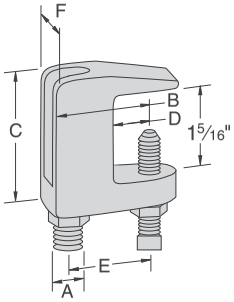
Material: Malleable Iron, Steel Set Screw

At least one full thread must be exposed

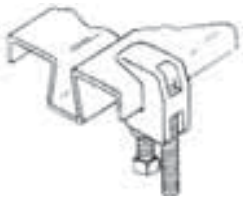


Part No.	Rod Size A	DIMENSIONS (Inches) B	C	D	E	Max. Pipe Size	Max. Load (Lbs.)	Wt/100 pcs
PS 93 3/8	3/8	1 5/8	2	3/4	7/8	2	400	28
PS 93 1/2	1/2	1 5/8	2	3/4	7/8	3 1/2	500	34
• Maximum temperature of 450° F								

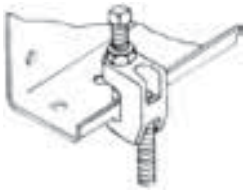
PS 94 – Wide Throat Top Beam "C" Clamp



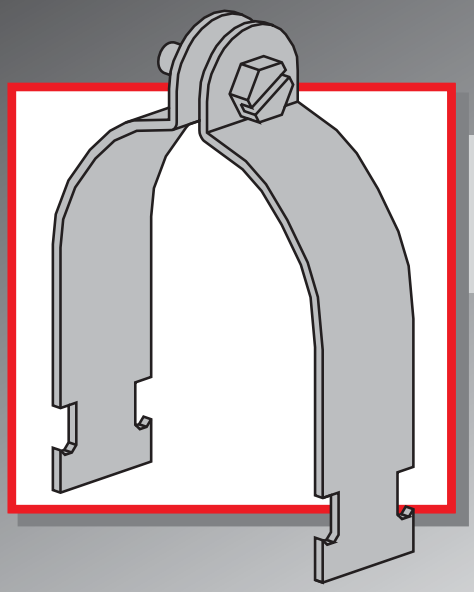
Material: Malleable Iron, Steel Set Screw



At least one full thread must be exposed



Part No.	Rod Size A	DIMENSIONS (Inches) B	C	D	E	F	Max Pipe Size	Max. Load (Lbs.)	Wt/100 pcs
PS 94 5/8	5/8	1 3/4	2 1/4	3/4	1 1/4	1	5	600	66
PS 94 3/4	3/4	1 7/8	2 3/8	3/4	1 3/8	1 1/4	8	800	83
• Maximum temperature of 450° F									



PIPE & CONDUIT CLAMPS

Power-Strut pipe, conduit and O.D. tubing clamps are formed in punch press dies in a wide selection of sizes to meet every requirement.

MATERIAL:

Power-Strut pipe, conduit and O.D. tubing clamps are made on punch press dies from hot rolled, pickled and oiled steel which conforms to the ASTM A-1008, A-1011 SS, A-575 and A-576 standards. Select sizes of O.D. tubing clamps are available in stainless steel or aluminum.

STANDARD FINISH:

All steel clamps are electro-galvanized. Select sizes of O.D. tubing clamps are available in copper plated finish. PVC coatings are available upon special request.

ORDERING INFORMATION:

When ordering, add the length or size and finish to the part number. See pages 8-9 for finish abbreviations and an example.

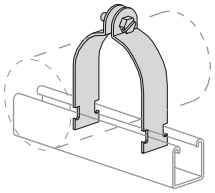
RECOMMENDED BOLT TORQUE:

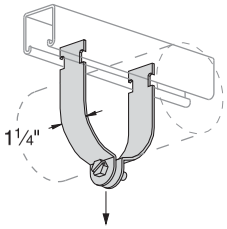
Bolt Size	1/4"–20	5/16"–18	3/8"–16	1/2"–13	5/8"–11	3/4"–10
Rec. Torque Ft/Lbs	6	11	19	50	100	125
Max. Torque Ft/Lbs	7	15	25	70	125	135

PIPE & CONDUIT CLAMPS

Finish: Electro-galvanized **Order By:** No., and Finish

PS 1000 – EMT Conduit Clamp

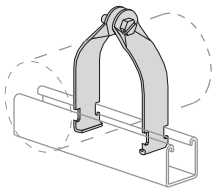


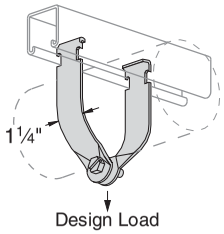


Note: For EMT larger than 2" use PS 1100

EMT Size	Stock Thickness	Hanging Load Rating/lbs.	Wt./100 pcs
½"	.060	400	11
¾"			12
1"	.075	600	15
1¼"			18
1½"	.105	800	29
2"			33

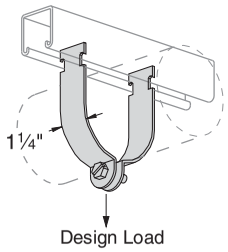
PS 1300 – Universal Clamp for EMT, IMC & GRC

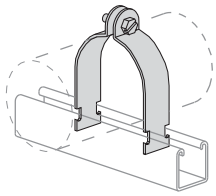




Nominal Size	Fits O.D.	Stock Thickness	Hanging Load Rating/lbs.	Wt./100 pcs
½"	0.706-0.840	.060	250	10
¾"	0.922-1.050	.060	400	11
1"	1.163-1.315			12
1¼"	1.510-1.660	.075	400	18
1½"	1.740-1.900	.075	500	20
2"	2.197-2.375			22

PS 1100, PS 1116, PS 1117 – Standard Pipe Clamp (GRC, IMC and SCH 40/SCH 80 steel pipe)



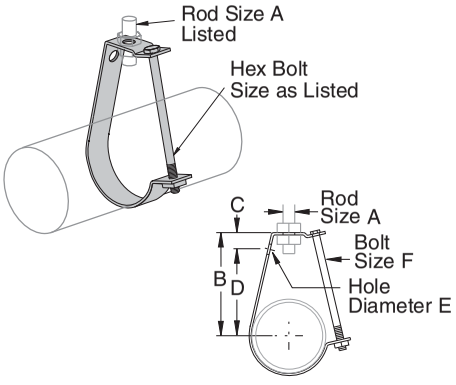


Material and finish are specified as:

1100 AL Alum. clamp, EG fasteners
1100 HG Clamp, Stainless Steel fasteners
1116 Alum. clamp and fasteners
1117 Alum. clamp, Stainless Steel fasteners
1100SS Stainless Steel clamp and fasteners

Pipe Size	Stock Thickness	Hanging Load Rating/lbs.	Wt./100 pcs
⅜"	.060	400	10
½"			11
¾"	.075	600	15
1"			17
1¼"			19
1½"	.105	800	29
2"			34
2½"			40
3"			47
3½"	.125	1,000	62
4"			67
5"			80
6"	.135		102
8"			130
10"			143
12"			174

PS 67 – "J" Pipe or Conduit Hanger

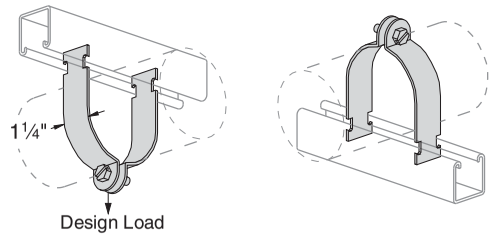


Hanger Rod Suspended

Conduit Size	A Rod Size	B	C	D	E	F	Load Rating/lbs.	Wt./100 pcs
½	⅜	2⅝	1	2	13/32	¼ x 2¼	400	20
¾		2⅞		2¼				21
1		3		2⅜		¼ x 2½		24
1¼		3¼		2½		¼ x 2¾		27
1½		3½		2⅝		¼ x 3		29
2		3¾	1⅛	2⅝		¼ x 3½		33
2½	½	4⅜	1⅛	3⅝	9/16	⅜ x 4½	800	71
3		4⅞		4		⅜ x 5		78
3½		5⅛		4¼		⅜ x 6		85
4	⅝	6⅛		5⅛				178
5		6¾		5¾		⅜ x 7½		199
6	¾	7¾	1¼	6½		⅜ x 8½	1,000	231
8	⅞	9¼	1¼	8		⅜ x 10	1,200	449

Notes:
Plastic Coated hanger is available ("N" Suffix).
Please contact factory for additional information.
Maximum operating temperature is 300°F
Minimum safety factor of five (5) on ultimate load.

PS 1200 – O.D. Tubing Clamp



Please contact factory for sizes & finishes not shown.

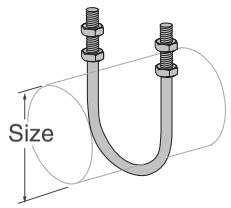
Note: Additional Available Finishes
SS - Stainless Steel
CC - Copper Coated

O.D. Size	Stock Thickness	Hanging Load Rating/lbs.	Wt./100 pcs
¼"	.060	400	8
⅜"			8
½"			9
⅝"			10
¾"			11
⅞"			12
1"	.075	600	14
1⅛"			15
1¼"			16
1⅜"			17
1½"			18
1⅝"			19
1¾"	.105	800	29
1⅞"			28
2"			31
2⅛"			32
2¼"			33
2⅜"			34
2½"			35
2⅝"			37
2¾"			38
2⅞"			40
3"			41

O.D. Size	Stock Thickness	Hanging Load Rating/lbs.	Wt./100 pcs
3⅛"	.105	800	43
3¼"			45
3⅜"			46
3½"			47
3⅝"			56
3¾"			58
3⅞"	.125	1,000	60
4"			62
4⅛"			62
4¼"			64
4⅜"			66
4½"			67
4⅝"			70
4¾"			72
4⅞"			73
5"			74
5⅛"			76
5¼"			77
5⅜"			78
5½"			79
5⅝"	.135	1,000	88
5¾"			90
5⅞"			92

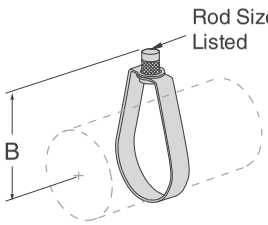
O.D. Size	Stock Thickness	Hanging Load Rating/lbs.	Wt./100 pcs
6"	.135	1,000	94
6⅛"			96
6¼"			98
6⅜"			99
6½"			100
6⅝"			102
6¾"			104
6⅞"			106
7"			108
7⅛"			110
7¼"			112
7⅜"			114
7½"			116
7⅝"			117
7¾"			119
7⅞"			121
8"			123
8⅛"			125
8¼"			126
8⅜"			128
8½"			129
8⅝"			130

PS 137 – Long Tangent "U" Bolt



Size	Wt./100 pcs
½"	21
¾"	28
1"	29
1¼"	31
1½"	33
2"	36
2½"	78
3"	88
3½"	94
4"	102

PS 69 – E-Z Grip Hanger

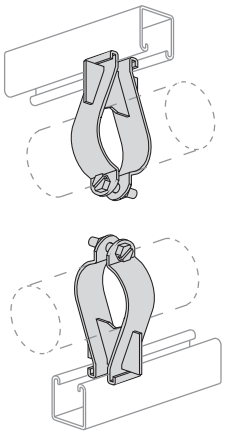


Size	A Rod Size	B	Load Rating Lbs/650	Wt./100 pcs
½"	⅜"	2¼"	300	9
¾"		2⁵⁄₁₆"		9
1"		2⁷⁄₁₆"		10
1¼"		2⅝"		10
1½"		2¾"		10
2"		3¼"		11
2½"		4"	525	25
3"		4⅜"		27
4"		4¹¹⁄₁₆"	600	48
5"	½"	5⁵⁄₁₆"	1000	53
6"		6⁷⁄₁₆"		100
7"		8"		100

PIPE & CONDUIT CLAMPS

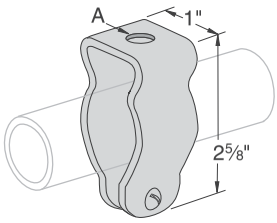
Finish: Electro-galvanized **Order By:** No., and Finish

PS 3138 – Parallel Run Pipe Clamp



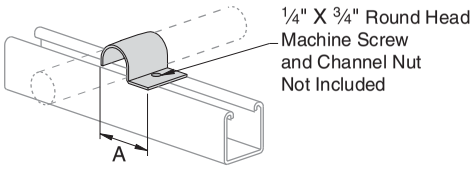
Pipe Size	Load Rating/lbs.	Wt./100 pcs
3/8"	300	27
1/2"		29
3/4"		30
1"	400	31
1 1/4"		38
1 1/2"	500	40
2"		47
2 1/2"		66
3"		78
3 1/2"		87
4"		90

PS 270 – Conduit Clamp



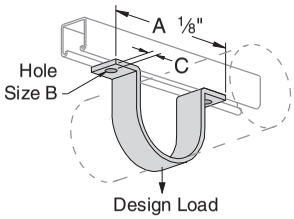
Size	A Diameter	Wt./100 pcs
3/8"	1/4"	6
1/2"		6
3/4"		8
1"		9
1 1/4"		11
1 1/2"		19
2"		27

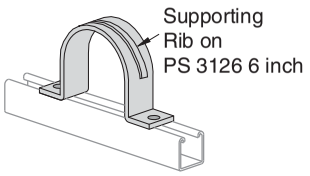
PS 1450 – One-Hole Clamp for O.D. Tubing



O.D. Size	A	Thickness Gages	Wt./100 pcs
1/4"	1 3/16"	16	4
3/8"	1 5/16"		5
1/2"	1 7/16"		6
5/8"	1 5/8"	14	8
3/4"	1 3/4"		9
7/8"	1 7/8"		10
1"	2"		11

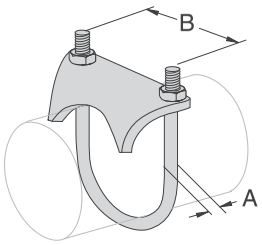
PS 3126 – One-Piece Pipe Strap





Pipe Size	A	B	C	Design Load/lbs.	Wt./100 pcs
1/2"	2 7/8"	9/32"	7/16"	500	23
3/4"	3 1/8"				26
1"	3 3/8"				31
1 1/4"	3 3/4"				35
1 1/2"	3 7/8"				39
2"	5 3/4"	7/16"	11/16"	1,000	94
2 1/2"	6 1/4"				114
3"	6 7/8"				133
3 1/2"	7 3/8"				152
4"	7 7/8"				176
5"	9"				198
6"	10"				225

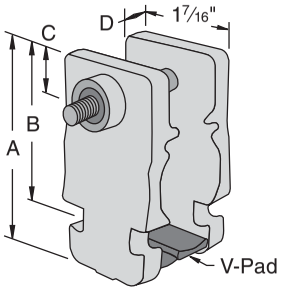
PS 51 – Right Angle Pipe or Conduit Clamp



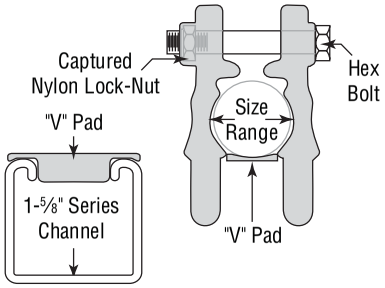
Material: Malleable Iron

Size	A Diameter	B	Wt./100 pcs
3/8"	5/16"	15/16"	25
1/2"		1 3/16"	41
3/4"		1 7/16"	42
1"		1 11/16"	47
1 1/4"		2"	54
1 1/2"		2 5/16"	57
2"	3/8"	2 3/16"	85
2 1/2"		3 3/8"	106
3"		4 1/8"	110
3 1/2"		4 5/8"	128
4"		5 1/8"	140

PS TP-025 thru PS TP-100 – Cush-A-Grip®



Part No.	Nominal Pipe Size	Dimensions (In.) "A"	"B"	"C"	"D"	Hex Head Cap Screw & Lock Nut	Wt/100 pcs Lbs
PS TP-025	¼	1 15/16	1 3/8	3/8	3/16	¼-20 x 1½"	4
PS TP-625	3/8	2 3/8	1 5/8	7/16	¼	¼-20 x 2"	6
PS TP-875	½	2 9/16	1 13/16		5/16		8
PS TP-100	¾	2 11/16	1 15/16		5/16		8



Tube Sizes

Part No.	O.D. Tube Sizes			Diameters	PullOut Load/Lbs	Slip Load/Lbs
PS TP-025	¼	3/8	½	0.25 - 0.54	500	40
PS TP-625	5/8	¾	7/8	0.62 - 0.87		
PS TP-875	7/8	1	1⅛	0.87 - 1.12		
PS TP-100	1	1⅛	1¼	1.00 - 1.31		

Pipe Sizes

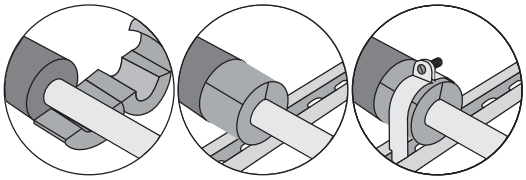
Part No.	Nominal Pipe Sizes		Diameters	PullOut Load/Lbs	Slip Load/Lbs
PS TP-025	¼		0.25 - 0.54	500	40
PS TP-625	3/8	½	0.62 - 0.87		
PS TP-875	¾		0.87 - 1.12		
PS TP-100	¾	1	1.00 - 1.31		

Includes: Cushion, V-pad, and Hardware.
Materials: Cushion: Thermoplastic elastomer.
Hardware: Stainless Steel with Captured Nylon Locknut
Temperature Rating: -40°F to +275°F

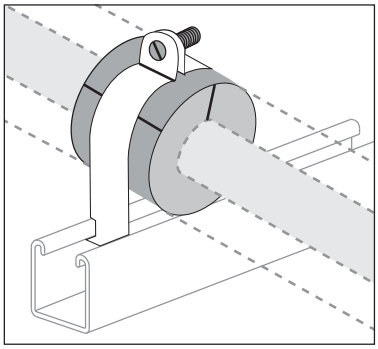
PS CT-3/8 thru PS CT1-4-1/8 – Cush-A-Therm™

The only airtight, crush-resistant insulation clamp on the market.

- Maintains thermal barrier protection
- Prevents condensation
- Properly supports pipe and tube
- Absorbs vibration



1. Insulation slides over pipes
2. Pipe hanger inserts are put in place and glued to insuation.
3. Joints are wrapped and sealed with ProTape.



Nominal ¾" Wall

Part No.	Hole Size	Copper Nom. I.D.	O.D.	IPS	O.D.	Length
PS CT-3/8	3/8 ID	¼	3/8	-	1.81	2.17
PS CT-½	½ ID	3/8	½	¼	1.89	
PS CT-5/8	5/8 ID	½	5/8	3/8	2.05	
PS CT-¾	¾ ID	5/8	¾	-	2.22	
PS CT-7/8	7/8 ID	¾	7/8	½	2.44	
PS CT-1-1/8	1⅛ ID	1	1⅛	¾	2.76	
PS CT-1-3/8	1⅜ ID	1¼	1⅜	1	3.19	2.56
PS CT-1-5/8	1⅝ ID	1½	1⅝	1¼	3.35	
PS CT-2-1/8	2⅛ ID	2	2⅛	-	3.86	
PS CT-2-1/8	2⅛ ID	2¼	2⅜	2	4.29	2.96
PS CT-2-5/8	2⅝ ID	2½	2⅝	-	4.87	
PS CT-3-1/8	3⅛ ID	3	3⅛	-	5.00	3.35
PS CT-3-5/8	3⅝ ID	3½	3⅝	-	5.94	3.94
PS CT-4-1/8	4⅛ ID	4	4⅛	3½	6.14	

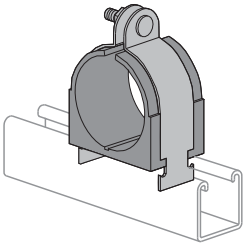
Nominal 1" Wall

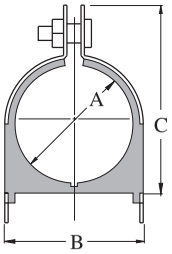
Part No.	Hole Size	Copper Nom. I.D.	O.D.	IPS	O.D.	Length
PS CT1-5/8	5/8 ID	½	5/8	3/8	2.54	2.17
PS CT1-¾	¾ ID	5/8	¾	-	2.82	
PS CT1-7/8	7/8 ID	¾	7/8	½	2.82	
PS CT1-1-1/8	1⅛ ID	1	1⅛	¾	3.06	
PS CT1-1-3/8	1⅜ ID	1¼	1⅜	1	3.33	2.56
PS CT1-1-5/8	1⅝ ID	1½	1⅝	1¼	3.65	
PS CT1-2-1/8	2⅛ ID	2	2⅛	-	4.16	
PS CT1-2-3/8	2⅜ ID	2¼	2⅜	2	3.92	
PS CT1-2-5/8	2⅝ ID	2½	2⅝		4.87	2.96
PS CT1-3-1/8	3⅛ ID	3	3⅛	-	5.14	3.35
PS CT1-3-5/8	3⅝ ID	3½	3⅝	-	6.48	3.94
PS CT1-4-1/8	4⅛ ID	4	4⅛	3½	6.48	

PIPE & CONDUIT CLAMPS

Finish: Electro-galvanized **Order By:** No., and Finish

PS 004T – PS 106N – Cush-a-Clamp® Assembly Pipe & Tube Series





Clamp: Electro-galvanized or stainless steel

Cushion: Thermoplastic elastomer resistant to the effects of most oils, chemicals and industrial cleaning compounds in temperatures from -50°F to 275°F.
UV Resistent

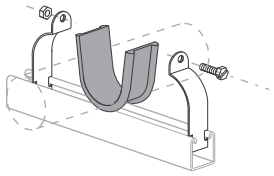
Includes: Cushion, Clamp and Hardware

Controlled Squeeze: Parts with the letter "T" have a Controlled Squeeze shoulder Bolt. Available on tube sizes ¼" thru 1⅜"

Pipe Series					
Part No.	Pipe Size (Nominal)	Dimensions			Wt./100 pcs
		A	B	C	
PS 009N	¼"	0.54	0.98	1.34	13
PS 011N	⅜"	0.67	1.13	1.54	14
PS 014N	½"	0.84	1.29	1.82	15
PS 017N	¾"	1.05	1.50	2.08	17
PS 021N	1"	1.31	1.76	2.34	19
PS 027N	1¼"	1.66	2.17	2.73	35
PS 030N	1½"	1.90	2.35	2.86	41
PS 038N	2"	2.37	2.82	3.67	49
PS 046N	2½"	2.87	3.32	4.17	57
PS 056N	3"	3.50	3.95	4.79	55
PS 064N	3½"	4.00	4.45	5.42	88
PS 072N	4"	4.50	4.95	5.92	110
PS 089N	5"	5.56	6.01	6.92	130
PS 106N	6"	6.62	7.07	8.23	140

Tube Series						
Part No.	Copper & Steel Tube O. D. Size	Copper Water Pipe (Nominal)	Dimensions			Wt./100 pcs
			A	B	C	
PS 004T	¼"		0.25	0.62	0.98	10
PS 006T	⅜"	¼"	0.37	0.82	1.13	11
PS 008T	½"	⅜"	0.50	0.94	1.34	13
PS 010T	⅝"	½"	0.62	1.06	1.54	14
PS 012T	¾"	⅝"	0.75	1.2	1.68	14
PS 014T	⅞"	¾"	0.87	1.31	1.82	15
PS 016T	1"		1.00	1.44	1.95	17
PS 018T	1⅛"	1"	1.12	1.57	2.08	18
PS 020T	1¼"		1.25	1.70	2.21	18
PS 022T	1⅜"	1¼"	1.37	1.82	2.34	20
PS 024N	1½"		1.50	1.95	2.47	33
PS 026N	1⅝"	1½"	1.62	2.07	2.60	35
PS 028N	1¾"		1.75	2.20	2.73	37
PS 030N	1⅞"		1.87	2.32	2.86	39
PS 032N	2"		2.00	2.45	3.04	41
PS 034N	2⅛"		2.12	2.57	3.23	46
PS 038N	2⅜"		2.37	2.82	3.67	47
PS 040N	2½"		2.50	2.94	3.79	49
PS 042N	2⅝"		2.62	3.07	3.92	51
PS 046N	2⅞"		2.87	3.32	4.17	55
PS 048N	3"		3.00	3.57	4.42	57
PS 050N	3⅛"		3.12	3.57	4.42	60
PS 056N	3½"		3.50	3.95	4.79	55
PS 058N	3⅝"		3.62	4.2	5.11	70
PS 064N	4"		4.00	4.45	5.42	88
PS 066N	4⅛"		4.12	4.57	5.54	94
PS 072N	4½"		4.50	4.95	5.92	110
PS 082N	5⅛"		5.12	5.57	6.54	125
PS 098N	6⅛"		6.12	6.57	7.54	130

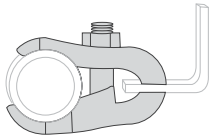
PS 3792 – Power-Wrap™



Material: EPDM
Stock Thickness: ⅛"
Stock Length: 25 ft./box
Service Temp: -70˚ to 350˚ F

Weight/100 boxes: 253 lbs.

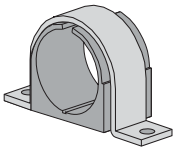
PS 52E – Parallel Pipe and Conduit Clamp

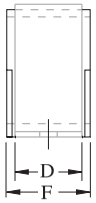


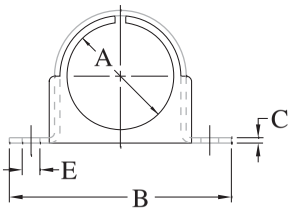
Material: Malleable Iron

Size	Wt./100 pcs
½"	59
¾"	64
1"	70
1¼"	72
1½"	93
2"	128
2½"	135
3"	155
3½"	190
4"	205

PS 004M – PS 038M – Cush-a-Clamp® Assembly Omega Series







Includes: clamp and cushion.
Materials
Clamp: ZD or Stainless Steel
Cushion: Thermoplastic elastomer

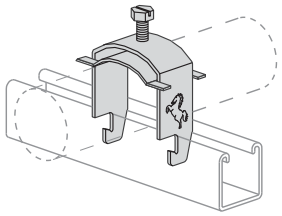
Part No.	Copper Tubing O.D. Size	Water Pipe (Nominal)	Pipe Size (Nominal)	Dimensions						Wt./100 pcs
				A	B	C	D	E	F	
PS 004M	¼"	–	–	0.25	1.81	0.06	0.62	0.20	0.78	3.4
PS 006M	⅜"	¼	–	0.37	1.90			0.20	0.81	4.0
PS 008M	½"	⅜	¼"	0.50	2.20		0.75	0.26	0.98	5.5
PS 010M	⅝"	½	⅜"	0.62	2.32					6.0
PS 012M	¾"	⅝	–	0.75	2.41					6.5
PS 014M	⅞"	¾	½"	0.87	2.56					7.1
PS 016M	1"	–	–	1.00	2.68					7.8
PS 018M20	–	–	¾"	1.05	2.68					8.1
PS 018M21	1⅛"	1	–	1.12	2.82					8.4
PS 020M	1¼"	–	–	1.25	3.00	0.08	1.25	0.26	1.56	17
PS 021M	–	–	1"	1.31	3.12					20
PS 022M	1⅜"	1¼	–	1.37	3.12					19
PS 024M	1½"	–	–	1.50	3.65					20
PS 026M	1⅝"	1½	–	1.62	3.77					23
PS 027M	–	–	1¼"	1.66	3.90	0.10	1.25	0.33	1.56	32
PS 028M	1¾"	–	–	1.75	3.90					32
PS 030M	1⅞"	–	1½"	1.87	4.02					34
PS 032M	2"	–	–	2.00	4.15					36
PS 034M	2⅛"	–	–	2.12	4.40					41
PS 038M	–	–	2"	2.37	4.71					44

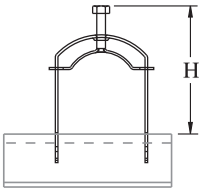
Note: Cannot be used on slot side of metal framing channel.

PIPE & CONDUIT CLAMPS

Finish: Electro-galvanized **Order By:** No., and Finish

PS MU-¼ thru PS MU-4 – Mustang Universal One-Piece Pipe, Conduit (GRC, EMT & IMC) and Tubing Clamps

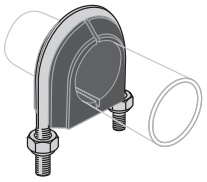




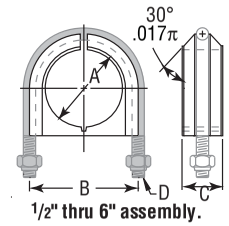
Part No.	Nominal Trade Size	OD		Height Above Channel "H"	
		Min	Max	Min	Max.
PS MU-¼	¼"	0.250"	0.540"	1¾"	2"
PS MU-⅜	⅜"	0.500"	0.675"	1⅞"	2⅛"
PS MU-½	½"	0.625"	0.840"	2"	2¼"
PS MU-¾	¾"	0.875"	1.050"	2¼"	2½"
PS MU-1	1"	1.125"	1.315"	2½"	2¾"
PS MU-1-¼	1¼"	1.375"	1.660"	2¾"	3⅛"
PS MU-1-½	1½"	1.625"	1.900"	3"	3⅜"
PS MU-2	2"	2.000"	2.375"	3½"	3⅞"
PS MU-2-½	2½"	2.500"	2.875"	4¼"	4⅝"
PS MU-3	3"	3.000"	3.500"	4⅞"	5⅜"
PS MU-3-½	3½"	3.625"	4.000"	5⅜"	5⅞"
PS MU-4	4"	4.125"	4.500"	5⅞"	6⅜"

Note:
Available in 14 ga. Electro-galvanized steel

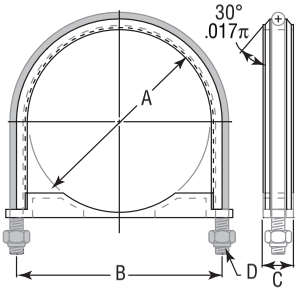
PS UB ½ – PS UB 10 – Cush-a-Clamp® Assembly U–Bolt Series



Includes: U-bolt, cushion, and hardware.
Materials: U-Bolt: Electrogalvanized finish or Type 316 SS
Cushion: Thermoplastic elastomer
Note: Not intended for use with metal framing components due to the length of the thread.



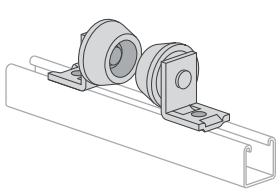
½" thru 6" assembly.

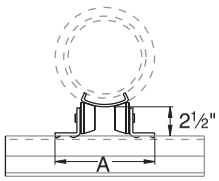


8" thru 12" assembly
Two piece cushion design

Part No.	Pipe Size	Dimensions				Wt./100 Pcs
		A	B	C	D	
PS UB ½	½"	0.84	1.60	0.68	¼-20 UNC-2B	9
PS UB ¾	¾"	1.05	1.80			10
PS UB 1	1"	1.31	2.05			12
PS UB 1-¼	1¼"	1.66	2.55	1.24	⅜-16 UNC-2B	32
PS UB 1-½	1½"	1.90	2.80			36
PS UB 2	2"	2.37	3.35			42
PS UB 2-½	2½"	2.87	3.90	1.24	½-13 UNC-2B	72
PS UB 3	3"	3.50	4.55			84
PS UB 3-½	3½"	4.00	5.05			93
PS UB 4	4"	4.50	5.50			102
PS UB 5	5"	5.56	6.56			123
PS UB 6	6"	6.62	7.75	1.44	⅝-11 UNC-2B	243
PS UB 8	8"	8.62	9.82			293
PS UB 10	10"	10.75	12.16	1.65	¾-10 UNC-2B	492

PS 1901 – Two-Piece Pipe Roller





Use With: ½"-4" pipe

Load Rating: 500 lbs.

Material:
Bracket - steel;
Roller - cast iron (or aluminum)

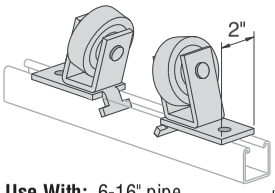
Finish: Green or galvanized;
Roller - plain

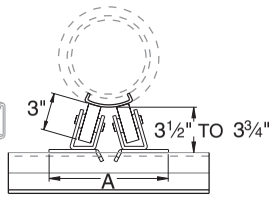
Weight/100 pair: 268 lbs.

Chart for Dimension A

Pipe Size	No Insulation	Insulation Thickness 1"	1½"	2"	2½"	3"	4"
½"	6½"	6½"	–	–	–	–	–
¾"			6⅝"	6⅞"			
1"							
1¼"			6⅞"	7⅛"	7⅜"		
1½"							
2"		6⅝"	7⅛"	7⅜"	7½"	8"	
2½"							
3"		7"	7½"	7¾"	7⅞"	8⅛"	
3½"							
4"	6⅝"	7¼"	7⅝"	7⅞"	8"	8⅜"	9"

PS 815 – Two-Piece, Heavy Duty Pipe Roller





Use With: 6-16" pipe

Material:
Bracket - steel; Roller - cast iron

Finish: Green or galvanized; Roller - plain

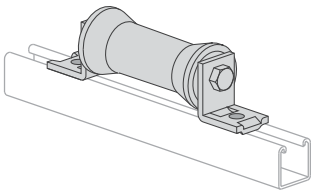
Load Rating: 1500 lbs.

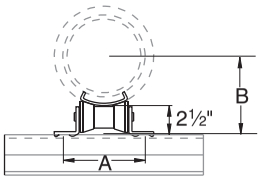
Weight/100 pair: 680 lbs.

Chart for Dimension A

Pipe Size	No Insulation	Insulation Thickness 1"	1½"	2"	2½"	3"	4"
6"	9½"	10¼"	10½"	10¾"	11"	11⅜"	11⅞"
8"	10⅛"	–	11"	11⅜"	11¾"	12"	12½"
10"	10¾"		11⅝"	12"	12¼"	12½"	13"
12"	11¼"		12⅛"	12½"	12¾"	13"	13½"
14"	11⅝"		12½"	12⅞"	13"	13⅜"	14"
16"	12⅛"		13"	13⅜"	13⅞"	14"	14½"

PS 1911 – Pipe Roller





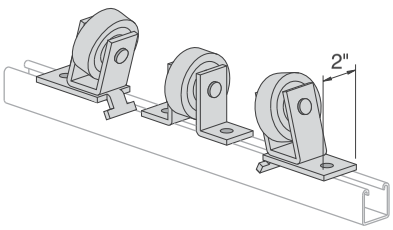
Material: Brackets and shaft - steel; Rollers - cast iron

Finish: Brackets - painted green or galvanized; Shaft - electro-galvanized; Rollers - plain

Load Rating: 950 lbs.

Size	Fits Pipe Size	A	B	Wt./100 pcs
2 – 3-½"	2"	5"	3"	160
	2½"		3¼"	
	3"		3⅝"	
4 – 6"	3½"	5"	3⅞"	215
	4"	5⅞"	4⁵⁄₁₆"	
	5"		4⅞"	
8 – 10"	6"	5⅞"	5⁷⁄₁₆"	525
	8"	8⁵⁄₁₆"	7⅛"	
	10"		8¼"	
12 – 14"	12"	10⅞"	9⅞"	1,025
	14"		10½"	

PS 816 – Three Piece, Heavy Duty Pipe Roller



Use With: 16-24" pipe

Material: Brackets - steel; Roller - cast iron

Finish: Brackets - painted green or galvanized; Roller - plain

Load Rating: 2,000 lbs.

Chart for Dimension A

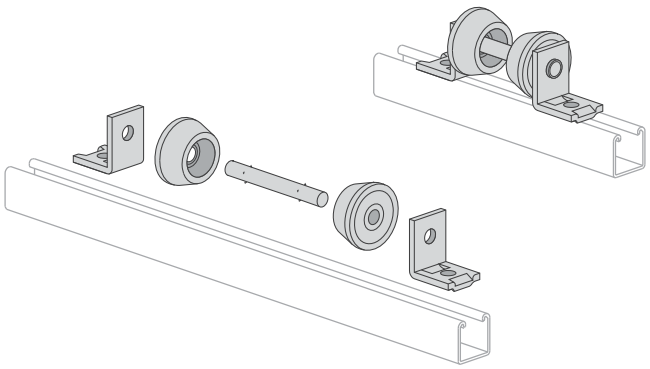
Pipe Size	Insulation Thickness 1½"	2"	2½"	3"	4"
16"	–		13⅞"	14"	14½"
18"	13⅝"	14"	14⅛"	14½"	15"
20"	14⅛"	14½"	14¾"	15"	15½"
24"	15¼"	15½"	15⅞"	16⅛"	16⅝"

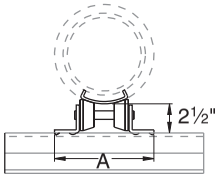
Weight/100 units: 1,046 lbs.

ROLLERS

Order By: No. and Finish

PS 1902 – Pipe-Roller Assembly





Material:
Brackets and shaft - steel;
Rollers - cast iron

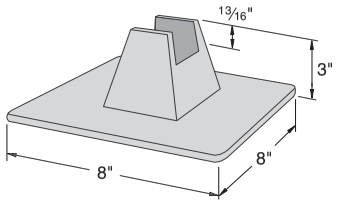
Finish:
Brackets - painted green or galvanized;
Shaft - electro-galvanized; Rollers - plain

Load Rating: 750 lbs.

Part No.	A	Wt./100 pcs.
PS 1902 - 1"-2"	6¾	299
PS 1902 - 2½"-3½"	7½	304
PS 1902 - 4"-6"	8½	311
PS 1902 - 8"	9⁹⁄₁₆	319

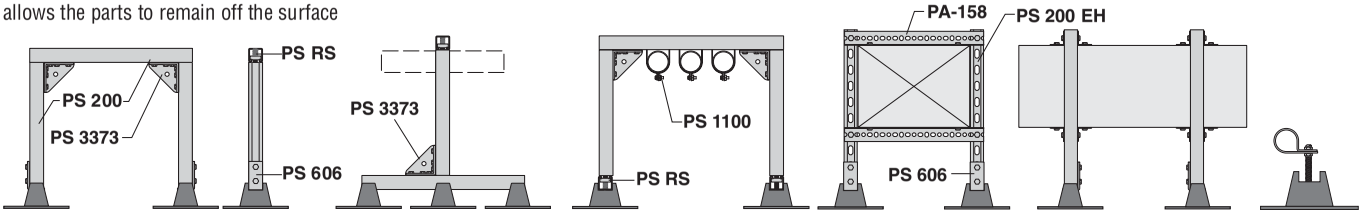
<table>
<tr><th rowspan="2">Pipe Size</th><th rowspan="2">No Insulation</th><th colspan="6">Insulation Thickness</th></tr>
<tr><th>1"</th><th>1½"</th><th>2"</th><th>2½"</th><th>3"</th><th>4"</th></tr>
<tr><td>½"</td><td rowspan="8">PS 1902 - 1"-2"</td><td rowspan="4">PS 1902 - 1"-2"</td><td rowspan="2">PS 1902 - 1"-2"</td><td rowspan="4">PS 1902 - 2½"-3½"</td><td rowspan="2">–</td><td rowspan="4">–</td><td rowspan="8">–</td></tr>
<tr><td>¾"</td></tr>
<tr><td>1"</td><td rowspan="4">PS 1902 - 2½"-3½""</td></tr>
<tr><td>1¼"</td><td rowspan="3">PS 1902 - 2½"-3½"</td></tr>
<tr><td>1½"</td><td rowspan="4">PS 1902 - 4"-6"</td><td rowspan="4">PS 1902 - 4"-6"</td></tr>
<tr><td>2"</td><td rowspan="3">PS 1902 - 2½"-3½"</td></tr>
<tr><td>2½"</td><td rowspan="3">PS 1902 - 4"-6"</td></tr>
<tr><td>3"</td><td rowspan="2">PS 1902 - 4"-6"</td></tr>
<tr><td>3½"</td></tr>
<tr><td>4"</td><td rowspan="3">PS 1902 - 2½"-3½"</td><td rowspan="3">PS 1902 - 4"-6"</td><td rowspan="2">PS 1902 - 4"-6"</td><td rowspan="3">PS 1902 - 8"</td><td rowspan="3">PS 1902 - 8"</td></tr>
<tr><td>5"</td></tr>
<tr><td>6"</td><td rowspan="2">PS 1902 - 4"-6"</td><td rowspan="2">PS 1902 - 4"-6"</td></tr>
<tr><td>8"</td><td>PS 1902 - 8"</td><td>PS 1902 - 8"</td><td>PS 1902 - 8"</td></tr>
</table>

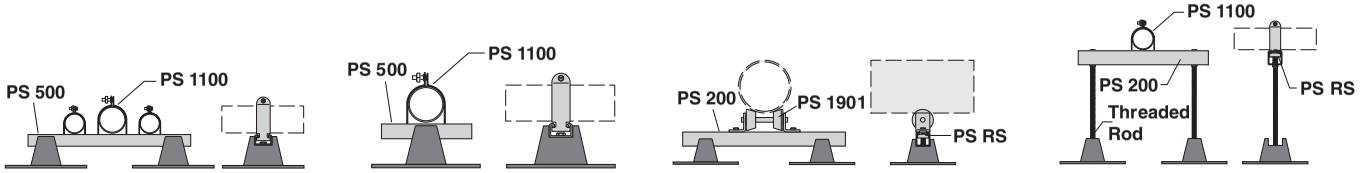
PS PP – Power-Pier

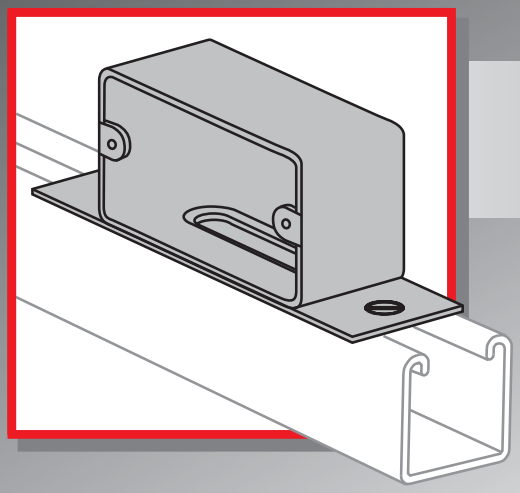


The Power-Pier Rooftop support system provides a simple and versatile way to support and manage pipe, tubing, conduit, HVAC systems, and the like. The Power-Pier system supports without roof surface penetration and allows the parts to remain off the surface

Part Number	Power-Pier Bases Qty.	Description
PS PP	4	Power-Pier Base Only (4 Bases & Hardware)
PS-SPSS-6 HG	4	PS PP + 4 Pcs PS 500 EH HG @ 6" Long for up to 3½" Pipe
PS-SPSS-10HG	4	PS PP + 4 Pcs PS 500 EH HG @ 10" Long for 4" to 8" Pipe
PS-MPDS-26HG	4	PS PP + 2 Pcs PS 200 EH HG @ 26" Long for Trapeze
PS-MPDS-38HG	4	PS PP + 2 Pcs PS 200 EH HG @ 38" Long for Trapeze
PS-MPDS-50HG	4	PS PP + 2 Pcs PS 200 EH HG @ 50" Long for Trapeze
PS-MPDS-62HG	4	PS PP + 2 Pcs PS 200 EH HG @ 62" Long for Trapeze







ELECTRICAL

Power-Strut offers a versatile means of supporting lighting, conduits, cable and other portions of an electrical system. Power-Strut is listed as an electrical raceway by Underwriters laboratories as specified by the National Electric Code (Article 384), and CSA approved in accordance with the Canadian Electrical Code (Part 1).

MATERIAL:

Power-Strut electrical raceways are cold formed from low carbon steel and meet the requirements of ASTM A-1011 Grade 33 in painted green or ASTM A-653 Grade 33 in pre-galvanized material. Plain or electro-galvanized fittings conform to the ASTM A-635 or ASTM A-36 standards while pre-galvanized fittings meet the requirements of ASTM A-653 Grade 33.

STANDARD LENGTHS:

Standard lengths of electrical raceway are 10 and 20 feet.
The Power-Strut closure strips are available only in 10 feet lengths.

STANDARD FINISH:

Electrical raceway channel is available in a painted green or pre-galvanized finish. All Power-Strut fittings are available in painted green or electro-galvanized finish. Many fittings are available in pre-galvanized.

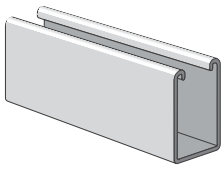
ORDERING INFORMATION:

When ordering, add the length or size and finish to the part number. See pages 8-9 for finish abbreviations and an example.

LISTINGS:

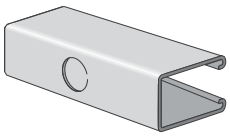
UL File No. E27817 - Channel & Closure Strips
UL File No. E27818 - Fittings
CSA File No. 091312

Solid Raceway*



Part No.	Section Height
PS 100	3¼"
PS 150	2 7⁄16"
PS 200	1⅝"
PS 210	1⅝"
PS 300	1⅜"
PS 400	1"
PS 500	13⁄16"

Knock-Out Raceway*



Part No.	Section Height
PS 100 KO6	3¼"
PS 150 KO6	2 7⁄16"
PS 200 KO6	1⅝"
PS 210 KO6	1⅝"
PS 300 KO6	1⅜"
PS 400 KO6	1"

Maximum Number of Wires Types

AVB, FEP, FEBP, RH, RHH, RHW, RUH, RUW, T, TW, THHN, THWN, THW, XHHW

	Raceway Part Numbers	Wt./ 100 Ft.	Height of Section Inches	Wire Size AWG*				
				14	12	10	8	6
Table A – Maximum number of conductors when raceway is installed to support and supply electric discharge type lighting fixtures when raceway wiring is suitable for at least 75 C. EXCEPTION: Wire suitable for 60 C may be used when clearance between raceway and fixtures is at least ½ inch.	PS 100, PS 100 K06	305	3¼"	10	10	8	6	4
	PS 150, PS 150 K06	247	2 7⁄16"	10	10	8	6	4
	PS 200, PS 200 K06	190	1⅝"	6	6	5	4	2
	PS 210, PS 210 K06	141	1⅝"	6	6	5	4	2
	PS 300, PS 300 K06	170	1⅜"	5	4	4	3	2
	PS 400, PS 400 K06	146	1"	4	3	0	0	0
	PS 500	97	13⁄16"	4	3	0	0	0
Table B – Maximum number of conductors when raceway is installed to support and supply electric discharge type lighting fixtures when raceway wiring is suitable for at least 75 C and clearance between raceway and fixtures is at least ⅛ inch.	PS 100, PS 100 K06	305	3¼"	10	10	10	9	6
	PS 150, PS 150 K06	247	2 7⁄16"	10	10	10	8	6
	PS 200, PS 200 K06	190	1⅝"	10	10	8	6	3
	PS 210, PS 210 K06	141	1⅝"	10	10	8	6	3
	PS 300, PS 300 K06	170	1⅜"	10	10	6	4	2
	PS 400, PS 400 K06	146	1"	6	6	0	0	0
	PS 500	97	13⁄16"	6	6	0	0	0
Table C – Maximum number of conductors when raceway is not employed with fixtures OR where the clearance between the raceway and fixtures is greater than ½ inch.	PS 100, PS 100 K06	305	3¼"	50	42	35	20	13
	PS 150, PS 150 K06	247	2 7⁄16"	36	29	25	14	9
	PS 200, PS 200 K06	190	1⅝"	22	18	15	9	5
	PS 210, PS 210 K06	141	1⅝"	24	20	17	10	6
	PS 300, PS 300 K06	170	1⅜"	18	15	13	7	5
	PS 400, PS 400 K06	146	1"	11	9	7	4	3
	PS 500	97	13⁄16"	9	7	6	4	2
Table D – CSA Certified Maximum number of wires Types R, RW, RWU, T, TW	PS 100, PS 100 K06	305	3¼"	10	10	8	6	4
	PS 150, PS 150 K06	247	2 7⁄16"	10	10	8	6	4
	PS 200, PS 200 K06	190	1⅝"	8	8	5	4	3
	PS 210, PS 210 K06	141	1⅝"	8	8	5	4	3
	PS 300, PS 300 K06	170	1⅜"	8	6	5	3	2
	PS 400, PS 400 K06	146	1"	4	3	0	0	0
	PS 500	97	13⁄16"	4	3	0	0	0

*In all cases, the snap-in-cover, PS 707, is required to complete raceway enclosures.

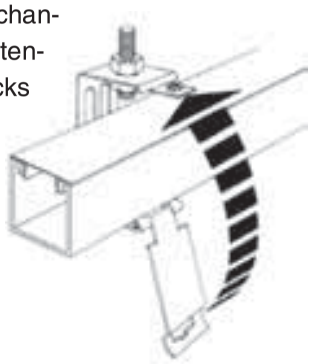
Also UL Listed: PS 100 2T3, PS 150 2T3, PS 200 2T3, PS 210 2T3, PS 300 2T3, PS 400 2T3, and PS 500 2T3

To Install Channel

1. Suspend and align PS-2632 Channel hanger from threaded rod at pre-determined level.

2. At floor working level install wiring in channel raceway and add a channel closure strip.

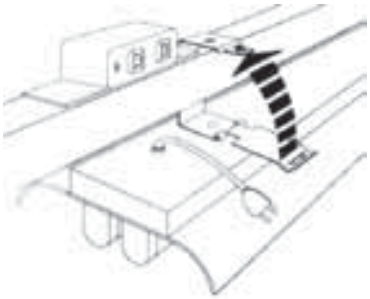
3. Lay raceway into pre-hung channel hanger. Close snap fastening door which securely locks raceway into position.

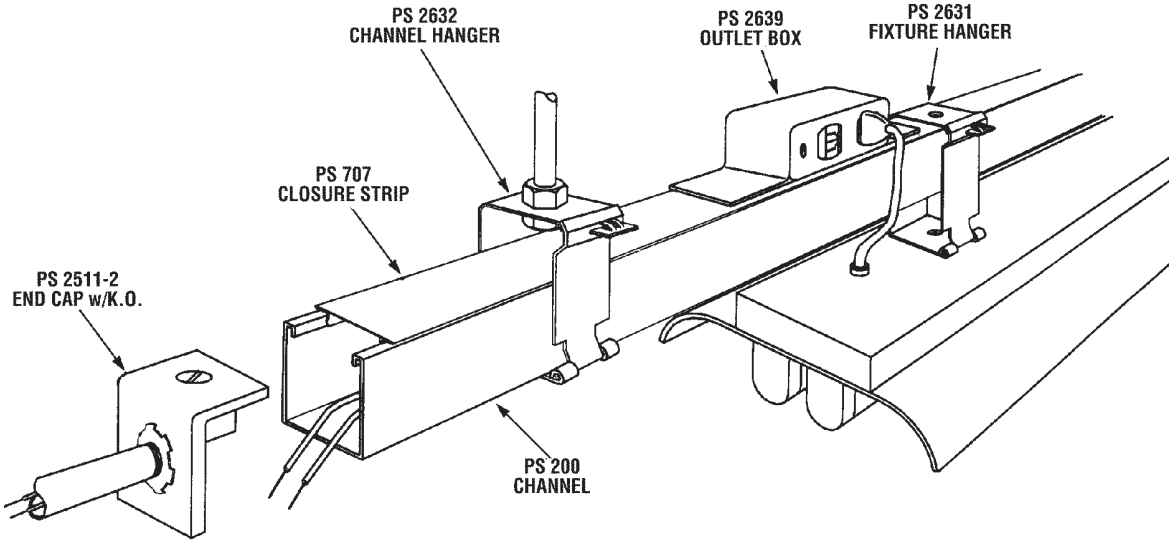


To Install Fluorescent Fixture

1. Attach PS2631 Fixture Hanger to fixture with quick assembly wing-nut leaving door open.

2. Hook fixture over raceway. Close snap fastening door which securely locks fixture into position. Plug in fixture.

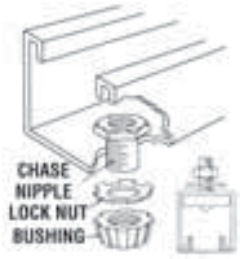


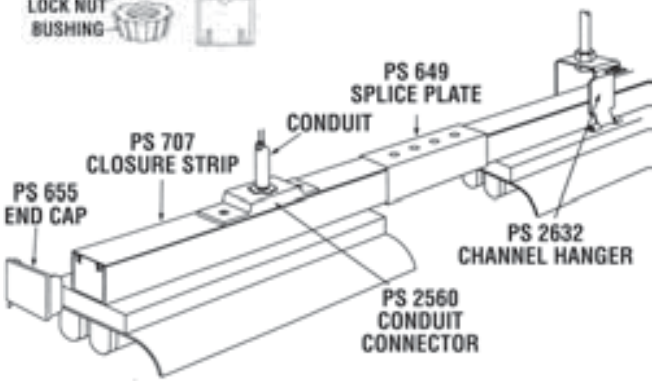


Complete installation in minutes. No screw, bolts or cotter pins to lose.

Knock-out Fluorescent Raceway System

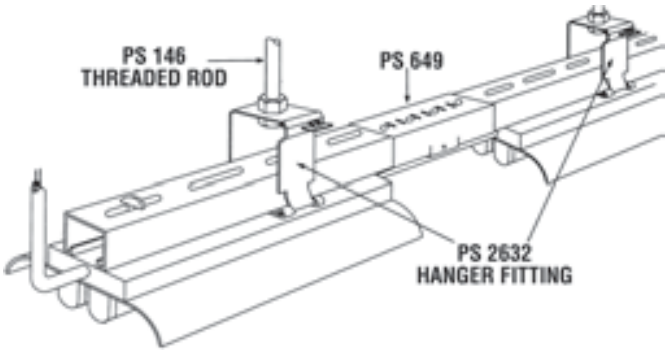
Listed by Underwriter's Laboratories, Inc. Fixture is attached to slot-up channel with chase nipple, locknut and bushing through knock-outs in bottom of channel. Conduit connector fitting PS-2560 holds channel and fixture to pipe or rod.

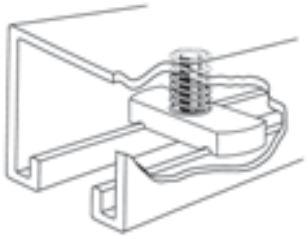




Basic Fluorescent Support System

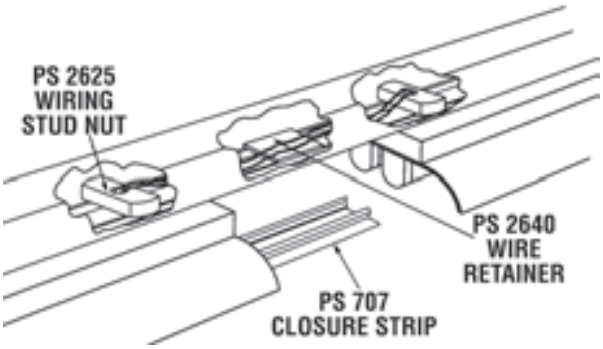
Slot-down channel holds fixture firmly in place with spring nut and bolt. Fixtures may be added or relocated without changing the basic assembly.

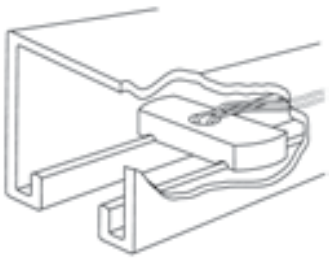




Economy Raceway System Fluorescent

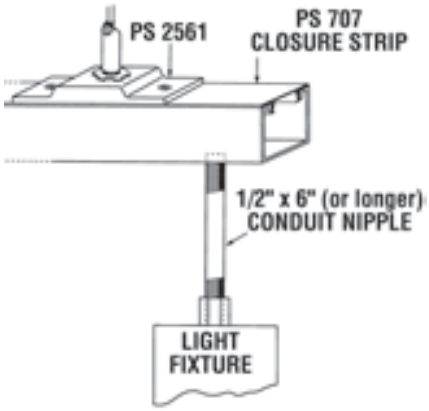
In this slot-down system the circuits run through the fixtures and only enter the channel where there is a break in the fixture run. At that point the fiber wire retainer holds wires in place and snap-in closure strip covers the area.





Knock-out Mercury Vapor Raceway System

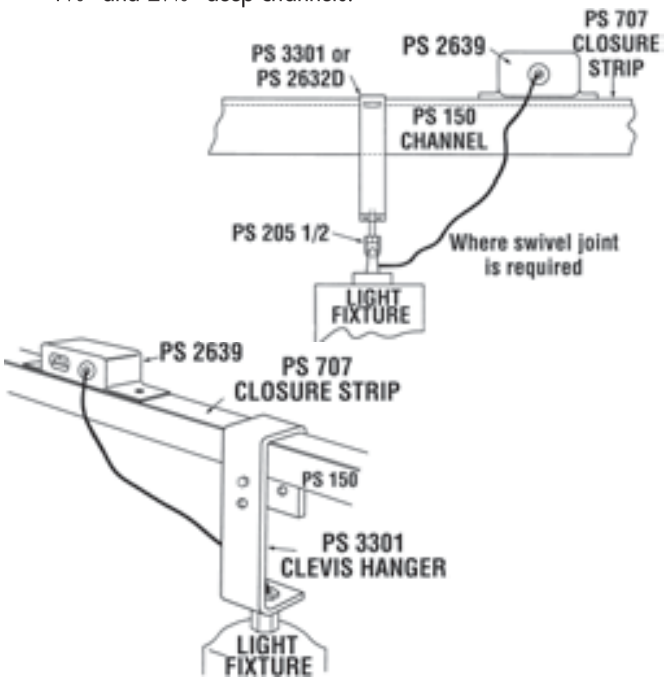
Listed by Underwriter's Laboratories, Inc. Fixture is attached to slot-up channel with chase nipple, locknut and bushing through knock-outs in bottom of channel. Conduit connector fitting PS-2561 holds channel and fixture to pipe or rod.



Basic Mercury Vapor Support System

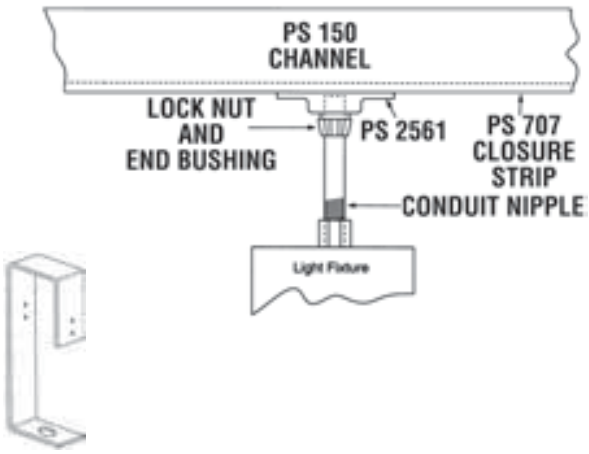
PS 3301 Clevis Hanger for use with PS 150, PS 200

In this slot up or down system, the fixture is supported by PS-3301 clevis hanger which is designed for use with both 1⅝" and 2⁷⁄₁₆" deep channels.



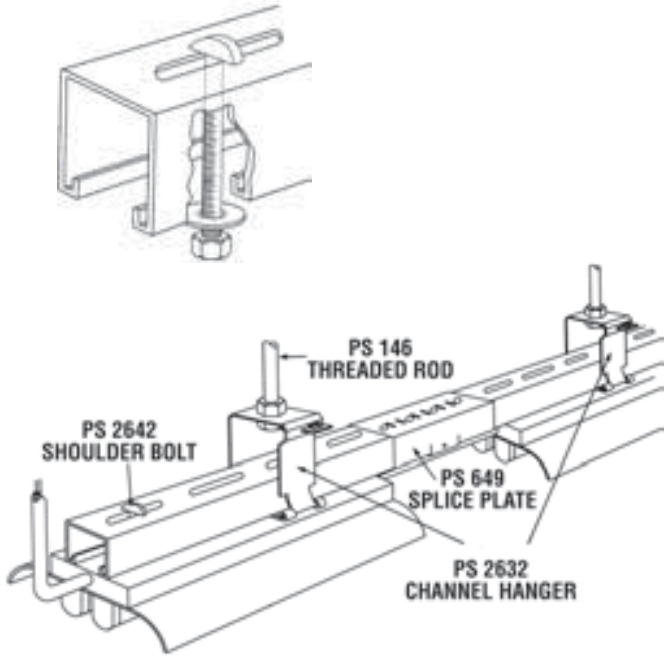
Slot Down Mercury Vapor System

In this slot down system the mercury vapor ballast is wired directly to the system.



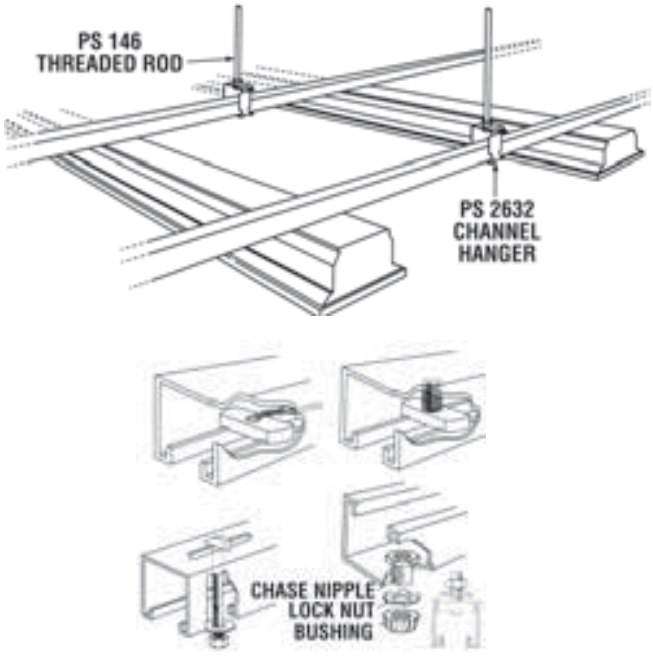
Slotted Support System

This system is designed for maximum ease of attaching fixture through slotted channel with shoulder bolt and provides positive alignment.

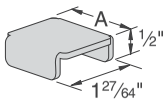


Grid System

This system is used where fixtures are hung at right angles to Power-Strut raceways and support channels. Any of the features of the above systems can be adapted to this system. Ideal for egg-crate type drop ceiling installations.

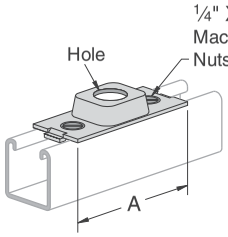


PS 655, PS 656, PS 901, PS 902, PS 930, PS 2580, PS 2585 – Raceway End Caps



Part No.	Use With	Finish	A	Wt./100 pcs
PS 902	PS 100	EG	3¼"	22
PS 2580	PS 150		2 7/16"	18
PS 655	PS 200		1⅝"	11
PS 2585	PS 210		1⅝"	12
PS 656	PS 300		1⅜"	15
PS 901	PS 400		1"	11
PS 930	PS 500		13/16"	5

PS 2560, PS 2561 – Conduit Connector Fitting

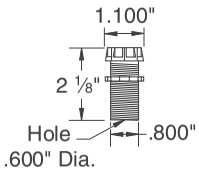


Stock Size: (.060)

Assembly: Connector Fitting, 2 Nuts, 2 Bolts

Part No.	Use With	A	Hole	Design Load (lbs.)	Wt./100 pcs
PS 2560	½ Conduit"	4"	⅞"	400	36
PS 2561	¾ Conduit"	5⅛"	1 3/32"	200	36

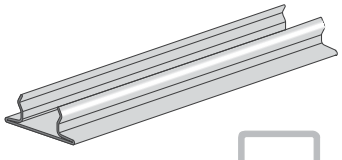
PS 803 – Fixture Wiring Nipple



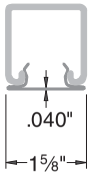
Assembly: ½" x 2" rigid conduit nipple
Bushing Locknut

Weight/100 pcs: 14 lbs.

PS 707, PS 707 P – Raceway Closure Strip

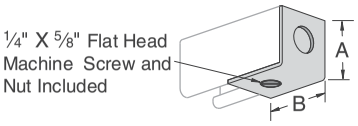


Material/Finish:
PS 707 P - Green and gray
PS 707 - Painted green and pre-galvanized
Stock Size: (.040) GRN, (.040) PGAL
Stock Length: 10 ft.
Use With: All 1⅝" wide channel.



Weight 47 Lbs./ ft.

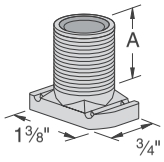
PS 2511, PS 2581 – End Cap With Knock-Out



Assembly:
End Cap Part, 1 Machine Screw, 1 Nut
Specify ½" or ¾" knock-out

Part No.	Use With	Finish	A	B	Wt./100 pcs
PS 2511–1	PS 100	EG	3¼"	1¾"	3.1
PS 2511–2	PS 200, PS 210		1⅝"	1¾"	2.7
PS 2511–3	PS 300		1⅜"	1¾"	2.6
PS 2581	PS 150		2 7/16"	2"	3.0

PS 2625 – Wiring Stud Nut



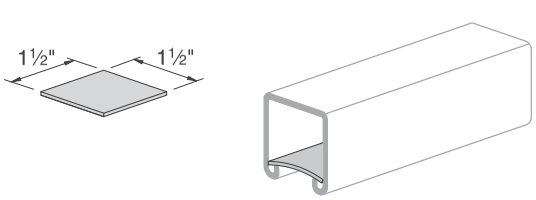
Material: Sintered Iron

Size: ½" - 14 Amer. Std, conduit thread

Part No.	A	Identification No.
PS 2625-½	15/64"	121961
PS 2625-2-⅝	⅝"	121960

Weight/100 pcs: 10 lbs.

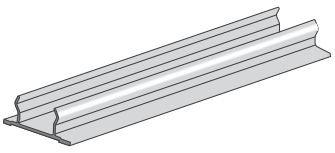
PS 2640 – Wire Retainer



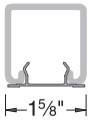
Material: Polypropylene

Weight/100 pcs: .30 lbs.

PS 707 – Aluminum Raceway Closure Strip



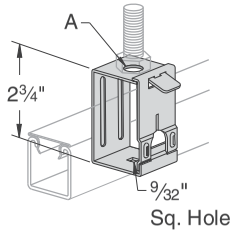
Material:
6063-T6 Aluminum, Copper Free, Extruded
Stock Size: (.051)
Stock Length: 10 ft.
Use With: All 1⅝" wide channel



Weight 21 Lbs./ ft.

PS 2632 – Swing Gate Channel Hanger

A Dia.	Use With
9/16"	1/2" Rod
7/8"	1/2" Conduit



Finish: Electro-galvanized

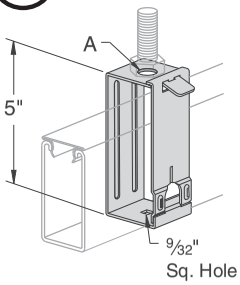
Use With: PS 200, PS 210, PS 300, PS 400 and PS 500

Load Rating: 90 lbs.

Weight/100 pcs: 25 lbs.

PS 2632D – Swing Gate Channel Hanger

A Dia.	Use With
9/16"	1/2" Rod
7/8"	1/2" Conduit



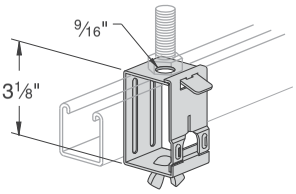
Finish: Electro-galvanized

Use With: PS 100, PS 150, PS 200 2T3, and PS 210 2T3

Load Rating: 90 lbs.

Weight/100 pcs: 34 lbs.

PS 2631 – Swing Gate Fixture Hanger



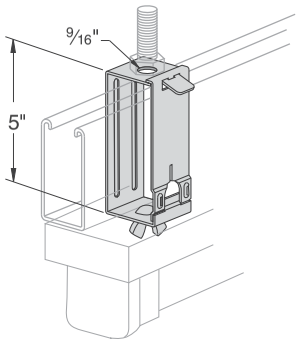
Use With: PS 200, PS 210, PS 300, PS 400 and PS 500

Load Rating: 90 lbs.

Note:
Includes Bolt and Wing Nut for connection to fluorescent fixtures.

Weight/100 pcs: 27 lbs.

PS 2631D – Swing Gate Fixture Hanger



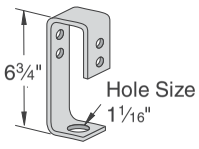
Use With: PS 100, PS 150, PS 200 2T3, PS 210 2T3

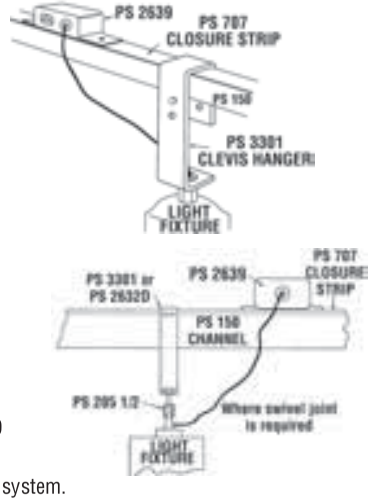
Load Rating: 90 lbs.

Note:
Includes Bolt and Wing Nut for connection to fluorescent fixtures.

Weight/100 pcs: 36 lbs.

PS 3301 – Mercury Vapor Fixture Hanger





Finish: Electro-galvanized

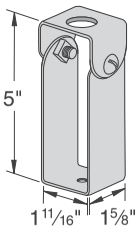
Stock Size: ¼"

Use With: PS 150, PS 200, PS 210

Note:
Supports fixture in slot up or down system.

Weight/100 pcs: 154 lbs.

PS 807 – Channel Hanger



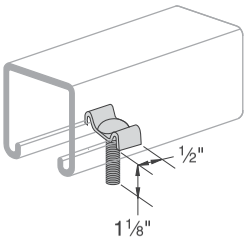
Use With: PS 100, PS 150

Load Rating: 150 lbs.

Note:
Washers supplied to adapt to ⅜" or ½" rod

Weight/100 pcs: 35 lbs.

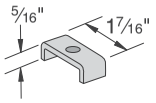
PS 2636 – Fixture Stud Nut



Size: ¼" x 20 thread, 1¼" long

Weight/100 pcs: 5 lbs.

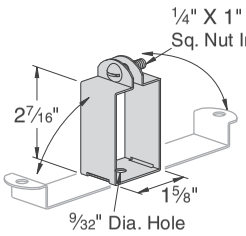
PS 2637 – Fixture Nut



Size: Tapped for ¼" - 20 thread

Weight/100 pcs: 2 lbs.

PS 702 – Fluorescent Fixture Hanger



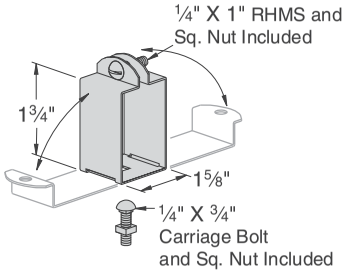
Hanger provides more than ½" space between channel and fixtures.

Use hanger for PS 200, PS 210 & PS 300.

Load Rating: 120 lbs.

Weight/100 pcs: 19 lbs.

PS 703 – Fluorescent Fixture Hanger



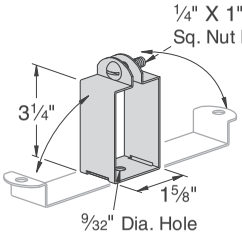
Hanger provides more than ⅛" space between channel and fixtures.

Use hanger for PS 200 & PS 210.

Load Rating: 120 lbs.

Weight/100 pcs: 17 lbs.

PS 702 D – Fluorescent Fixture Hanger



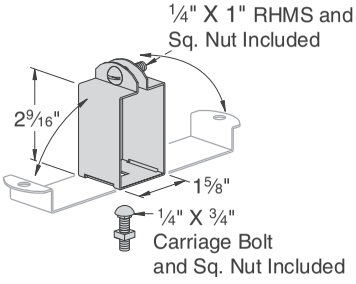
Hanger provides more than ½" space between channel and fixtures.

Use hanger for PS 150.

Load Rating: 120 lbs.

Weight/100 pcs: 20 lbs.

PS 703 D – Fluorescent Fixture Hanger



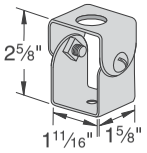
Hanger provides more than ⅛" space between channel and fixtures.

Use hanger for PS 150.

Load Rating: 120 lbs.

Weight/100 pcs: 18 lbs.

PS 659 – Channel Hanger



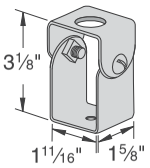
Use With: PS 400, PS 500

Load Rating: 150 lbs.

Note:
Washers supplied to adapt to ⅜" or ½" rod

Weight/100 pcs: 28 lbs.

PS 658 – Channel Hanger



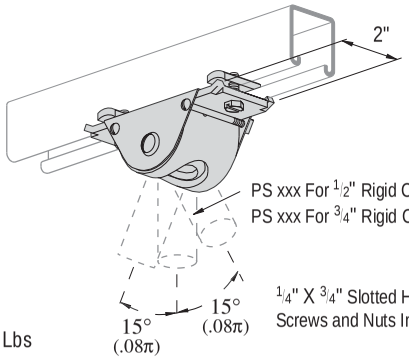
Use With: PS 200, PS 210, PS 300

Load Rating: 150 lbs.

Note:
Washers supplied to adapt to ⅜" or ½" rod

Weight/100 pcs: 30 lbs.

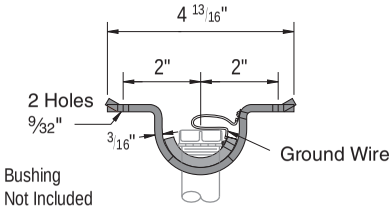
PS 2621 – Conduit Swing Fitting



Design Load: 300 Lbs

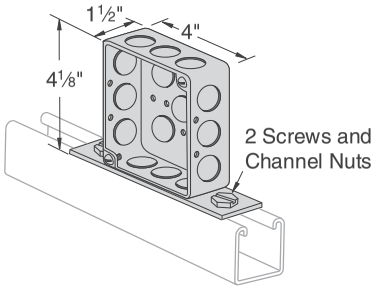
Note:
Conduit hanger fittings allow a free swivel of 15° in one direction.

Fitting may be mounted to the slot side of the channel or to the back



Weight/100 pcs: 396 lbs.

PS 2094 – 4" Receptacle Box With Knock-outs

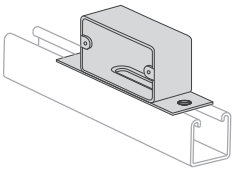


Stock Size: (.075)

Assembly: 1 Box, 2 Screws

Weight/100 pcs: 93 lbs.

PS 2639 – Outlet Box

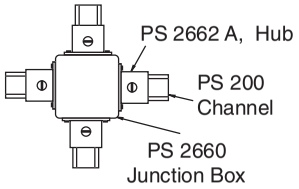


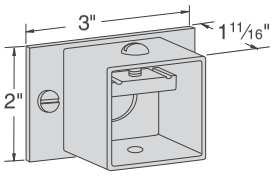
Stock Size: (.075)

Assembly: 1 Box, 2 Screws, 2 Channel Nuts

Weight/100 pcs: 88 lbs.

PS 2662 A – Hub Assembly



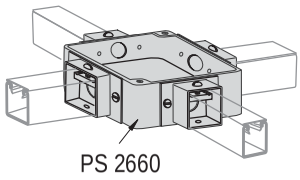


Use With: PS 200, PS 210

Assembly: 1 Hub, 2 Screws, 1 Bolt, 1 Nut

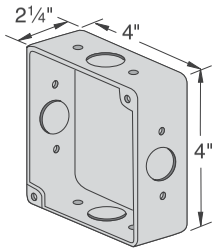
Note: Add hub assemblies to the basic PS 2660 unit assembly to make 1, 2, 3 ot 4-way junction box.

Identification No. 122022



Weight/100 pcs: 27 lbs.

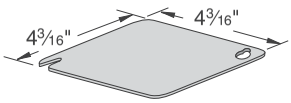
PS 2660 – Junction Box



Note:
Add hub assemblies PS 2662-A
to make 1, 2, 3 or 4-way junction box.

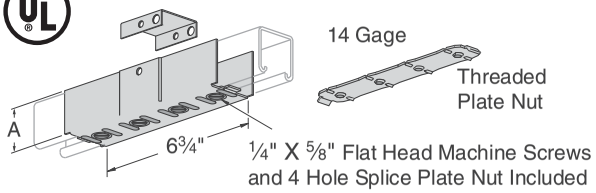
Weight/100 pcs: 113 lbs.

PS 2661 – Junction Box Cover



Weight/100 pcs: 30 lbs.

PS 649, PS 693, PS 694, PS 805, PS 942, PS 2582 – Electrical Joiner



Part No.	A	Use With	Finish	Wt./100 pcs
PS 805	1⅝"	PS 100	EG, GRN	106
PS 2582		PS 150	EG	103
PS 649		PS 200, PS 210	EG, GRN	100
PS 694	1⅜"	PS 300		97
PS 693	1 1⁄16"	PS 400		97
PS 942	13⁄16"	PS 500, PS 520		80

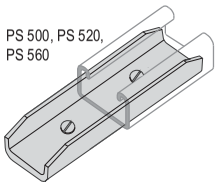
Stock Size: (.060)

Assembly: 1 Splice Plate Clevis (GRN), 1 Tapped Plate (EG), 1 Backplate (GRN), 4 Flat Head Machine Screws (EG).

PS 2700 – Inside Strut Joiner

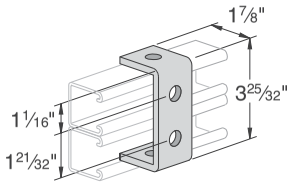
Material: Extruded aluminum

Jam screws included



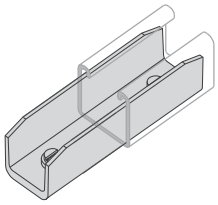
Weight/100 pcs: 12 lbs.

PS 671 – Strut Suspension Member



Weight/100 pcs: 70 lbs.

PS 2800 – Inside Strut Joiner



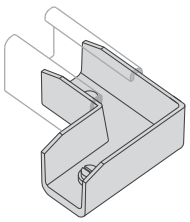
Material: Cast aluminum or electro-galvanized

Jam screws included

Note: electro-galvanized is not UL Listed

Weight/100 pcs: 20 lbs.

PS 2802 – "Elbow" Inside Strut Joiner

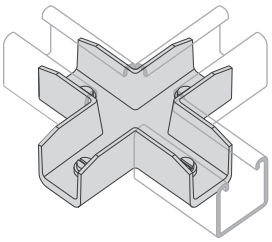


Material: Cast aluminum

Jam screws included

Weight/100 pcs: 27 lbs.

PS 2803 – "Cross" Inside Strut Joiner

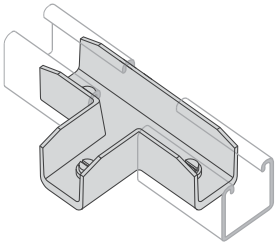


Material: Cast aluminum

Jam screws included

Weight/100 pcs: 45 lbs.

PS 2801 – "T" Inside Strut Joiner

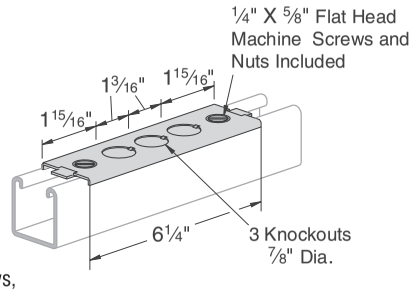


Material: Cast aluminum

Jam screws included

Weight/100 pcs: 35 lbs.

PS 791 – Electrical Box Adapter Plate

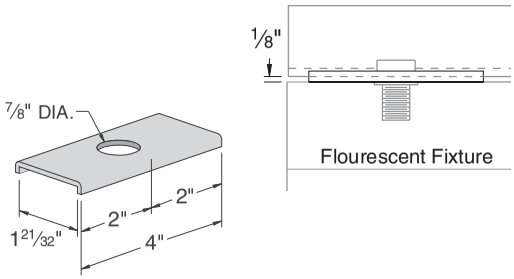


Stock Size: (.060)

Assembly: 1 Plate, 2 Screws, 2 Channel Nuts

Weight/100 pcs: 35 lbs.

PS 2627 – Spacer Clevis



Material: 12 gage

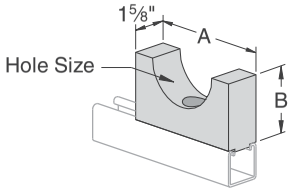
Weight/100 pcs: 24 lbs.

PS 1510 – Maple Cable Saddle

Use With: All 1⅝" Channel

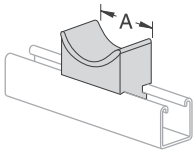
Assembly: Maple Part, 1 Spring Nut, 1 Flat Head Screw

Note: Specify Cable Diameter



Cable Size	A	B	Wt./100 pcs
0"– 1"	3"	1¾"	31
1" – 1½"	3½"	2"	38
1½"– 2"	4"	2¼"	47
2"– 2½"	4½"	2½"	57
2½" – 3"	5"	2¾"	68
3"– 3½"	5½"	3"	80
3½" – 4"	6"	3¼"	94

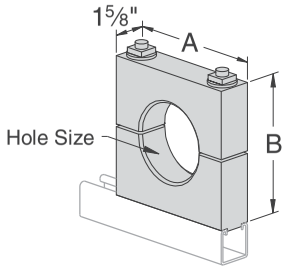
PS 1500 – Porcelain Cable Rack Insulators



Cable Diameter	A	Wt./100 pcs
3"	3"	75
4½"	4"	95

Use With: All 1⅝" channel

PS 1801 – Square Maple Cable Clamps



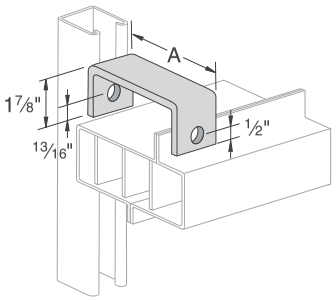
Inside Diameter Size	A & B	Wt./100 pcs
0"– 1"	3½"	84
1"– 1½"	4"	102
1½"– 2"	4½"	121
2"– 2½"	5½"	165
2½" – 3"	6"	189
3"– 3½"	6½"	215
3½"– 4"	7"	243

Use With: All 1⅝" Wide Channels.

Assembly: Maple Part, 2 Stud Bolts, 2 Washers, 2 Spring Nuts, 2 Square Nuts

Note: Special maple clamps can be made to order. Specify Cable Diameter.

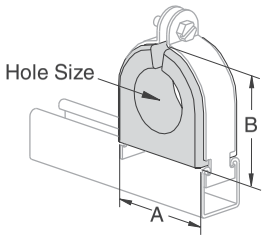
PS 760 – Bus Duct Connection Clevis



Part No.	Outside Width	Inside Width	Wt./100 pcs
PS 760–1	2 13/32"	1 29/32"	57
PS 760–2	3 25/32"	3 9/32"	73
PS 760–3	4¾"	4¼"	84

Weight/100 pcs: 93 lbs.

PS 722 – Porce -A- Clamp™



Porce –A– Clamp™

- Non-Breakable TPE Material
- U.V. Resistant
- U.L. Listed
- Electro-galvanized or Stainless Steel Clamps
- Tapered Flange to Protect Cable
- Dielectric Strength 640 Volts Per Mil.
- One Piece
- Replaces Porcelain & Maple Cable Clamp
- For use in accordance with National Electrical Code ANSI/NFPA 70.

Replaces the two piece PS 723 Porcelain Cable Clamp

Includes: Everdur Hardware

Patents Pending

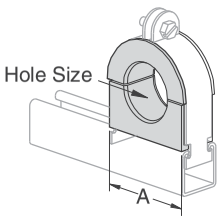
Strap Material: Electro-galvanized steel or stainless steel

Use With: All 1⅝" channel

Temperature Range: -50°F to +275°F

Part No.	Hole Size	A	B	Wt./100 pcs
PS722 ⅜"	⅜"	1⅞"	1 15/32"	25
PS722 ½"	½"			
PS722 ⅝"	⅝"			
PS722 ¾"	¾"	2⅜"	2 1/32"	37
PS722 ⅞"	⅞"			
PS722 1"	1"			
PS722 1⅛"	1⅛"			
PS722 1¼"	1¼"	2⅞"	2 17/32"	58
PS722 1⅜"	1⅜"			
PS722 1½"	1½"			
PS722 1⅝"	1⅝"			
PS722 1¾"	1¾"	4"	3⅝"	76
PS722 1⅞"	1⅞"			
PS722 2"	2"			
PS722 2⅛"	2⅛"			
PS722 2¼"	2¼"	4½"	4⅛"	90
PS722 2⅜"	2⅜"			
PS722 2½"	2½"			
PS722 2⅝"	2⅝"			
PS722 2¾"	2¾"	5⅛"	4⅝"	109
PS722 2⅞"	2⅞"			
PS722 3"	3"			
PS722 3⅛"	3⅛"			
PS722 3¼"	3¼"	6⅛"	5 11/32"	130
PS722 3⅜"	3⅜"			
PS722 3½"	3½"			
PS722 3⅝"	3⅝"			
PS722 3¾"	3¾"	7¼"	6¾"	160
PS722 3⅞"	3⅞"			
PS722 4"	4"			
PS722 4⅛"	4⅛"			
PS722 4¼"	4¼"			
PS722 4⅜"	4⅜"			
PS722 4½"	4½"			

PS 1610 – Maple Cable Clamp

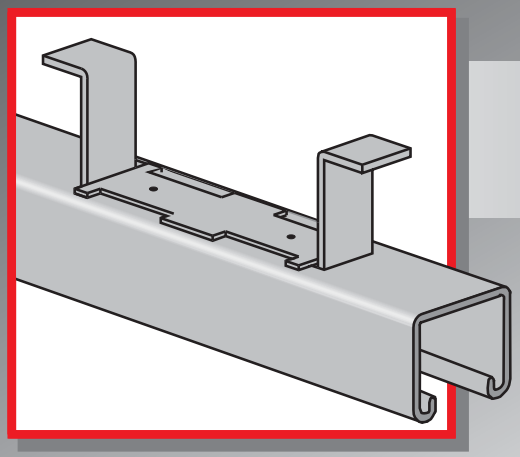


Use With: All 1⅝" Wide Channel

Assembly: Maple Part, Pipe Clamp Assembly

Note: Specify Cable Diameter

Inside Diameter	A	PS 1100 Size	Wt./100 pcs
0 to ⅝"	1 5/16"	1"	24
½ to 1"	1 15/16"	1½"	42
¾ to 1½"	2⅜"	2"	54
1¼ to 1¾"	3½"	3"	65
1½ to 2¼"	4"	3½"	84
2 to 2½"	4½"	4"	107
2¼ to 3"	5 9/16"	5"	123
3 to 4"	6⅝"	6"	163



CONCRETE INSERTS

A selection of heavy-duty to light-duty "continuous" and "spot" concrete inserts is available for use in pre-cast, pre-stressed or poured-in-place concrete floors, walls or ceilings.

MATERIAL:

Power-Strut continuous slotted concrete inserts are cold formed from structural quality strip steel.

STANDARD LENGTHS:

Standard lengths are 10 or 20 feet. Non-standard lengths from 3 inches to 20 feet are also available.

STANDARD FINISH:

Power-Strut continuous-slotted concrete inserts are available in plain or pre-galvanized finishes. Closure strips (CS) are made of plastic and end caps (EC) are pre-galvanized.

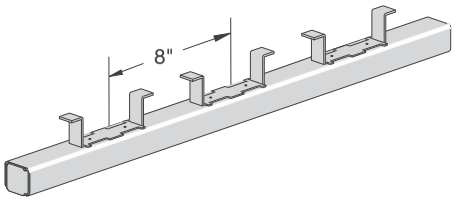
ORDERING INFORMATION:

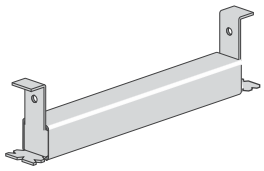
When ordering, add the length or size and finish to the part number. See pages 8-9 for finish abbreviations and an example.

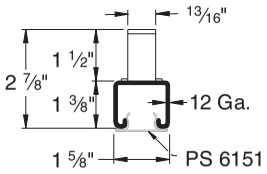
CONCRETE INSERTS

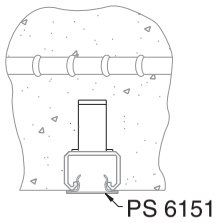
Finish: Plain, Hot-Dipped Galvanized, or Pregalvanized **Stock Length:** 20', Other lengths made to order
Stock Thickness: .105 (12 ga.) **Order By:** No., Size, Length and Finish

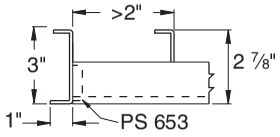
PS 349 – Continuous Concrete Insert (1⅝" x 1⅜")

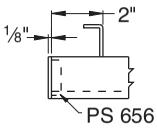












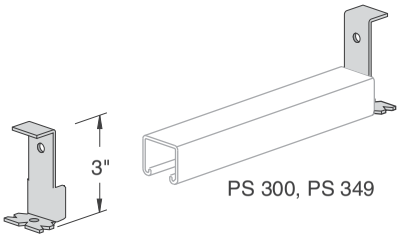
Choice of end cap is based on the distance from the end of the insert to the first anchor as shown below.

Furnished with steel end caps and plastic closure strips installed

- Use channel nuts designed for PS 300 Channel.
- Nail or anchor the inserts to forms every 16" to 24"

Part No.	End Cap	Wt./100 pcs - PLN	Load Data*
PS 349 3" CS/EC	PS 653	72	500 lbs
PS 349 4" CS/EC		87	600 lbs.
PS 349 6" CS/EC		117	800 lbs.
PS 349 8" CS/EC		147	1,200 lbs.
PS 349 1' CS/EC		194	2,000 lbs./ft.
PS 349 1'4" CS/EC	PS 656	253	
PS 349 1'8" CS/EC	PS 653	312	
PS 349 2' CS/EC	PS 656	371	
PS 349 2'8" CS/EC		490	
PS 349 3' CS/EC	PS 653	549	
PS 349 4' CS/EC	PS 656	727	
PS 349 5' CS/EC	PS 653	905	
PS 349 6' CS/EC	PS 656	1,082	
PS 349 7' CS/EC	PS 653	1,260	
PS 349 8' CS/EC	PS 656	1,438	
PS 349 9' CS/EC	PS 653	1,615	
PS 349 10' CS/EC	PS 656	1,793	
PS 349 12' CS/EC		2,148	
PS 349 14' CS/EC		2,504	
PS 349 16' CS/EC		2,859	
PS 349 18' CS/EC		3,215	
PS 349 20' CS/EC		3,570	
PS 349 10' W/O	Insert Only	1,777	*uniform recommended loading on inserts in 3,000 psi concrete.
PS 349 20' W/O		3,554	

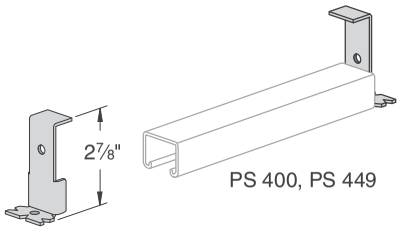
PS 653 – Type 'B' End Cap



Finish: Pre-galvanized

Weight/100 pcs: 14 lbs.

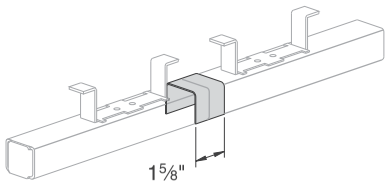
PS 654 – Type 'B' End Cap



Finish: Pre-galvanized

Weight/100 pcs: 12 lbs.

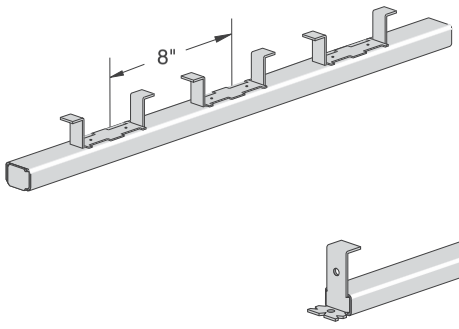
PS 1154 – Splice Connection

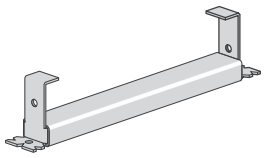


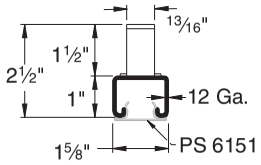
Use With: PS 349

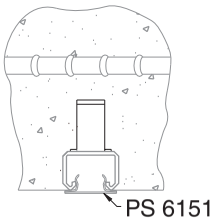
Weight/100 pcs: 10 lbs.

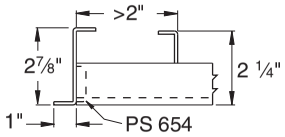
PS 449 – Continuous Concrete Insert (1⅝" x 1")

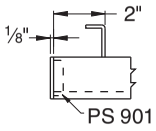












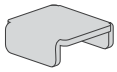
Choice of end cap is based on the distance from the end of the insert to the first anchor as shown below.

Furnished with steel end caps and plastic closure strips installed

- Use channel nuts designed for PS 400 Channel.
- Nail or anchor the inserts to forms every 16" to 24"

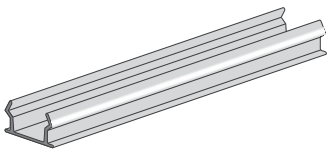
Part No.	End Cap	Wt./100 pcs - PLN	Load Data*
PS 449 3" CS/EC	PS 654	62	500 lbs
PS 449 4" CS/EC		74	600 lbs.
PS 449 6" CS/EC		99	800 lbs.
PS 449 8" CS/EC		124	1,000 lbs.
PS 449 1' CS/EC		163	1,500 lbs./ft.
PS 449 1'4" CS/EC	PS 901	213	
PS 449 1'8" CS/EC	PS 654	263	
PS 449 2' CS/EC	PS 901	313	
PS 449 2'8" CS/EC		414	
PS 449 3' CS/EC	PS 654	464	
PS 449 4' CS/EC	PS 901	615	
PS 449 5' CS/EC	PS 654	766	
PS 449 6' CS/EC	PS 901	916	
PS 449 7' CS/EC	PS 654	1,079	
PS 449 8' CS/EC	PS 901	1,218	
PS 449 9' CS/EC	PS 654	1,368	
PS 449 10' CS/EC	PS 901	1,519	
PS 449 12' CS/EC		1,820	
PS 449 14' CS/EC		2,122	
PS 449 16' CS/EC		2,423	
PS 449 18' CS/EC		2,725	
PS 449 20' CS/EC		3,026	
PS 449 10' W/O	Insert Only	1,507	*uniform recommended loading on inserts in 3,000 psi concrete.
PS 449 20' W/O		3,014	

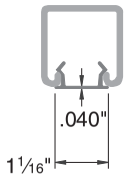
PS 656, PS 901 – Type 'A' End Cap



Part No.	Use With Insert	Finish	Wt./100 pcs
PS 656	PS 349	PGAL	8
PS 901	PS 449		6

PS 6151 – Plastic Closure Strip





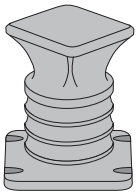
Material: Plastic

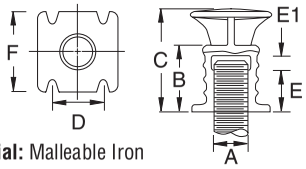
Stock Length: 10 ft.

Use With: All 1⅝" channel and inserts to prevent concrete seepage

Weight/100 pcs: 47 lbs.

PS 152 – Screw Concrete Insert



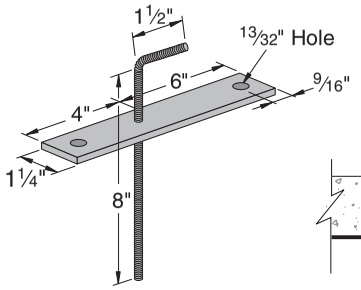


Material: Malleable Iron

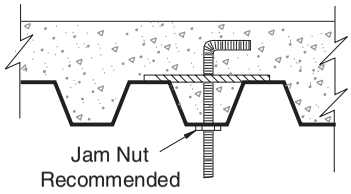
Finish: Black

Part No.	Rod Size "A"	B	C	D	E	E[1]	F	Load Rating	Wt./100 pcs
PS 152 3/8	3/8"	1 1/32"	2 1/4"	1"	1/2"	3/8"	1 5/8"	600	31
PS 152 1/2	1/2"							1,130	32
PS 152 5/8	5/8"	1 7/32"			5/8"			1,260	37
PS 152 3/4	3/4"	1 5/8"	2 1/2"	1 1/4"	15/16"	7/16"	2"	2,500	64
PS 152 7/8	7/8"	-	-	-	-	-	-		71

PS 680 – Concrete Deck Insert

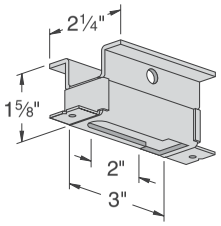


Note:
Rod is electro-galvanized and plate is plain.



Part No.	Load Rating	Wt./100 pcs
PS 680–3/8"	610	86
PS 680–1/2"	1,130	105
PS 680–5/8"	1,810	130

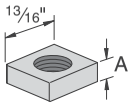
PS 285 – Light Weight Concrete Insert



Finish: Plain or Electro-galvanized

Part No.	Rod Size	Load Rating	Wt./100 pcs
PS 285 1/4	1/4"	230	46
PS 285 3/8	3/8"	400	49
PS 285 1/2	1/2"		49

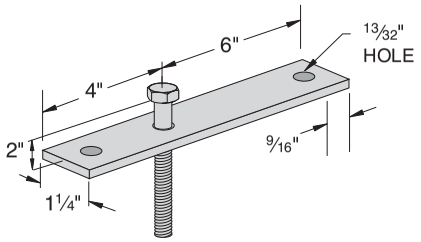
PS 285 N – Concrete Insert Nut (for use with PS 285)

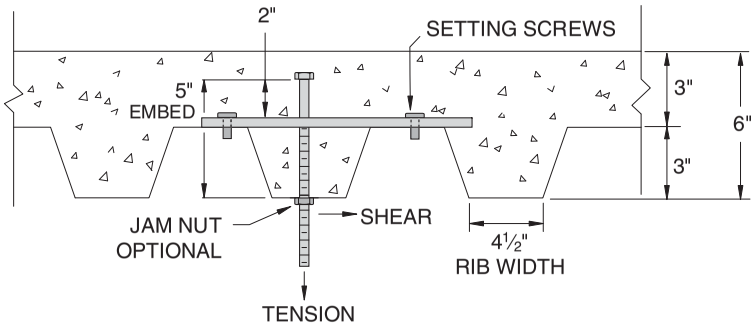


Finish: Plain or Electro-galvanized

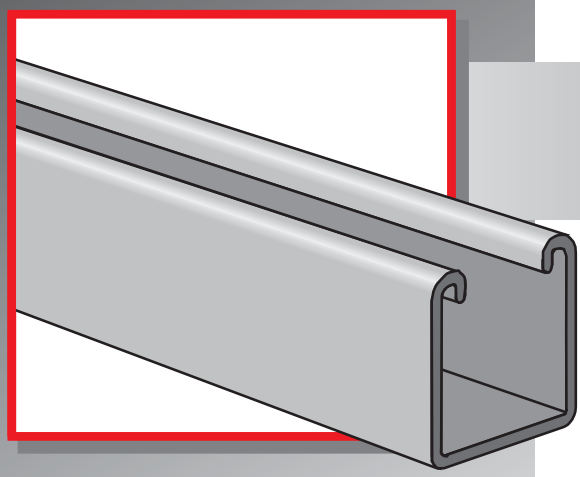
Part No.	Rod Size	A	Wt./100 pcs
PS 285 N	1/4"	5/16"	6
PS 285 N	3/8"		5
PS 285 N	1/2"	7/16"	6
PS 285 N	5/8"		7

PS 3700 – Concrete Deck Insert





Part No.	Tension Load Rating/Lbs	Shear Load Rating/Lbs	Wt./100 pcs
PS 3700–3/8"	850	600	89
PS 3700–1/2"	1,380	1,000	111
PS 3700–3/8"	1,920	1,760	141



JUNIOR CHANNEL

Power-Strut junior channel sections are cold formed from prime quality cold rolled steel. Junior channel fittings are punched from hot rolled, pickled and oiled steel.

STANDARD LENGTHS:

Standard length is 10 feet at a tolerance of ±1/16 inches.
Shorter lengths are available for a small cutting charge.

STANDARD DIMENSIONS FOR FITTINGS:

Fitting Thickness:	1/8"
Fitting Width:	13/16"
Hole Diameter:	9/32"
Hole Spacing:	11/16" on centers and 13/32" from end.

STANDARD FINISH:

PS 600J and PS 700J junior channels are available in a galvanized or painted green finish. All junior channel fittings are available in electro-galvanized finish.

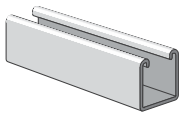
ORDERING INFORMATION:

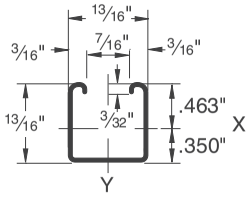
When ordering, add the length or size and finish to the part number. See pages 8-9 for finish abbreviations and an example.

JUNIOR CHANNEL

Finish: Electro-galvanized **Stock Width:** 13/16" **Stock Thickness:** 1/8" **Stock Length:** 10'
Order By: No., Size and Finish **Hole Spacing:** 13/32" from end, 1 1/16" on center **Hole Diameter:** 9/32"

PS 600J – Channel (13/16" x 13/16" x 19 ga.)





BEAM LOADING – PS 600J

Span (in)	Max Allowable Uniform Load (lbs)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
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
54	80	0.60	40	30	20
60	70	0.72	30	20	20

* Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

COLUMN LOADING – PS 600J

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
18	600	1,660	1,400	1,100	860
24	490	1,300	1,010	740	590
30	420	990	740	560	450
36	340	770	590	450	370
42	300	630	490	380	310
48	260	540	420	330	270
54	240	470	370	290	**
60	210	410	330	**	**

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

ELEMENTS OF SECTION

Weight (lbs./100 ft.)	Area of Section (Inch^2)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch^4)	Section Modulus (Inch^3)	Radius of Gyration (Inch)	Moment of Inertia (Inch^4)	Section Modulus (Inch^3)	Radius of Gyration (Inch)
36	0.107	0.009	0.020	0.295	0.012	0.029	0.333

PS 3017 – Junior Channel Nuts

Size	Wt./100 pcs
8-32	1
10-32	1
10-24	1
1/4"	1

Use With: PS 600J channel

PS 4017 – Junior Channel Nuts

Size	Wt./100 pcs
8-32	1
10-32	1
10-24	1
1/4"	1

Use With: PS 700J channel

PS 2029 – End Cap

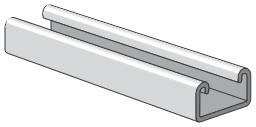
Use With: PS 600J

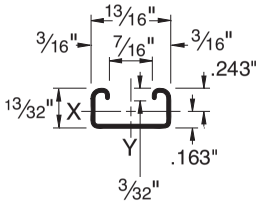
Weight/100 pcs: 2 lbs.

JUNIOR CHANNEL

Finish: Electro-galvanized **Stock Width:** 13/16" **Stock Thickness:** 1/8" **Stock Length:** 10'
Order By: No., Size and Finish **Hole Spacing:** 13/32" from end, 1 13/32" on center **Hole Diameter:** 9/32"

PS 700J – Channel (13/16" x 13/32" x 19 ga.)





* Bearing load may govern capacity.

** $KL/r > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading. For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

BEAM LOADING – PS 700J

Span (in)	Max Allowable Uniform Load (lbs)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
18	80	0.12	60	50	30
24	60	0.22	40	30	20
30	50	0.36	20	20	10
36	40	0.50	20	10	10

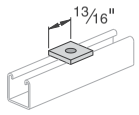
COLUMN LOADING – PS 700J

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K =1.0 (lbs)	K = 1.2 (lbs)
18	420	1,200	990	720	510
24	330	900	640	410	280
30	260	620	410	**	**
36	200	430	280	**	**

ELEMENTS OF SECTION

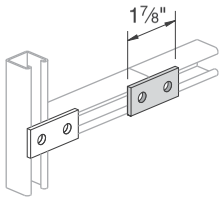
Weight (lbs./100 ft.)	Area of Section (Inch^2)	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch^4)	Section Modulus (Inch^3)	Radius of Gyration (Inch)	Moment of Inertia (Inch^4)	Section Modulus (Inch^3)	Radius of Gyration (Inch)
25	0.074	0.002	0.007	0.150	0.007	0.017	0.307

PS 2013 – Square Washer



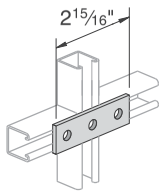
Weight/100 pcs: 2 lbs.

PS 2014 – Two-Hole Splice Plate



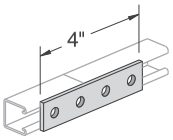
Weight/100 pcs: 5 lbs.

PS 2015 – Three-Hole Splice Plate



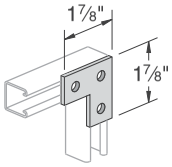
Weight/100 pcs: 8 lbs.

PS 2016 – Four-Hole Splice Plate



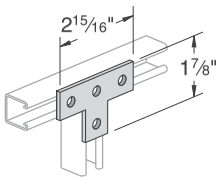
Weight/100 pcs: 11 lbs.

PS 2033 – Flat Angle Plate



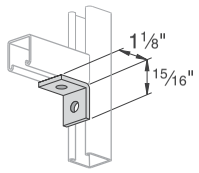
Weight/100 pcs: 8 lbs.

PS 2034 – Tee Plate



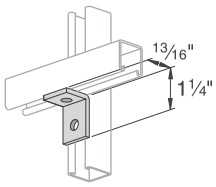
Weight/100 pcs: 11 lbs.

PS 2008 – Two-Hole Corner Angle



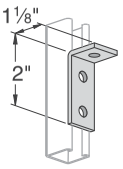
Weight/100 pcs: 5 lbs.

PS 2017 – Two-Hole Corner Angle



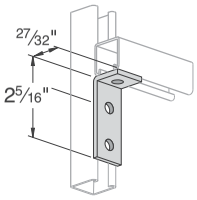
Weight/100 pcs: 5 lbs.

PS 2018 – Three-Hole Corner Angle



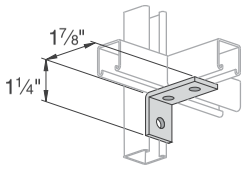
Weight/100 pcs: 8 lbs.

PS 2025 – Three-Hole Corner Angle



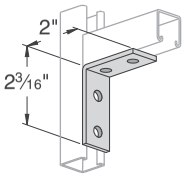
Weight/100 pcs: 8 lbs.

PS 2037 – Three-Hole Corner Angle



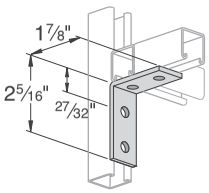
Weight/100 pcs: 8 lbs.

PS 2019 – Four-Hole Corner Angle



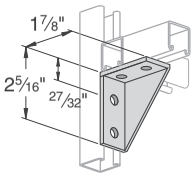
Weight/100 pcs: 11 lbs.

PS 2024 – Four-Hole Corner Angle



Weight/100 pcs: 11 lbs.

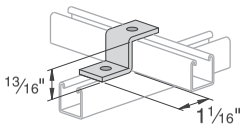
PS 2023 R or L – Four-Hole Shelf Bracket



Note:
Specify R (right) or L (left) when ordering
Right Hand Illustrated

Weight/100 pcs: 19 lbs.

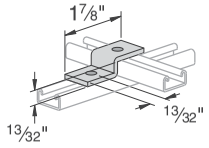
PS 2010 – Zee Support



Use With: PS 600J

Weight/100 pcs: 7 lbs

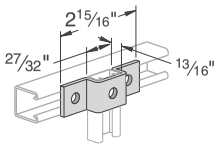
PS 2026 –Zee Support



Use With: PS 700J

Weight/100 pcs: 6 lbs.

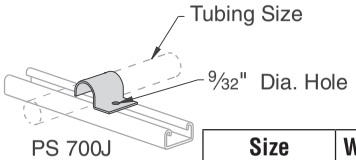
PS 2011 – "U" Support



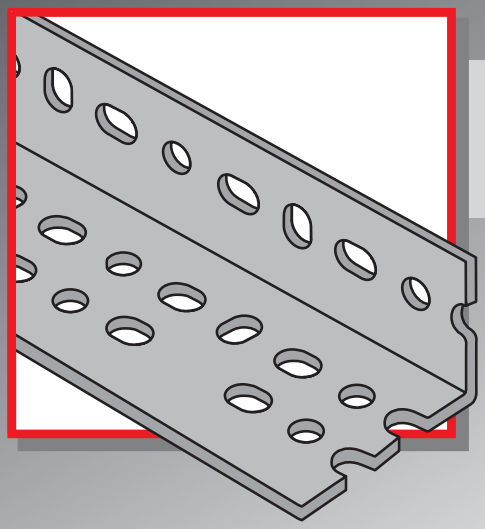
Use With: PS 600J

Weight/100 pcs: 12 lbs.

PS 2041 – Tubing Clamps



Size Tubing O.D.	Wt./100 pcs
¼"	2
⅜"	
½"	
⅝"	
¾"	3
⅞"	
1"	



POWER-ANGLE®

A complete support system that's versatile, economical and easy to use.

- *No drilling, welding or special tools necessary.*
- *Fast, efficient bolt-together construction*
- *Easy to change and adjust*

STANDARD LENGTHS:

Standard lengths are 10' and 12'. Slotted angle is shipped in ten-piece bundles complete with 75 pieces of 3/8" - 16 x 3/4" hex head bolts and 3/8" nuts.

STANDARD FINISH:

Available in two durable, long-lasting finishes; pre-galvanized or Power–Green™.

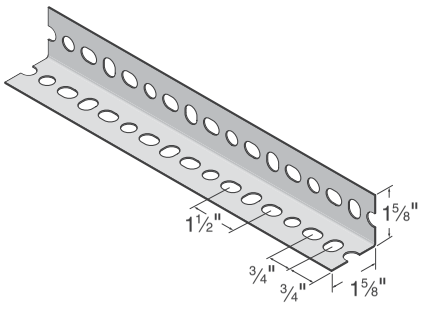
ORDERING INFORMATION:

When ordering, add the length or size and finish to the part number. See pages 8-9 for finish abbreviations and an example.

POWER-ANGLE®

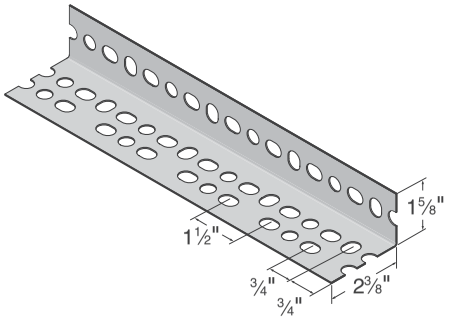
Finish: Pregalvanized or Acrylic Green **Stock Thickness:** .075(14 ga.) **Stock Length:** 10 & 12 Feet
Order By: No., Length and Finish

PA 158 – Light Duty (1⅝" x 1⅝" x 14 ga.)



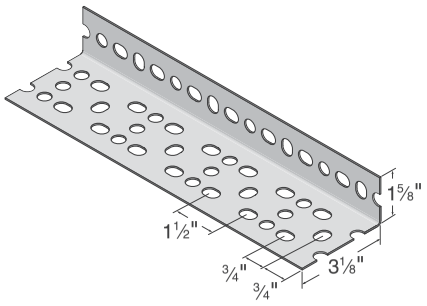
Weight/100 ft.: 66 lbs.

PA 238 – Medium Duty (1⅝" x 2⅜" x 14 ga.)



Weight/100 ft.: 80 lbs.

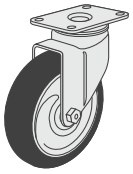
PA 318 – Heavy Duty (1⅝" x 3⅛" x 12 ga.)



Note: Includes Serrated Nuts & Bolts

Weight/100 ft.: 130 lbs.

PA 1SC – Swivel Caster

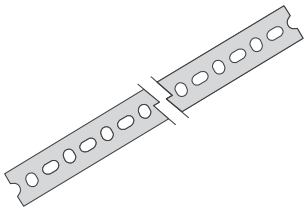


Weight/100 pcs: 170 lbs.

PA 1RC – Rigid Caster

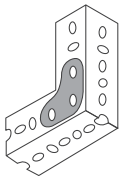
Weight/100 pcs: 110 lbs.

PA 1RP – Slotted Strap



Weight/100 pcs: 35 lbs.

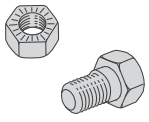
PA 1GP – Gusset Plate



Weight/100 pcs: 9 lbs.

PA 1SNB – Serrated Nuts & Bolts

(Package of 75 nuts and 75 bolts)



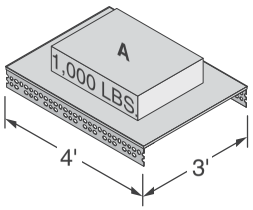
Weight/100 pcs: 7 lbs.

Beam Load Calculations

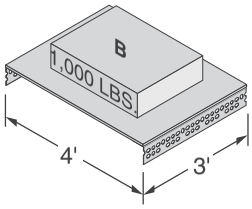
The beam loading depends on which slotted angle is used and the manner in which the beam is constructed. The diagrams on the next page show how individual slotted angle components can be combined to form a beam. The loading for each beam configuration is shown in the beam loading tables on the following pages.

Example - Load "A"

Load "A" is supported by two 48" sections of PA-238 (1⅝" x 2⅜"). The 48" row of Table 2 (page 103) indicates what each beam configuration will support. Since the columns are sorted from lowest to highest load, the first configuration that satisfies the requirement is "J" which will support 1,110 lbs.



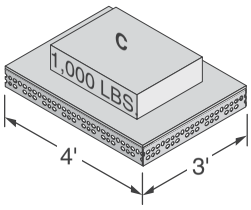
Example - Load "B"



Load "B" is supported by two 36" sections of PA-238 (1⅝" x 2⅜"). The 36" row of Table 2 (Page 103) indicates what each beam configuration will support. Since the columns are sorted from lowest to highest load, the first configuration that satisfies the requirement is "I" which will support 1,100 lbs.

Example - Load "C"

Load "C" is supported by all four beam sections. The load is distributed uniformly on two 3' and two 4' beams which total 14' of supporting beam length. Dividing the 1,000 lb. load by 14-feet equals 72 lbs. per foot. Using the two longest (weakest) lengths, calculate the total weight as follows:

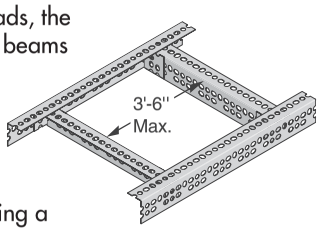


2 (beams) x 4' (length) x 72 lbs./ ft. = 576 lbs. total weight

The 36" row of Table 2 (Page 103) indicates what each beam configuration will support. Since the columns are sorted from lowest to highest load, the first configuration that satisfies the requirement is "H" which will support 680 lbs. and is adequate for this requirement. The 3-foot beams configured in the same manner will support the load because they are shorter and stronger.

Transverse Stiffeners

When supporting concentrated loads, the capacity of a pair of slotted-angle beams can be increased by the addition of transverse stiffeners. These should be placed immediately under the load bearing point. The slotted-angle segment used as the stiffener is bolted into place using a metal connector at each junction.



Beams that are 6' long or less require only one stiffener in the center of the span. Seven-foot beams need two stiffeners placed 2' from each end. Eight-ffot beams require two stiffeners 2'6" from the ends. For beams with a nine-foot span, it is necessary to have three stiffeners at 2'3" intervals. Ten-foot beams need three stiffeners with 2'6" spacings.

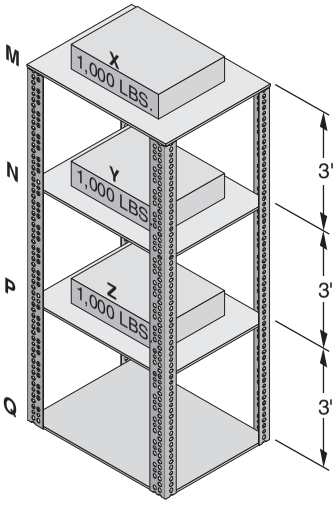
For maximum effectiveness, transverse stiffeners should never be spaced more than 3'6" apart.

Note: All loads based on actual physical testing. Documentation available on request.

Column Load Calculations

Column sections are calculated as described in the following example: (Assumes use of PA-238 1⅝" x 2 ⅝", material.)

Since all load areas are supported equally by the 4-columns, the calculations are based on a single-column section.



Section MN is one-fourth of "X", or 250 pounds. Column section NP supports one-fourth of "Y" (250 pounds) plus the load supported by MN, or a total of 500 pounds. Section PQ supports one-fourth of "Z" (250 pounds) plus the 500 pound load on section NP, or a total of 750 pounds.

Column loads are based on free and unbraced column lengths. Since MN, NP and PQ are each 3' long, the load requirement is for a 36" section that will bear 750 pounds safely. A reference to Table 5 (Page 104) indicates that all sections designated "A" will support 2,280 lbs. and meet the necessary requirements.

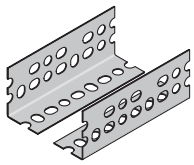
Note: To simplify assembly, we recommend using the same size material as for the horizontal members. This would be found in Table 2 to match the 14 gauge 1⅝" x 2⅝" material selected for the beams of this structure.

POWER-ANGLE®

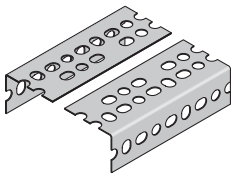
Finish: Pregalvanized or Acrylic Green **Stock Thickness:** .075(14 ga.) **Stock Length:** 10 & 12 Feet
Order By: No., Length and Finish

Beam Configurations (See corresponding letters in table on following page for load data)

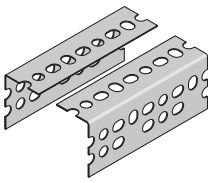
G – Two Single Pieces (Up)



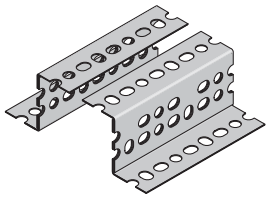
H – Two Single Pieces (Level)



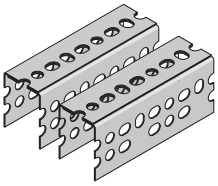
I – Two Single Pieces (Down)



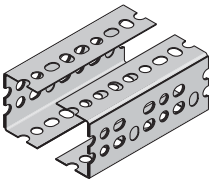
J – Two Z-Sections



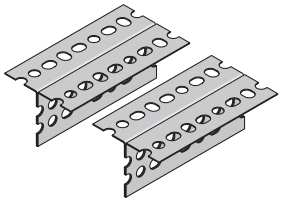
K – Two Narrow Channels



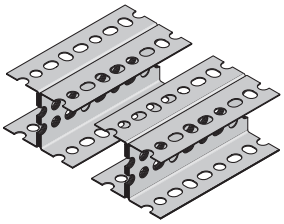
L – Two Broad Channels



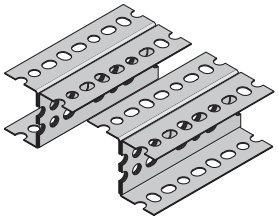
M – Two T-Sections



N – Two I-Section

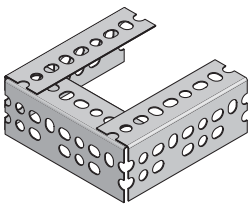


O – Two J-Sections

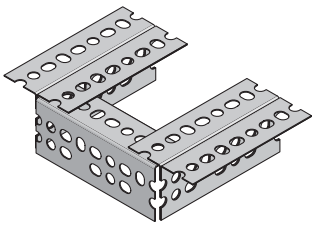


Beam Configurations With Stiffeners
(See corresponding letters in table on following page for load data)

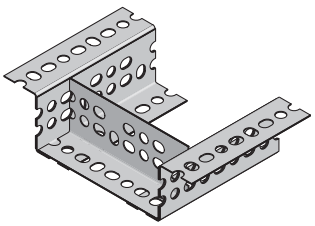
P – Single Pieces w/Stiffner



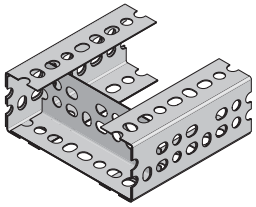
Q – T-Sections w/Stiffener



R – Z-Sections w/Stiffener

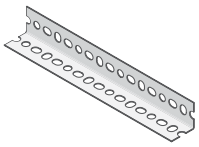


R – I-Sections w/Stiffener



Beam Loads PA 158 – Light Duty (1⅝" x 1⅝" x 14 ga.)

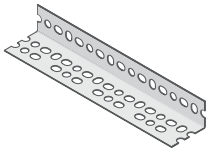
Table 1



Beam Span (Inches)	Beam Configuration (See Previous Page) Beam Load in Pounds*						
	G	H	I	P	L	R	M
24	550	830	830	920	1,600	1,700	1,840
36	370	560	560	610	1,070	1,130	1,230
48	280	420	420	460	800	850	920
60	220	330	330	370	640	680	740
72	180	280	280	310	530	570	610
84	•	240	240	260	460	490	530
96	•	210	210	230	400	430	460
108	•	•	•	•	360	380	410
120	•	•	•	•	320	340	370

Beam Loads PA 238 – Medium Duty (1⅝" x 2⅜" x 14 ga.)

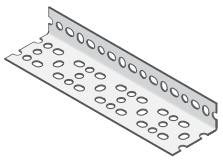
Table 2



Beam Span (Inches)	Beam Configuration (See Previous Page) - Beam Load in Pounds*											
	G	H	I	P	J	L	R	M	K	Q	O	N
24	700	1,020	1,660	1,740	2,220	3,170	3,230	3,490	3,590	3,630	6,060	7,560
36	460	680	1,100	1,160	1,480	2,110	2,150	2,320	2,390	2,420	4,040	5,040
48	350	510	830	870	1,110	1,580	1,620	1,740	1,800	1,810	3,030	3,780
60	280	410	660	700	890	1,270	1,290	1,390	1,440	1,450	2,420	3,020
72	230	340	550	580	740	1,060	1,080	1,160	1,200	1,210	2,020	2,520
84	•	290	470	500	630	910	920	1,000	1,030	1,040	1,730	2,160
96	•	260	410	440	550	790	810	870	900	910	1,520	1,890
108	•	•	•	•	490	700	720	770	800	810	1,350	1,680
120	•	•	•	•	440	630	650	700	720	730	1,210	1,510

Beam Loads PA 318 – Heavy Duty (1⅝" x 3⅛" x 12 ga.)

Table 3



Beam Span (Inches)	Beam Configuration (See Previous Page) - Beam Load in Pounds*											
	G	H	I	P	J	L	R	M	K	Q	O	N
24	1,790	1,610	4,300	4,960	6,520	7,910	8,070	9,920	9,990	10,170	14,600	16,120
36	1,200	1,070	2,870	3,310	4,350	5,270	5,380	6,610	6,660	6,780	9,730	10,750
48	900	810	2,150	2,480	3,260	3,950	4,030	4,960	4,990	5,080	7,300	8,060
60	720	640	1,720	1,980	2,610	3,160	3,230	3,970	4,000	4,070	5,840	6,450
72	600	540	1,430	1,650	2,170	2,640	2,690	3,310	3,330	3,390	4,870	5,370
84	•	460	1,230	1,420	1,860	2,260	2,300	2,830	2,850	2,910	4,170	4,610
96	•	400	1,080	1,240	1,630	1,980	2,020	2,480	2,500	2,540	3,650	4,030
108	•	•	•	1,100	1,450	1,760	1,790	2,200	2,220	2,260	3,240	3,580
120	•	•	•	990	1,300	1,580	1,610	1,980	2,000	2,030	2,920	3,220

* Based on simple beam condition with uniform loads on parallel beams.
To determine concentrated load capacity at mid-span, multiply uniform load by 0.5.

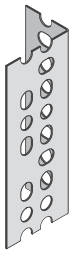
POWER-ANGLE®

Finish: Pregalvanized or Acrylic Green **Stock Thickness:** .075(14 ga.) **Stock Length:** 10 & 12 Feet
Order By: No., Length and Finish

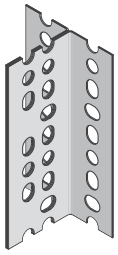
Column Sections

(See corresponding letters in table on for load data)

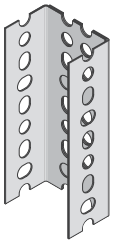
A – Single Piece



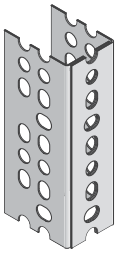
B – T-Section



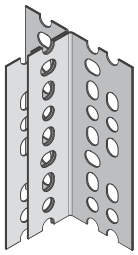
B – Broad Channel Section



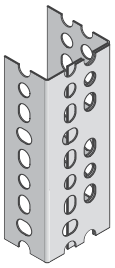
B – Narrow Channel Section



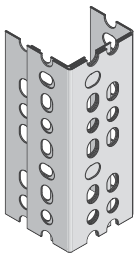
C – Uneven T-Section



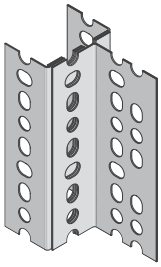
C – Uneven Channel Section



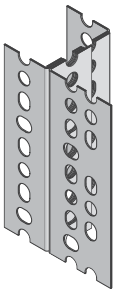
D – Dual Channel Section



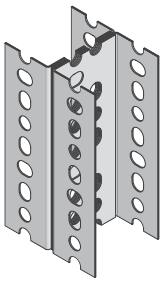
D – T-Channel Section



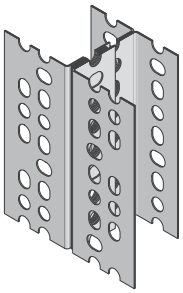
D – T-Channel Section



E – I-Section



F – Uneven I-Section



Column Load

PA 158 – Light Duty (1⅝" x 1⅝" x 14 ga.)

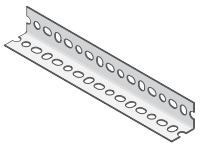


Table 4

Column Height (Inches)	Column Load in Pounds*	
	Column Sections (See Left Side of Page)	
	A	B
36"	1,450	3,850
48"	1,150	3,500
60"	950	3,000
72"	750	2,500

PA 238 – Medium Duty (1⅝" x 2⅜" x 14 ga.)

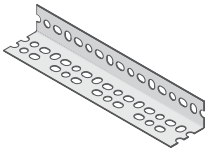


Table 5

Column Height (Inches)	Column Load in Pounds*					
	Column Sections (See Left Side of Page)					
	A	B	C	D	E	F
36"	2,280	4,760	4,940	7,270	9,520	9,865
48"	1,970	4,490	4,680	6,920	8,970	9,330
60"	1,520	3,995	4,310	6,370	7,990	8,620
72"	1,070	3,140	3,870	5,840	6,280	7,715
84"	660	2,340	3,665	4,930	4,660	6,740
96"	•	1,750	2,700	3,850	3,500	5,365
108"	•	•	2,060	2,870	•	4,115
120"	•	•	1,610	2,690	•	3,210

PA 318 – Heavy Duty (1⅝" x 3⅛" x 12 ga.)

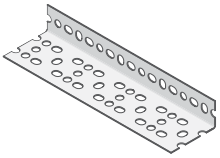
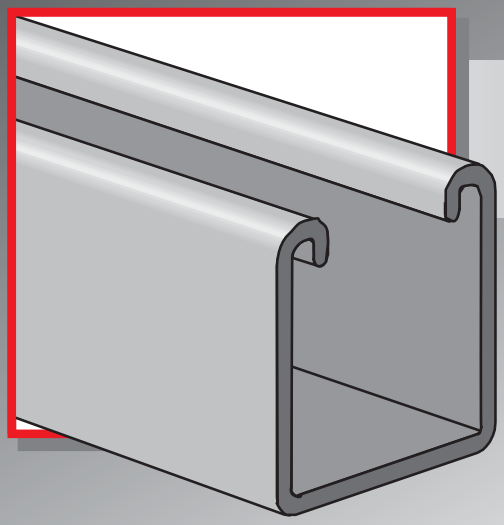


Table 6

Column Height (Inches)	Column Load in Pounds*					
	Column Sections (See Left Side of Page)					
	A	B	C	D	E	F
36"	3,470	7,970	8,770	12,560	15,940	17,550
48"	2,870	7,360	8,580	11,970	14,750	17,150
60"	1,970	6,570	8,180	11,360	13,160	16,360
72"	1,280	5,270	7,690	10,480	10,560	15,360
84"	•	3,670	6,970	9,470	7,370	13,970
96"	•	2,580	6,260	8,370	5,170	12,570
108"	•	•	5,460	6,880	•	10,970
120"	•	•	4,460	5,370	•	8,960

* Column Loads are concentric without intermediate lateral support.



FIBERGLASS

The installation of fiberglass channel and accessories is similar to the installation of metallic channel and accessories. All standard installation practices and procedures apply. In general, special handling is not required. Fabrication of Aickinstrut components requires just three simple operations; cutting, drilling and sealing.

AICKINSTRUT FABRICATION

The installation of fiberglass channel and accessories is similar to the installation of metallic channel and accessories. All standard installation practices and procedures apply. In general, special handling is not required. Fabrication of Aickinstrut components requires just three simple operations; cutting, drilling and sealing as described below.

Cutting – Cutting can be accomplished with a wide variety of saws. Hand held saws, such as hack saws (24 to 32 teeth per inch) are suitable when a few number of cuts are required. For frequent cutting, a circular power saw with a carbide-tipped masonry blade yields the best results and the greatest number of cuts. When using a power saw, dust filter masks, gloves and long sleeve clothing should be worn.

Drilling – Any standard twist bit, even when used with battery-powered drills will work well. Carbide-tipped drill bits are recommended.

Sealing – To protect against future migration of corrosive elements into the cut sections, all cuts and holes should be properly sealed using Aickincoat or Aickinzap.

LABOR SAVINGS

Aickinstrut fiberglass structural members can be cut and drilled at a much faster rate than steel. Typically, fiberglass can be fabricated in less than half the time. As a result, substantial labor savings will be realized. Also, Aickinstrut products average ⅓ the weight of their steel counterparts, making them much easier to handle on the job site.

RELATIVE MATERIAL COSTS

Aickinstrut materials are advantageously priced relative to specialty metals traditionally used in corrosive environments. Aickinstrut, even though slightly more expensive than pre-galvanized channel, can be used with the knowledge that it will not have to be maintained regularly or replaced after a brief time. Should pre-galvanized channel have to be replaced once, its cost far outweighs the expense of doing the initial installation with Aickinstrut.

MATERIAL

The finished Aickinstrut application will utilize a combination of materials from the following resin families:

Material Code	Material
E	PVC (extruded)
P	Polyester (pultruded)
V	Vinyl ester (pultruded)
PU	Polyurethane (injection molded)
PP	Polypropylene (injection molded)
N	Nylon (injection molded)

The ability of each material to handle high and low temperatures, chemical exposures and static loads is covered in each of the following sections. By using these criteria, you will be able to select the optimal Aickinstrut Channel, Fittings and Accessories for your particular applications.

OPERATING ENVIRONMENT

In order to design an Aickinstrut system for your application, consideration should be given to the maximum operating conditions. These "worst case" conditions will determine which type of Aickinstrut materials are best suited for your application. The three "worst case" operating conditions to consider are:

- Temperature
- Chemical Environment
- Loading

Temperature Ranges – Aickinstrut is supplied in six different materials covering distinct temperature ranges. Materials should be chosen which meet or exceed the minimum and maximum temperatures for your applications.

Material Code	Low Temperature	High Temperature
E	-25°F	130°F
P	-35°F	200°F
V	-35°F	200°F
PU	-40°F	140°F
PP	-30°F	150°F
N	-20°F	150°F

The temperature ranges indicated are meant to be used only as a general guideline. Continual exposure to elevated temperatures reduces the strength properties of plastics and glass reinforced fiberglass. Actual resin test data confirms that a 50% reduction in strength occurs at the extreme high temperature levels.

Chemical Resistance – Each resin family has its own specifications regarding its performance against corrosion resistance. Use the following chart to determine which Aickinstrut material system will provide the best performance for your particular application. The results in the chart are based upon immersion for a 24 hour period. This is typically the "worst case" exposure to corrosion. Less severe contact such as spills, splashes and vapor condensate will exceed the performance results listed in the table.

Loading – Channel loading is defined on pages 112. Additional loading and design limitations for fittings and accessories are described in the appropriate section for that part.

Aickinstrut Specifications

1.0 SCOPE

1.1 This specification covers the requirements for the Aickinstrut Nonmetallic Channel Framing System.

2.0 MATERIAL

2.1 FRP channel shall be of pultruded glass reinforced polyester or vinyl ester resin having the physical property values listed in this catalog.

2.2 PVC channel shall be of extruded polyvinyl chloride having the physical property values listed in this catalog.

2.3 Some accessories shall be of injection molded, 40% long glass fiber reinforced polyurethane, polypropylene or nylon.

3.0 COMPOSITION

3.1 Glass reinforced channel shall have a synthetic surfacing veil applied on exterior surfaces to improve weatherability and inhibit ultraviolet degradation. An ultraviolet stabilizer shall be incorporated in the resin formulation to further inhibit ultraviolet degradation.

3.2 PVC channel shall be manufactured from a U.V. stabilized resin and incorporate dark gray pigment to improve weatherability and inhibit ultraviolet degradation.

4.0 STRUCTURAL DESIGN

4.1 Channel shall incorporate Aickinstrut's patented flange profile design which allows full and positive interlocking contact of channel accessories and prohibits premature flange failure from torqued accessories.

4.2 Channel profile dimensions shall be:

1 5/8" x 1 5/8" x 1/8",
1 1/2" x 1 1/2" x 1/8", or
1 1/2" x 1 1/8" x 1/8".

4.3 All 1 5/8" x 1 5/8" channel profiles shall have a minimum pull out resistance of 1,000 pounds when load is applied over a 3/8" long section of the inside flanges.

4.4 Channel section lengths shall be supplied in 10' or 20' lengths (±1/8").

4.5 Universal Pipe Clamps shall have full interlocking contact with interior channel flanges to maximize pull-out resistance and be adjustable to accommodate a minimum 3/4" variance in piping or conduit O.D. sizes.

5.0 STANDARDS

5.1 Glass reinforced and PVC channels covered in this specification shall have a flame spread rating of 25 or less when tested per ASTM E84 and meet the requirements of UL 94V0 thereby qualifying them as Class 1 material in the Uniform Building Code.

5.2 Glass reinforced channels covered in this specification shall comply with the requirements of ASTM D 3917 and ASTM D 4385 which govern the dimensional tolerance and visual defects of pultruded shapes.

6.0 GENERAL

6.1 Aickinstrut Nonmetallic Channel Framing shall be furnished as a system which includes all the necessary fasteners, channel splice plates, brackets, sealants, hangers, pipe clamps, etc.

6.2 Nonmetallic fasteners shall be manufactured from long glass fiber reinforced polyurethane to ensure maximum strength and corrosion resistance.

6.3 All components of the Aickinstrut Channel Framing System shall be nonmetallic except where type 316 stainless steel hardware is used as part of the assembly.

6.4 Aickinstrut is manufactured by Aickinstrut, a subsidiary of T. J. Cope, Philadelphia, Pennsylvania, 1-800-426-4293.

6.5 The manufacturer shall not have had less than 10 years experience in manufacturing strut systems.

6.6 All products are manufactured in the United States of America.

Chemical Compatibility Table

Chemical	Series E (Rigid PVC) 70°-160°F		Series P (Poly/Glass) 70°-160°F		Series V (Vinyl/Glass) 70°-160°F		Series K (PVDF) 70°-160°F		Series PU (Polyurethane) 70°-160°F		Series N (Nylon) 70°-160°F	
Acetic Acid, Up to 10%	R	R	R	R	R	R	R	R	R	–	NR	NR
Acetic Acid, Up to 50%	R	R	R	R	R	R	R	R	R	–	NR	NR
Acetone, Up to 10%	NR	NR	NR	NR	NR	NR	NR	NR	R	–	R	R
Aluminum Hydroxide	R	R	R	R	R	R	R	R	R	–	NR	NR
Ammonium Hydroxide (Aqueous Ammonia), Up to 5%	R	R	NR	NR	R	R	R	R	R	–	–	–
Ammonium Hydroxide, Up to 10%	R	R	NR	NR	R	150°	R	R	R	–	–	–
Ammonium Hydroxide, Up to 20%	R	R	NR	NR	R	150°	R	R	R	–	–	–
Ammonium Nitrate	R	NR	R	R	R	R	R	R	R	–	–	–
Ammonium Phosphate	R	R	R	NR	R	R	R	R	R	–	–	–
Ammenium Sulfide, saturated	R	R	NR	NR	R	120°	R	R	R	–	–	–
Aqua Regia, fumes	NR	NR	NR	NR	R	150°	R	R	NR	–	–	–
Benzene	NR	NR	NR	NR	NR	NR	NR	R	R	R	R	R
Benzoic Acid	R	R	R	R	R	R	R	R	R	–	–	–
Bromine, wet gas	R	NR	NR	NR	R	100°	R	R	–	–	–	–
Butylene Glycol, Up to 100%	R	R	R	R	R	R	R	R	R	–	R	R
Butyric Acid, Up to 50%	NR	NR	R	R	R	R	R	R	R	–	–	–
Calcium Hydroxide	R	R	R	NR	R	R	R	R	R	–	–	–
Calcium Hypochlorite	R	R	R	NR	R	R	R	R	R	–	NR	NR
Chlorine, Dry Gas	NR	NR	NR	NR	R	R	R	R	–	–	–	–
Chlorine, Wet Gas	NR	NR	NR	NR	R	R	R	R	–	–	–	–
Chlorine, Liquid	NR	NR	NR	NR	NR	NR	R	R	–	–	–	–
Chlorine, Water	NR	NR	R	R	R	R	R	R	R	–	NR	NR
Chromic Acid, Up to 5%	R	R	NR	NR	R	R	R	R	–	–	R	R
Copper Chloride	R	R	R	R	R	R	R	R	R	–	–	–
Copper Cyanide	R	R	R	NR	R	R	R	R	R	–	–	–
Copper Fluoride	R	R	R	NR	R	R	R	R	R	–	–	–
Copper Nitrate	R	R	R	R	R	R	R	R	R	–	–	–
Copper Sulfate	R	R	R	R	R	R	R	R	R	–	–	–
Dechlorinated Brine Storage	R	R	–	–	R	R	R	R	R	–	–	–
Esters, Fatty Acid	NR	NR	R	R	R	R	R	R	R	–	–	–
Ferric Chloride	R	R	R	R	R	R	R	R	R	–	–	–
Ferrous Chloride	R	R	R	R	R	R	R	R	R	–	–	–
Fluoboric Acid	R	R	R	120°	R	R	R	R	–	–	–	–
Fluosilicic Acid, Up to 10%	NR	NR	NR	NR	R	R	R	R	–	–	NR	NR
Fluosilicic Acid, Up to 32%	NR	NR	NR	NR	R	100°	R	R	–	–	–	–
Formic Acid, Up to 10%	R	R	NR	NR	R	R	R	R	R	–	NR	NR
Formic Acid, Up to 50%	R	R	NR	NR	R	100°	R	R	R	–	–	–
Gasoline, Aviation	R	NR	R	NR	R	R	R	R	R	–	–	–
Green Liquor, Pulp Mill	R	R	–	–	R	R	R	R	–	–	–	–
Hydrochloric Acid Up to 15%	R	R	R	NR	R	R	R	R	R	–	–	–
Hydrochloric Acid Up to 37%	R	R	R	NR	R	R	R	R	R	–	–	–
Hydrofluoric Acid, Up to 10%	R	R	NR	NR	R	150°	R	R	–	–	–	–
Hydrofluoric Acid, Up to 20%	R	NR	NR	NR	R	100°	R	R	–	–	–	–
Hydrogen Chloride, Wet Gas	NR	NR	R	NR	R	R	R	R	NR	–	–	–
Hydrogen Sulfide, Wet Gas	R	R	R	NR	R	R	R	R	R	–	–	–

Legend: "**NR**" indicates "Not Recommended" for use;
"**R**" indicates "Recommended";
"**–**" indicates no information available

Chemical Compatibility Table

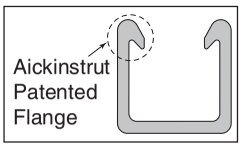
Chemical	Series E (Rigid PVC) 70°-160°F		Series P (Poly/Glass) 70°-160°F		Series V (Vinyl/Glass) 70°-160°F		Series K (PVDF) 70°-160°F		Series PU (Polyurethane) 70°-160°F		Series N (Nylon) 70°-160°F	
Lactic Acid	R	R	R	NR	R	R	R	R	R	–	–	–
Lead Nitrate	R	R	–	–	R	R	R	R	R	–	–	–
Magnesium Hydroxide	R	R	NR	NR	R	R	R	R	R	–	R	R
Nickel Sulfate, Low pH	R	R	NR	NR	R	R	R	R	R	–	–	–
Nickel Sulfate, High pH	R	R	NR	NR	R	R	R	R	R	–	–	–
Nitric Acid, Up to 5%	R	R	NR	NR	R	150°	R	R	R	–	–	–
Nitric Acid, Up to 35%	R	R	NR	NR	R	150°	R	R	R	–	–	–
Nitric Acid, Vapor	R	R	NR	NR	R	R	R	R	–	–	–	–
Perchloric Acid, Up to 10%	NR	NR	NR	NR	R	150°	R	R	–	–	NR	NR
Pickling Liquids, 3-5% H2S04	R	R	R	R	R	R	R	R	R	–	–	–
Phosphoric Acid	R	R	NR	NR	R	R	R	R	R	–	NR	NR
Phosphoric Acid, Super or Poly (115%, P20%)	R	R	NR	NR	R	R	R	R	–	–	–	–
Phosphoric Acid Vapor or Condensate	R	R	NR	NR	R	R	R	R	–	–	–	–
Potassium Chloride	R	R	R	R	R	R	R	R	R	–	–	–
Potassium Nitrate	R	R	R	R	R	R	R	R	R	–	–	–
Potassium Persulfate	R	R	NR	NR	R	R	R	R	R	–	–	–
Silver Cyanide, Up to 5%	R	R	NR	NR	R	R	R	R	R	–	–	–
Sodium Hydroxide, Up to 25%	R	R	NR	NR	R	150°	R	R	R	–	–	–
Sodium Hydroxide, up to 50%	R	R	NR	NR	R	180°	R	R	–	–	R	R
Sodium Hypochlorite, Up to 15%	R	R	NR	NR	R	150°	R	R	R	–	NR	NR
Sodium Nitrate	R	R	R	R	R	R	R	R	R	–	–	–
Sodium Sulfate	R	R	R	NR	R	R	R	R	R	–	–	–
Sodium Sulfide	R	R	NR	NR	R	R	R	R	R	–	–	–
Sulfuric Acid, Up to 25%	R	R	R	R	R	R	R	R	R	–	NR	NR
Sulfuric Acid, Up to 50%	R	R	NR	NR	R	R	R	R	R	–	–	–
Sulfuric Acid, Up to 70%	R	R	NR	NR	R	R	R	R	R	–	NR	NR
Sulfuric Acid, Up to 75%	NR	NR	NR	NR	R	120°	R	R	–	–	NR	NR
Sulfuric Acid, Up to 80%	NR	NR	NR	NR	NR	NR	NR	NR	–	–	NR	NR
Sulfuric Acid, Vapor	R	R	R	NR	R	R	R	R	–	–	–	–
Trichlorethylene, Fumes	NR	NR	NR	NR	R	120°	R	R	NR	–	–	–
Trisodium Phosphate	R	R	R	NR	R	R	R	R	R	–	–	–
Urea	R	R	R	NR	R	150°	R	R	R	–	R	R
Vegetable Oils	R	R	R	R	R	R	R	R	R	–	R	R
Vinegar	R	R	R	R	R	R	R	R	R	R	R	R
White Liquor, Pulp Mill	R	R	–	–	R	R	R	R	–	–	–	–

Note: The recommendations contained in this table are made without guarantee of representation as to results. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by T.J. Cope, Inc. as to effects of such use or results to be obtained nor does T.J. Cope, Inc. assume any liability arising out of the use by others of the products referenced in this table. Nor is the information herein to be construed as absolutely complete since additional information may be needed or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. We suggest that you evaluate these recommendations and suggestions in your own laboratory prior to use. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material.

Legend: "**NR**" indicates "Not Recommended" for use; "**R**" indicates "Recommended"; "**–**" indicates no information available

CHANNEL FRAMING

All Aickinstrut channels, except the SST series, incorporate a patented flange design which provides reliable fastening and interlocking of Aickinstrut components and accessories.



Channels are provided in standard lengths of 10' with longer lengths available upon request. Aickinstrut single channels come packaged in boxes of 100' while the double channels are packaged in boxes containing 40'.

Aickinstrut channel is available in three materials:

- Polyester (P material),
- Vinyl Ester (V material) and
- PVC (E material)

POLYESTER AND VINYL ESTER MATERIALS

The polyester and vinyl ester channels are manufactured from the pultrusion process. In this process, the component is made by reinforcing a polymer resin (polyester or vinyl ester) with multiple strands of glass filament, alternating layers of glass mat and U.V. resistant surfacing veils. The glass is drawn through the liquid resin, which coats and saturates the fibers. The combination of resin, glass and veil is then continuously guided and pulled (pultruded) through a heated die that determines the shape of the component.

In the die, the resin is cured to form a permanent, reinforced part which can be cut to a specific length. Since the hardened fiberglass pultrusion is reinforced with and internal arrangement of permanently bonded continuous glass fibers, it possesses great strength.

In addition, pultruded fiberglass components exhibit exceptional corrosion and fire resistance. These attributes make fiberglass the material of choice for many harsh industrial applications.

The polyester and vinyl ester channels are color coded. Polyester channels are colored gray and the vinyl ester channels are colored beige.

PVC MATERIALS

The PVC channels are manufactured from the extrusion process. In this process, the component is made by a PVC resin mixture being continuously fed through a heated die that determines the shape of the component.

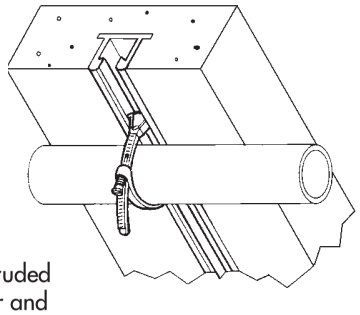
In the die, the resin is cured to form a permanent, extruded part that can be cut to a specific length. Unlike pultruded components, extruded components do not incorporate glass-reinforcement; consequently, they do not exhibit the same beam strength as their pultruded counterparts. PVC components, however; exhibit exceptional corrosion and fire resistance. These features make PVC channels an excellent alternative when excessive beam strength is not required. PVC channels are color coded dark gray.

CHANNEL AVAILABILITY CHART

The following chart illustrates the availability of materials in the different channel profiles.

Channel Profile	Polyester (P)	Vinyl Ester (V)	PVC (E)
Series 2000, 2200, 2300	X	X	X
Series 1500, 1700, 1800	X	X	N/A
Series 1000, 1200, 1300	X	X	X
Series 2100	X	X	N/A
Series 1600	X	X	N/A
Series 1100	X	X	N/A

CONCRETE EMBEDMENT CHANNEL PART NO. – 20E-2300



In certain applications, it is necessary to embed a corrosion resistant channel into a new pouring of concrete. For these applications, Aickinstrut concrete embedment channel is recommended. Aickinstrut embedment channel is available in three material types; PVC, polyester and vinyl ester. The PVC embedment channel is extruded as one piece while the polyester and vinyl ester embedment channel is a two piece bonded type design. The PVC embedment channel is available in the 1⅝" and 1⅛" profiles while polyester and vinyl ester embedment channels are available in all three profiles (1⅝", 1½" & 1⅛").

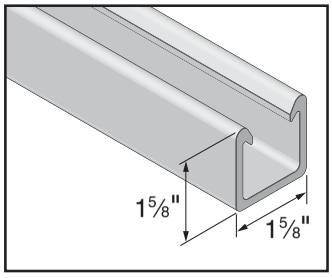
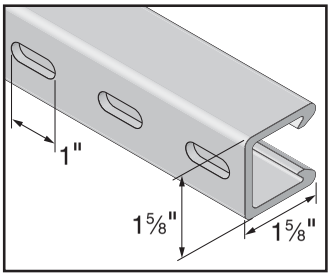
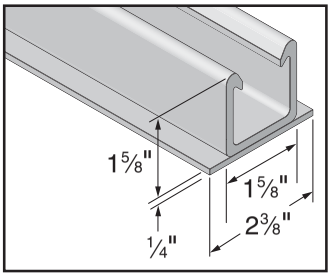
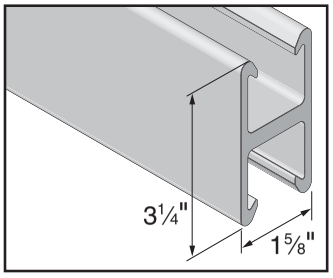
The embedment channel utilizes two continuous protruding flanges in the profile base to retain the channel in the concrete. Mounting the embedment channel flush with the concrete surface is a convenient way to secure piping, conduits or electrical enclosures to a wall or ceiling. The PVC embedment channel is extremely high in strength. When embedded in 3,000 PSI concrete, the concrete will fail before the channel is pulled out.

AICKINSTRUT SST CHANNEL

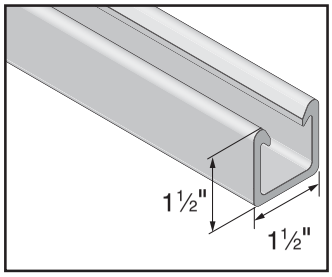
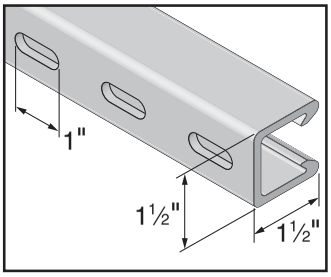
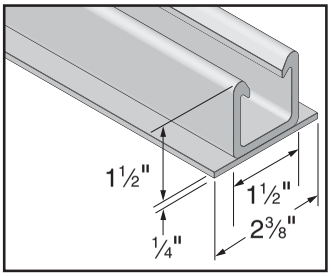
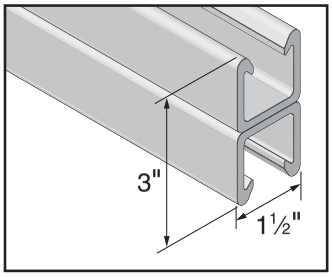
Aickinstrut SST Fiberglass Channel incorporates a standard channel profile that will accommodate metallic pipe straps and clamps. SST channel is available in polyester or vinyl ester resin. All standard styles (solid, slotted, concrete insert and back-to-back) are also available. Please contact the factory for loading information for the SST Channel.

Note: Aickinstrut SST Channel is not compatible with the Aickinstrut pipe clamps, channel nuts, and grooved fittings shown in this catalog. Please contact Aickinstrut for information on a complete line of compatible clamps and channel nuts.

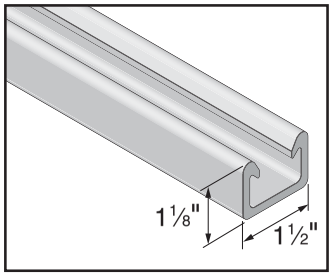
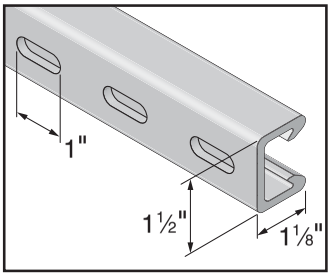
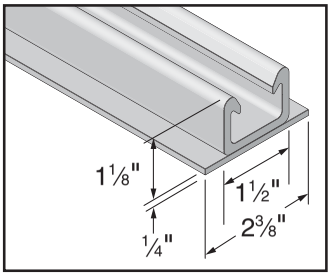
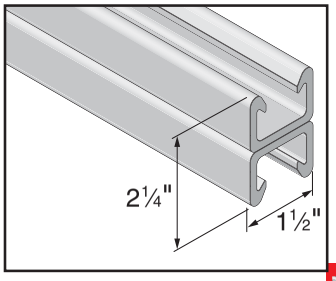
HEAVY DUTY CHANNEL – AICKINSTRUT PROFILE

Standard 20P-2000, 20V-2000, 20E-2000	**Slotted** (1" x ⅜" Holes) 20P-2200, 20V-2200, 20E-2200	**With Concrete Inserts** 20P-2300, 20V-2300, 20E-2300	**Back-to-Back** 20P-2100, 20V-2100
			

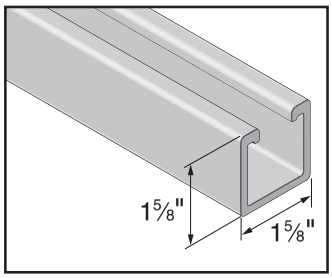
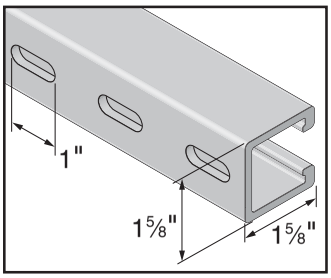
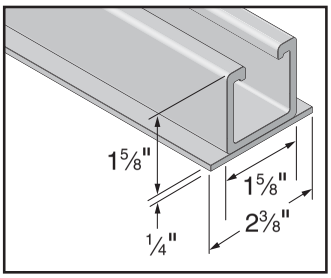
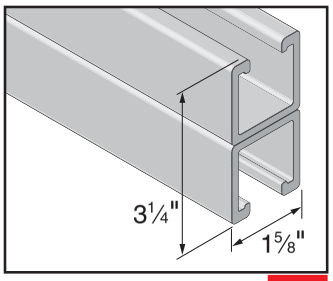
MEDIUM DUTY CHANNEL – AICKINSTRUT PROFILE

Standard 20P-1500, 20V-1500	**Slotted** (1" x ⅜" Holes) 20P-1700, 20V-1700	**With Concrete Inserts** 20P-1800, 20V-1800	**Back-to-Back** 20P-1600, 20V-1600
			

LIGHT DUTY CHANNEL – AICKINSTRUT PROFILE

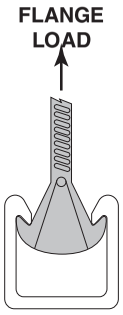
Standard 20P-1000, 20V-1000, 20E-1000	**Slotted** (1" x ⅜" Holes) 20P-1200, 20V-1200, 20E-1200	**With Concrete Inserts** 20P-1300, 20V-1300, 20E-1300	**Back-to-Back** 20P-1100, 20V-1100
			

HEAVY DUTY CHANNEL – STANDARD PROFILE

Standard 20P-2000-SST, 20V-2000-SST	**Slotted** (1" x ⅜" Holes) 20P-2200-SST, 20V-2200-SST	**With Concrete Inserts** 20P-2300-SST, 20V-2300-SST	**Back-to-Back** 20P-2100-SST, 20V-2100-SST
			

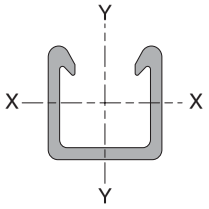
Flange Loading

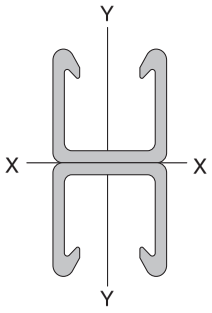
Pull-out strength is the channel's resistance to a clamp or fastener inserted under the flange and put under tension. For additional information concerning specific channels, materials and their pull-out strengths, refer to the channel flange pull-out chart on the right.



Heavy Duty Channel	Pull-Out Strength*
20V-2000	449
20P-2000	360
20E-2000	260
Medium Duty Channel	**Pull-Out Strength***
20V-1500	229
20P-1500	219
Light Duty Channel	**Pull-Out Strength***
20E-1000	239
20P-1000	213
20V-1000	213
*Values shown represent a 3:1 safety factor	

Section Properties





Section Number	Height	Width	Weight	Area	X - X Axis				Y - Y Axis		
					I	R	C^1	C^2	I	R	C
	(in.)	(in.)	(lbs./ft.)	($in.^2$)	($in.^4$)	(in.)	(in.)	(in.)	($in.^4$)	(in.)	(in.)
2000	1⅝	1⅝	0.82	1.06	0.31	0.54	0.70	0.93	0.42	0.63	0.82
2100	3½	1⅝	1.64	2.12	1.77	0.91	1.63	1.63	0.85	0.63	0.82
1500	1½	1½	0.55	0.71	0.19	0.52	0.62	0.88	0.25	0.59	0.75
1600	3	1½	1.10	1.42	1.02	0.85	1.50	1.50	0.49	0.59	0.75
1000	1⅛	1½	0.47	0.61	0.10	0.40	0.51	0.62	0.22	0.60	0.75
1100	2½	1½	0.94	1.22	0.42	0.59	1.13	1.13	0.44	0.60	0.75

Beam Loading – PVC

The data listed in the Beam Loading Chart reflects testing conducted on Polyester (Type P) and vinyl ester (Type V) channels. PVC (Type E) material will differ from the Polyester/Vinyl ester Beam Loading Chart. To obtain the beam loading for PVC channel, reduce the load as follows:

$$\text{PVC Beam Load} = \frac{\text{(Polyester/Vinyl Ester Beam Load)}}{4}$$

Note: PVC is not recommended for lengths over 24"

Polyester/Vinyl Ester Beam Loading Chart

Span	Part No.	Max. Uniform Beam Load (Safety Factor - 3:1) Load (lbs.)	Uniform Load at Defl. of 1/360 Span Deflection (in.)	Maximum Column Load (lbs.)	Deflection (in.)	Load (lbs.)
12" Span	20P/V-2100	5,559	0.028	5,559	0.033	9,454
	20P/V-1600	4,836	0.043	3,778		7,007
	20P/V-1100	3,804	0.082	1,556		5,961
	20P/V-2000	3,561	0.102	1,159		5,160
	20P/V-1500	1,950	0.093	700		3,439
	20P/V-1000	1,629	0.151	359		2,759
18" Span	20P/V-2100	3,706	0.064	2,914	0.050	8,866
	20P/V-1600	3,224	0.096	1,697		6,501
	20P/V-1100	2,536	0.183	691		5,509
	20P/V-2000	2,374	0.230	515		4,704
	20P/V-1500	1,300	0.209	311		3,136
	20P/V-1000	1,086	0.340	160		2,351
24" Span	20P/V-2100	2,780	0.113	1,639	0.067	8,181
	20P/V-1600	2,418	0.171	944		5,909
	20P/V-1100	1,902	0.326	389		4,979
	20P/V-2000	1,781	0.410	290		4,168
	20P/V-1500	975	0.371	175		2,778
	20P/V-1000	815	0.605	90		1,862
30" Span	20P/V-2100	2,224	0.177	1,049	0.083	7,405
	20P/V-1600	1,934	0.267	604		5,236
	20P/V-1100	1,522	0.509	249		4,375
	20P/V-2000	1,424	0.640	185		3,553
	20P/V-1500	780	0.580	112		2,369
	20P/V-1000	652	0.945	57		1,298
36" Span	20P/V-2100	1,853	0.254	730	0.100	6,451
	20P/V-1600	1,612	0.384	420		4,482
	20P/V-1100	1,268	0.734	173		3,698
	20P/V-2000	1,187	0.922	129		2,859
	20P/V-1500	650	0.836	78		1,906
	20P/V-1000	543	1.360	40		901
48" Span	20P/V-2100	1,390	0.452	410	0.133	4,534
	20P/V-1600	1,209	0.683	236		2,809
	20P/V-1100	951	1.304	97		2,254
	20P/V-2000	890	1.638	72		1,636
	20P/V-1500	488	1.486	44		1,091
	20P/V-1000	407	2.418	22		507
60" Span	20P/V-2100	1,112	0.707	262	0.167	2,902
	20P/V-1600	967	1.067	151		1,798
	20P/V-1100	761	2.038	62		1,442
	20P/V-2000	712	2.560	46		1,047
	20P/V-1500	390	2.321	28		698
	20P/V-1000	326	3.779	14		324
72" Span	20P/V-2100	927	1.018	182	0.200	2,015
	20P/V-1600	806	1.536	105		1,248
	20P/V-1100	634	2.935	43		1,001
	20P/V-2000	594	3.686	32		727
	20P/V-1500	325	3.343	19		485
	20P/V-1000	272	5.441	10		225

FIBERGLASS

Channel Fittings

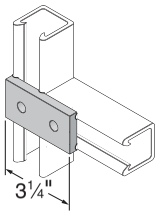
Aickinstrut Channel Fittings are required to fabricate an Aickinstrut structure and are easily attached to Aickinstrut Channels with channel nuts and polyurethane fasteners. The fittings are offered in two types; fabricated (cut from flat stock) or molded. Fabricated fittings are made from either polyester or vinyl ester material. All molded fittings with the exception of the post bases are molded in polyurethane. Post bases are also offered in polypropylene.

The 2500 Series Fittings are manufactured from ½" flat material. The 2800 Series Fittings are manufactured from ⅜" flat material and feature grooves which stabilize the fittings when mounted to the open side of the channel. All channel fittings are provided with 13/32" holes which accommodate ⅜" hardware, however several of the new molded fittings come with 9/16" holes 50PU-2616, 50PU-2611, and 50PU-2613. Larger diameter holes can be provided upon special request.

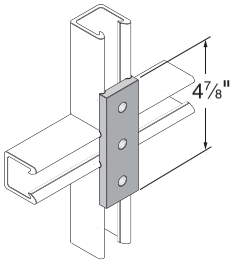
Legend
R = Right Hand
L = Left Hand
P Series Fittings are Grey
V Series Fittings are Beige
2500 Series - Flat
2800 Series - Grooved

Note: Illustrations depict grooved channel fittings.

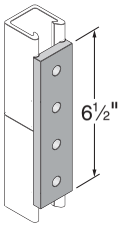
20P-2500, 20V-2500 (Flat)
20P-2800, 20V-2800 (Grooved)



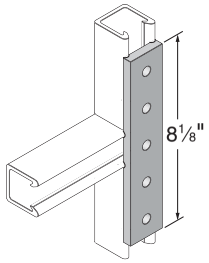
20P-2502, 20V-2502 (Flat)
20P-2802, 20V-2802 (Grooved)



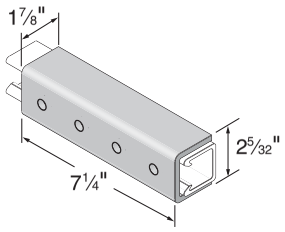
20P-2504, 20V-2504 (Flat)
20P-2804, 20V-2804 (Grooved)



20P-2506, 20V-2506 (Flat)
20P-2806, 20V-2806 (Grooved)

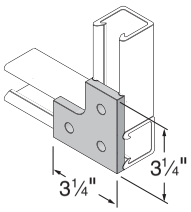


50PU-2616

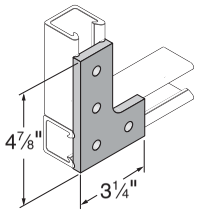


Note: 9/16" diameter holes

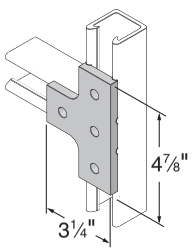
20P-2508, 20V-2508 (Flat)
20P-2808, 20V-2808 (Grooved)



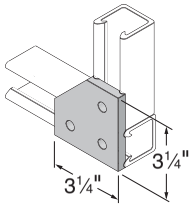
20P-2510, 20V-2510 (Flat)
20P-2810R, 20V-2810R (Grvd)
20P-2810L, 20V-2810L (Grvd)



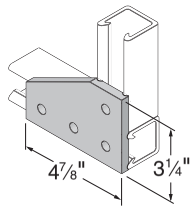
20P-2512, 20V-2512 (Flat)
20P-2812, 20V-2812 (Grooved)



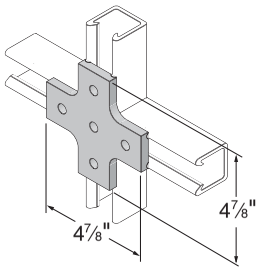
20P-2514, 20V-2514 (Flat)
20P-2814, 20V-2814 (Grooved)



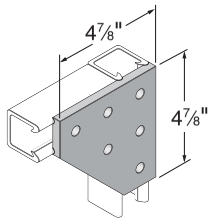
20P-2516, 20V-2516 (Flat)
20P-2816R, 20V-2816R (Grvd)
20P-2816L, 20V-2816L (Grvd)



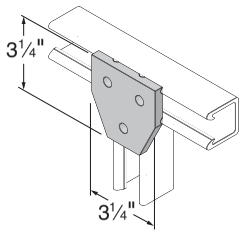
20P-2518, 20V-2518 (Flat)
20P-2818, 20V-2818 (Grooved)



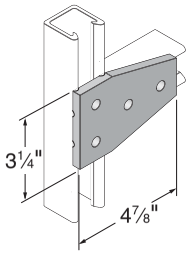
20P-2520, 20V-2520 (Flat)
20P-2820, 20V-2820 (Grooved)



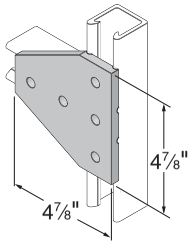
20P-2522, 20V-2522 (Flat)
20P-2822, 20V-2822 (Grooved)



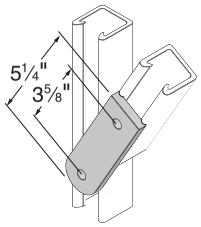
20P-2524, 20V-2524 (Flat)
20P-2824, 20V-2824 (Grooved)



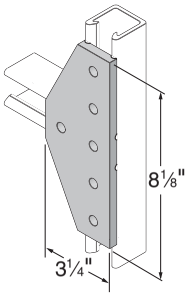
20P-2526, 20V-2526 (Flat)
20P-2826, 20V-2826 (Grooved)



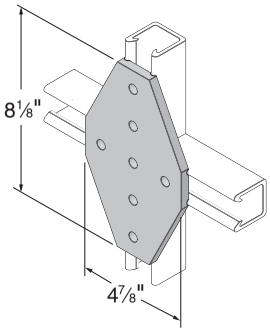
20P-2528, 20V-2528 (Flat)
20P-2828, 20V-2828 (Grooved)



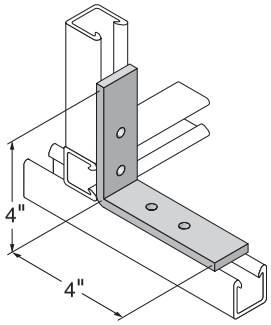
20P-2530, 20V-2530 (Flat)
20P-2830, 20V-2830 (Grooved)



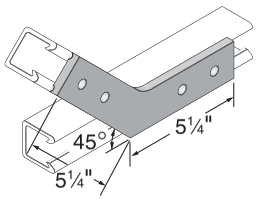
20P-2534, 20V-2534 (Flat)
20P-2834, 20V-2834 (Grooved)



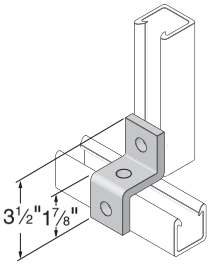
20P-2541, 20V-2541 (Flat)



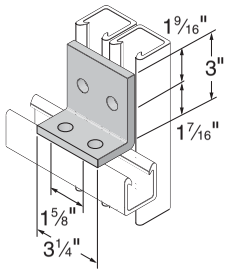
20P-2540, 20V-2540 (Flat)
20P-2840, 20V-2840 (Grooved)



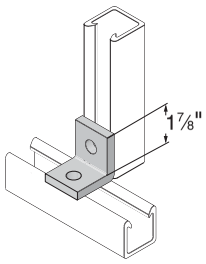
50PU-2611 (Flat)



20P-2542, 20V-2542 (Flat)

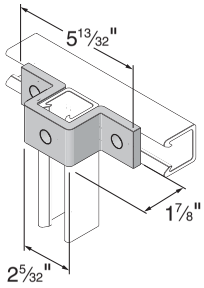


50PU-2611-SP



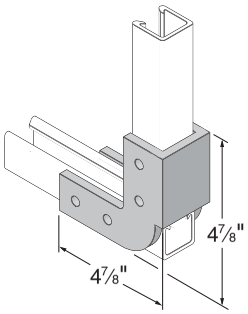
Note: 9/16" diameter holes

50PU-2613 (Flat)

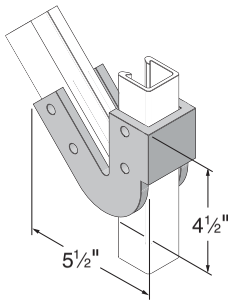


Note: 9/16" diameter holes

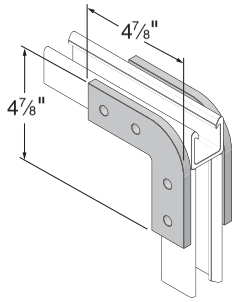
50PU-1508 (1½")
50PU-2008 (1⅝")



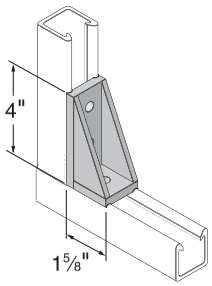
50PU-2045 (1⅝")



50PU-2090 (1⅝")

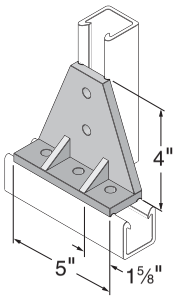


50PU-2636[1], 50PU-2636A[2], 50PU-2636B[3], 50PU-2936[4]

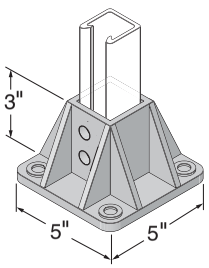


1) **50PU-2636** – Flat, without splines
2) **50PU-2636A** – Splines on long side only
3) **50PU-2636B** – Splines on short side only
4) **50PU-2936** – Splines on both long and short sides

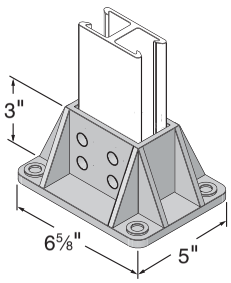
50PU-2538 (Flat)



20PU-5853 (1⅝"), 20PU-5854 (1½"), 20PU-5855 (1⅝"), 20PP-5853 (1⅝"), 20PP-5854 (1½"), 20PP-5855 (1½")



20PU-5903 (3¼"), 20PU-5904 (3"), 20PU-5905 (2¼"), 20PP-5903 (3¼"), 20PP-5904 (3"), 20PP-5905 (2¼")

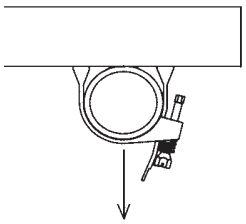


Aickinclamps Design Load Information

There are two types of piping system loadings, overhead (Type 1) and vertical (Type 2) as described below. All Aickinstrut pipe straps and clamps show the recommended loading for both types of loading.

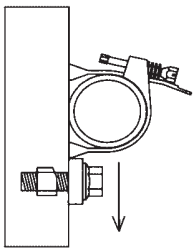
TYPE 1 DESIGN LOAD

The design load shown represents pipes supported below the strut. The design loads shown are based on a minimum ultimate failure safety factor of 3:1.



TYPE 2 DESIGN LOAD

The design loading shown can be achieved with the addition of a vertical stop lock assembly (Part #200-4219) installed directly beneath the pipe clamp. The adjacent illustration shows how the vertical stop lock assembly provides additional support for pipe and how it can be used to achieve full Type 2 design loads.



Design loads are based on a minimum clamp slip safety factor or 3:1. It is recommended that stop lock assemblies be used for all vertical pipe support applications.

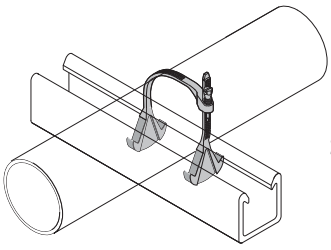
Adjustable Pipe Clamps

Aickinstrut Adjustable Pipe Clamps are manufactured from glass-reinforced polyurethane and are adjustable to accommodate a wide range of outside diameters. They can be utilized with a variety of piping systems including: PVC, fiberglass, copper, rigid steel conduit and PVC coated rigid steel conduit. Aickinclamps sized 6½" – 20" are to be used only in non-load bearing applications. These are applications where the weight of the pipe is being supported by Aickinstrut structural members (see figure on right).

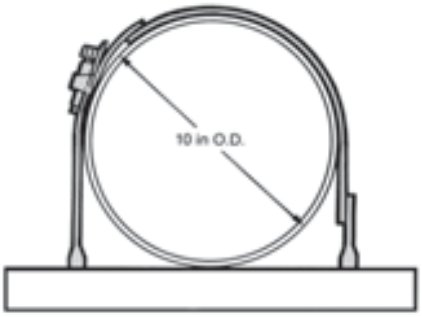
Aickinclamps can safely be used in temperatures up to 160°F. For operating temperatures of 160-230°F, it is recommended to use PVDF clamps. PVDF clamps are available as a special order. Contact the factory for pricing and availability. Care should be taken not to exceed 3 ft./lbs. of torque on the adjustable pipe straps.

Part Number	O.D. Pipe Size (in.)	Design Load (lbs.)*		Torque
		Type 1	Type 2	(ft./lbs.)
200-3100	½–1½	135	65	10 in./lbs.
200-3110	1½–2¼			3
200-3120	2¼–3¼	145	70	
200-3130	3–4	215		
200-3140	4–6½			
200-3150	6½–8	Non-Load Bearing		
200-3160	8–10			
200-3170	10–12			
200-3180	12–14			
200-3190	14–16			
200-3200	16–18			
200-3210	18–20			

*Design loads shown represent a 3:1 safety factor.

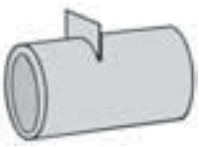


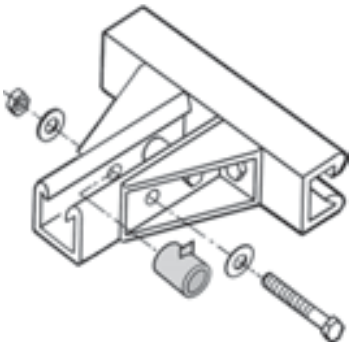
200-3100 to 200-3140



200-3150 to 200-3210

50PU-500SP – Channel Spacers





Channel spacers are designed to prevent wall compression under heavy loading conditions. Such loading occurs during the torquing of hardware for channel fittings. The spacers are molded from polyurethane and will accommodate ⅜" and ½" bolts. The spacers are designed to be used only with 1⅝" and 1½" channels.

Rigid Pipe Clamps

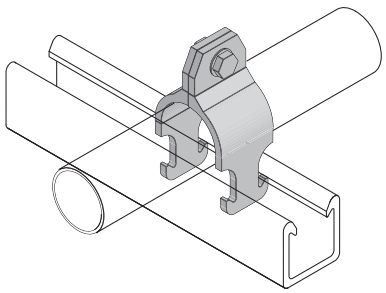
Aickinstrut Rigid Pipe Clamps resemble the more traditional style of pipe clamps. These clamps are made from glass-reinforced polyurethane and are sized based on the pipe inside diameter or nominal size.

Polyurethane clamps are recommended for applications up to 160°F. For high temperature applications (up to 230°F), PVDF clamps are available as a special order. Contact the factory for pricing and availability.

Care should be taken not to exceed the recommended torque values of the rigid pipe clamps.

Part No.	Nominal Size (in.)	PVC Sch. 80 & Rigid Metal	Design Loads (lbs.)*		FRP Bolt Size (in.)	FRP Bolt Torque (ft./lbs.)
			Type 1	Type 2		
PCR-050	½	0.840	225	90	⅜ x 1¼	3
PCR-075	¾	1.050				
PCR-100	1	1.315				
PCR-125	1¼	1.660				
PCR-150	1½	1.900				
PCR-200	2	2.375				
PCR-250	2½	2.875				
PCR-300	3	3.500				
PCR-400	4	4.500	300	125		
PCR-600	6	6.625				
PCR-800	8	8.625				

*Design loads shown represent a 3:1 safety factor.

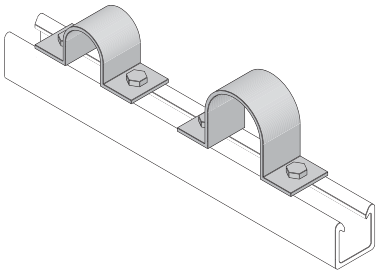


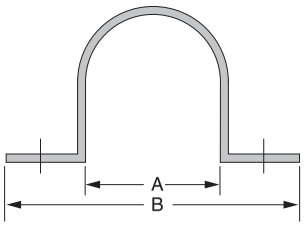
Two Hole Pipe Straps

Aickinstrut Two Hole Pipe Straps are designed for use in securing pipe, conduit and ducts to Aickinstrut Channel. Two hole fiberglass straps can also be used independently from the channel for surface mounting. All sizes of the straps are suitable for load bearing applications.

The two hole pipe straps are manufactured from a fire-retardant, glass reinforced polyester resin. For extreme chemical environments, the straps can be manufactured from vinyl ester resin. Larger diameter straps for special applications are also available. Contact the factory for pricing and availability of vinyl ester and large diameter straps. Two hole pipe straps should not be torqued above recommended values.

Part No.	Dimension		Bolt Size (in.)	Material Size (in.)	Design Load (lbs)*		Torque (ft./lbs.)
	A (in.)	B (in.)			Type 1	Type2	
PS050	0.840	4.840	½	¼ X 1⅝	135	50	4
PS075	1.050	5.050					
PS100	1.315	5.315					
PS150	1.900	5.900					
PS200	2⅜	6.375					
PS250	2⅞	6.875					
PS300	3½	7.500					
PS350	4	8.000					
PS400	4½	8.500			175	60	
PS500	5⁹⁄₁₆	9.563					
PS600	6⅝	10.625					
PS800	8⅝	12.625			225	125	
PS1000	10¾	15.750	⅝	¼ X 1⅝	225	125	10
PS1200	12¾	16.250					
PS1400	14	18.000		⅜ X 1⅝	250	150	
PS1600	16	20.000					
PS1800	18	23.000					



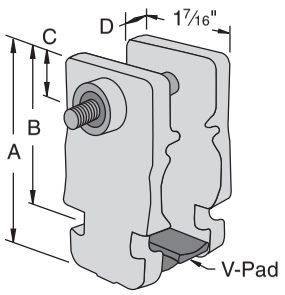


When bolting onto 1⅝" or 1½" channel a 1¼" long bolt is required.

*Design loads shown represent a 3:1 safety factor.

Notes: Bolts and channel nuts are sold separately.

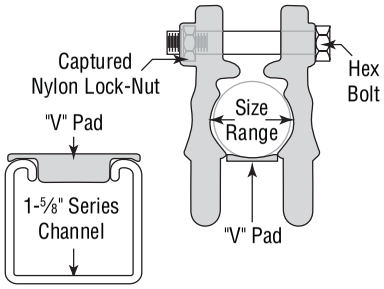
Aickin-A-Grip (SST Style Channel Only)



Part No.	Nominal Pipe Size	Dimensions (In.)				Hex Head Cap Screw & Lock Nut	Wt/100 pcs Lbs
		"A"	"B"	"C"	"D"		
PS TP-025	1/4	1 15/16	1 3/8	3/8	3/16	1/4-20 x 1 1/2"	4
PS TP-625	3/8	2 3/8	1 5/8	7/16	1/4	1/4-20 x 2"	6
PS TP-875	1/2	2 9/16	1 13/16		5/16		8
PS TP-100	3/4	2 11/16	1 15/16				8

Includes: Cushion, V-pad, and Hardware.
Materials: Cushion: Thermoplastic elastomer.
Hardware: Stainless Steel with Captured Nylon Locknut
Temperature Rating: -40°F to +275°F
Note: For use with SST Style Strut only

Multi-Size Adjustment Capability Allows Four Clamp Sizes to Fit Seventeen Sizes of Tube & Pipe.



Tube Sizes

Part No.	O.D. Tube Sizes			Diameters	PullOut Load/Lbs	Slip Load/Lbs
PS TP-025	1/4	3/8	1/2	0.25 - 0.54	500	40
PS TP-625	5/8	3/4	7/8	0.62 - 0.87		
PS TP-875	7/8	1	1 1/8	0.87 - 1.12		
PS TP-100	1	1 1/8	1 1/4	1.00 - 1.31		

Pipe Sizes

Part No.	Nominal Pipe Sizes		Diameters	PullOut Load/Lbs	Slip Load/Lbs
PS TP-025	1/4	-	0.25 - 0.54	500	40
PS TP-625	3/8	1/2	0.62 - 0.87		
PS TP-875	3/4	-	0.87 - 1.12		
PS TP-100		1	1.00 - 1.31		

FEATURE

- Ten sizes of tube;
  Five sizes of pipe…
  Using just four sizes of clamp.
- Diameters from .25" to 1.31"
- Metric Sizes from 6mm to 32mm
- Non-Conducting
- Corrosion Resistant
- UV Resistant
- Temperature

ADVANTAGE

- Reduces Inventory SKU's
- Fewer parts needed on the job.
- Simplifies take-offs & component requirements on projects using both Tube & Pipe Sizes
- High pull out and slip loads

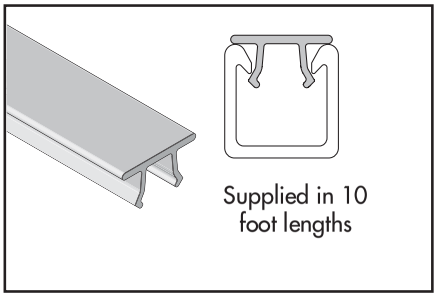
BENEFIT

- Lowers Inventory Costs.
- Always have the right clamp on hand when you need it.
- Job Costing made easier & more accurate.

Nominal Pipe Size	Water Filled Weight	Code Required Support Spacing [3]	Pipe Load At Support	Safety Factors from Allowed Value	
(Sch 40)	*(lbs/ft)*	*(ft)*	*(lbs)*	*Pullout*	*Slip*
1/4"	0.470	7	3	150	12
3/8"	0.651		5	110	9
1/2"	0.983		7	70	6
3/4"	1.361		10	50	4
1"	2.055		14	30	3

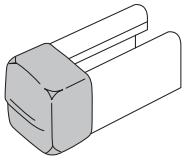
[1] Based on preliminary testing
[2] SF = 5 to Ultimate Load
[3] Per MSS-SP69 & ASME B31.1 for water filled pipe

20E-5000 – Channel Capping Strip



Channel Capping Strip is made from PVC and installs simply by pressing it onto the channel opening. It is designed to be used when a cover is desired for the channel opening (such as concrete embedment channel).

AIC-EC – Channel End Cap



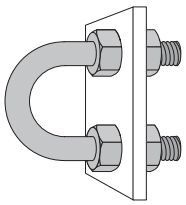
The Aickin-End Cap is made from red PVC and designed for 1 5/8" channel. End caps are desired when the ends of the channel need to be enclosed. The Aickin-End Cap easily installs by pressing it onto the end of the channel opening.

Nonmetallic U-bolts

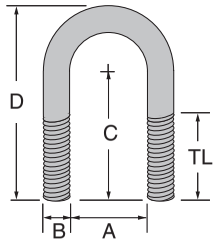
Aickinstrut Nonmetallic U-Bolts provide a corrosion resistant alternative to traditional metallic U-Bolts. Made from glass-reinforced polyurethane, these bolts will outlast stainless steel in most corrosive applications. Nonmetallic U-Bolts have oversized diameters which allow them to hold steel conduit and plastic pipe.

Each U-Bolt comes with two polyurethane hex nuts. Additional nuts and washers can be purchased separately.

The U-Bolts can also be installed to allow for thermal expansion and contraction of plastic pipe as shown here.



Note: Plate not included. Illustration purpose only



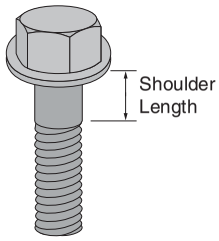
Part No.	Size	"A"	"B"	"C"	"D"	"TL"	Load (lbs.)*	Torque (in./lbs.)*
UB-050	½	0.937	0.375	1.568	2.412	1.25	135	40
UB-075	¾	1.125		1.662	2.600			
UB-100	1	1.375		1.787	2.850			
UB-125	1¼	1.687		1.943	3.162			
UB-150	1½	2.000		2.100	3.475			
UB-200	2	2.437	0.500	2.468	4.187	1.50		80
UB-250	2½	2.937		2.718	4.687			
UB-300	3	3.562		3.031	5.312			
UB-350	3½	4.062		3.281	5.812			
UB-400	4	4.562		3.531	6.312			
UB-600	6	6.750	0.625	5.750	9.875	3.25		120

*Torque and load values shown represent a 3:1 safety factor.

Fiberfast Bolts

Fiberfast bolts are provided in two styles and five diameters (¼", ⅜", ½", ⅝" and ¾") and range in length from 1¼" to 3½". The flanged style incorporates a molded washer collar which eliminates the need for a washer. The flanged style is provided for ¼" and ½" diameter bolts. Flanged bolts are available in ⅜" diameter as a special order item. The hex head style is provided for all ⅜", ⅝" and ¾" diameter bolts. All Fiberfast bolts are not fully threaded, therefore, shoulder length (nonthreaded portion) dimensions have been provided. Fiberfast bolts are ideal for mechanical connections that require a high degree of corrosion resistance. The ⅜" diameter fasteners are recommended for all channel fitting mechanical connections. All Fiberfast bolts are manufactured from glass-reinforced polyurethane and are packaged in bags containing 25 pieces.

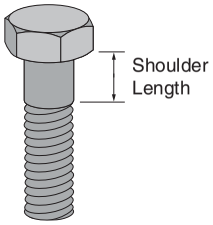
Hex Flange Bolts



Part No.	Size	Thread Shear (lbs.)*	Shank Shear (lbs.)*	Shoulder Length	Torque (ft./lbs.)
250PU-075	¼ x ¾	110	210	Full Thread	10 In./lbs.
250PU-100	¼ x 1				
250PU-150	¼ x 1½			½	
500PU-125	½ x 1¼	450	870	Full Thread	8
500PU-150	½ x 1½				
500PU-200	½ x 2			¾	
500PU-250	½ x 2½				
500PU-300	½ x 3			1	
500PU-350	½ x 3½			2 3/16	

*Thread shear values shown represent a 3:1 safety factor.

Hex Bolts

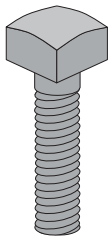


Part No.	Size	Thread Shear (lbs.)*	Shank Shear (lbs.)*	Shoulder Length (in.)	Torque (ft./lbs.)
375PU-125	⅜ x 1¼	250	470	Full Thread	3
375PU-150	⅜ x 1½			¼	
375PU-200	⅜ x 2			½	
375PU-250	⅜ x 2½			¾	
375PU-300	⅜ x 3			1	
625PU-125	⅝ x 1¼	700	1,360	¼	12
625PU-150	⅝ x 1½				
625PU-200	⅝ x 2				
625PU-250	⅝ x 2½				
625PU-300	⅝ x 3				
625PU-350	⅝ x 3½			1¼	

*Thread shear values shown represent a 3:1 safety factor.

Vinyl Ester Square Head Bolts

Vinyl ester square head bolts are used for concrete mounting and general purpose fastening applications. The square head bolts are constructed from vinyl ester all-thread rod and vinyl ester square nuts. The units are bonded together with a durable two part urethane adhesive. The square head bolts are offered in ⅜" diameter but can be supplied in other diameters as a special order. Contact the factory for pricing and availability of special diameter square head bolts.



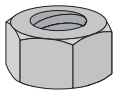
Part No.	Size	Thread Shear (lbs.)*	Torque (ft./lbs.)*
375V-100	⅜ x 1	250	10
375V-125	⅜ x 1¼		
375V-150	⅜ x 1½		
375V-175	⅜ x 1¾		
375V-200	⅜ x 2		
375V-250	⅜ x 2½		
375V-300	⅜ x 3		
375V-350	⅜ x 3½		
375V-400	⅜ x 4		

*Thread shear values shown represent a 3:1 safety factor.

Fiberfast Hex Nuts

Aickinstrut hex nuts are available in two styles; hex and hex flange nuts. The Aickinstrut hex nut is similar in design to the conventional hex nut and is preferred for channel fitting connections. The Aickinstrut hex flange nut is preferred for applications that require additional thread engagement (such as with all-thread rod) or maximum thread shear strength. All nuts are manufactured from glass-reinforced polyurethane and are packaged in bags containing 25 pieces. All hex and hex flange nuts are available in PVDF and Polypropylene and metric sizes as a special order. Contact the factory for pricing and availability.

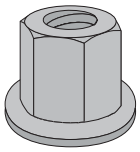
Hex Nuts



Part No.	Size	Thread Shear (lbs.)*	Height	Torque (ft./lbs.)
250PU-000	¼-20	150	0.218	10 in./lbs.
375PU-000	⅜-16	460	0.328	3
500PU-000	½-13	800	0.437	8
625PU-000	⅝-11	1,000	0.546	12
750PU-000	3-10		0.640	15
1000PU-000	1-8	1,100	0.859	17

*Thread shear values shown represent a 3:1 safety factor.

Hex Flange Nuts

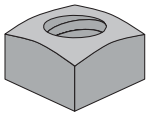


Part No.	Size	Thread Shear (lbs.)*	Height	Torque (ft./lbs.)
375PU-FN-000	⅜-16	500	0.750	3
500PU-FN-000	½-13	1,200	0.855	8
625PU-FN-000	⅝-11	2,200	1.220	12
750PU-FN-000	¾-10	2,900	1.590	15
1000PU-FN-000	1-8		1.750	17

*Thread shear values shown represent a 3:1safety factor.

Vinyl Ester Square Nuts

Square nuts are manufactured from pultruded vinyl ester square stock. They are recommended for applications that require high thread shear values. Square nuts are packaged in bags containing 25 pieces.

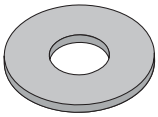


Part No.	Size	Thread Shear (lbs.)*	Height	Torque (ft./lbs.)
375V-000	⅜-16	1,300	0.437	10
500V-000	½-13	1,700	0.562	
625V-000	⅝-11		0.687	
750V-000	¾-10		0.812	
1000V-000	1-8		0.937	

*Thread shear values shown represent a 3:1 safety factor.

Flat Washers

Flat Washers are made from PVC and are available for ¼" diameter through 1". PVC washers are recommended for connections that utilize hex nuts and bolts. PVC washers are packaged in bags containing 25 pieces.



Part No.	Size	Outside Diameter
250E-999	¼	0.49
375E-999	⅜	1.00
500E-999	½	1.25
625E-999	⅝	1.50
750E-999	¾	1.50
1000E-999	1	2.25

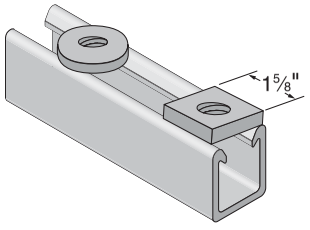
All-Thread Washers

Aickinstrut All-Thread Washers are flat fiberglass wshers for use with FRP all-thread rods. All-Thread rod washers are ¼" thick with a 1⅞" diameter and are available in polyester or vinyl ester resin. To order vinyl ester, add the suffix "V" to the part number. To order square washers add the suffix "-SQ" to the part number.

Part No. *	All-Thread Rod Size (in.)
WR375	⅜
WR500	½
WR625	⅝
WR750	¾

* Add the suffix "V" to the part number to specify vinyl ester Example "WR500V"

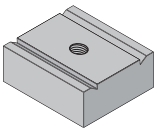
* Add the suffix "-SQ" to the part number to specify square washer Example "WR500-SQ"



Channel Nuts

Channel nuts are provided in two types; Standard Duty and Heavy Duty. Standard Duty channel nuts are designed for light duty applications that do not require high thread shear values. Standard duty channel nuts can also be used with all sizes of Aickinstrut Channel. Heavy duty channel nuts are designed to be used where high thread shear values or spring nuts are required. Heavy duty channel nuts can not be used with Series 1000 Channel (light duty). All channel nuts are manufactured from glass-reinforced polyurethane and are packaged in bags containing 50 pieces. Channel nuts are also available in PVDF as a special order. Contact the factory for pricing and availability.

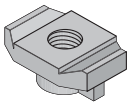
Heavy Duty Channel Nuts



Part No.	Size	Thread Shear (lbs.)*	Torque (ft./lbs.)
375PU-CNHD	3/8-16	1,400	8
500PU-CNHD	1/2-13		
625PU-CNHD	5/8-11		10
750PU-CNHD	3/4-10		
10PU-CNMHD	10 mm		8
12PU-CNMHD	12 mm		
16PU-CNMHD	16 mm		10
20PU-CNMHD	20 mm		

*Thread shear values shown represent a 3:1 safety factor.

Standard Duty Channel Nuts



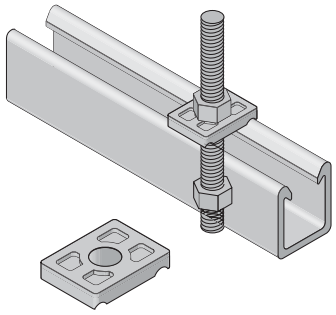
Part No.	Size	Thread Shear (lbs.)*	Torque (ft./lbs.)
250PU-CN	1/4-20	460	2
312PU-CN	5/16-18		
375PU-CN	3/8-16		3
500PU-CN	1/2-13		
10PU-CN	10 mm		
12PU-CN	12 mm		
10PU-CNS	#10 Screw		N/A

*Thread shear values shown represent a 3:1 safety factor.

Saddle Clips

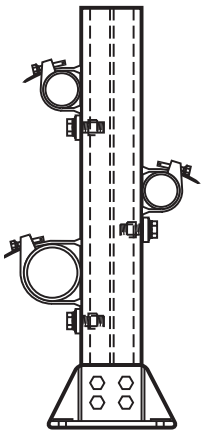
Aickinstrut Saddle Clips make fastening through Aickinstrut channel much easier. The clips mate with the exterior of the channel flanges and are secured with threaded rods and nuts. The saddle clips are manufactured from glass reinforced polyurethane and are supplied in bags of 50 pieces.

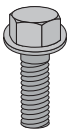
Part No.	Size
200-4226	3/8
200-4217	1/2
200-4341	5/8
200-4342	3/4



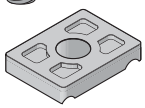
Stop-Lock Assemblies

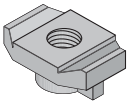
Aickinstrut Stop-Lock Assemblies reduce the chance of pipe slippage when running supports vertically. Stop-Locks are recommended for applications that are subject to vibration, have regular contact with fluids or are vertically mounted (Type 2). The Stop-Locks fit all three sizes of channel. Stop-Locks are offered with a 3/8", 1/2" and 5/8" bolt size. The 5/8" Stop-Lock Assembly is supplied with a heavy duty channel nut (the 5/8" Stop-Lock Assembly will not work with the 1000 Series Channel).





The Stop-Lock Assemblies' components are manufactured from glass-reinforced polyurethane.

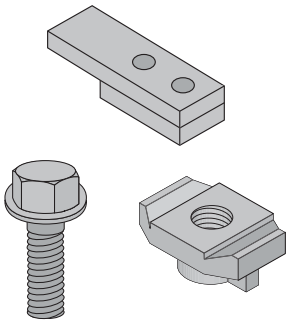




Part No.	Size	Force Resistance (lbs.)*	Torque (ft./lbs.)
200-4227	3/8	200	7
200-4219	1/2	220	12
200-4343	5/8	250	15

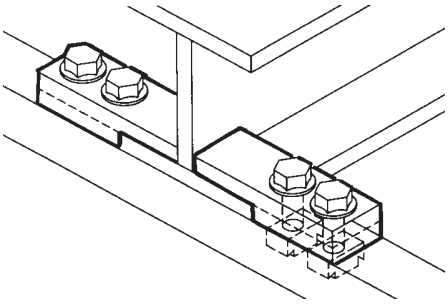
*Force resistance values shown represents a 3:1 safety factor.

Fabricated Beam Clamps



Part No.	Flange Thickness	Thread Shear (lbs.)*	Torque (ft./lbs.)
20V-2BC-25	1/4	600	10
20V-2BC-37	3/8		
20V-2BC-50	1/2		

*Design load values shown represent a 3:1 safety factor. Bolts and channel nuts are 1/2" diameter.

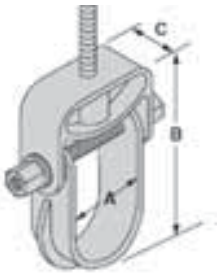


Clevis Hangers

Clevis hangers are available in two styles; molded and hand lay-up. The molded clevis hangers are manufactured from glass-reinforced polyurethane and are available for sizes ½" through 6".

The hand lay-up clevis hangers are manufactured from glass-reinforced vinyl ester resin and are available for sizes 1" through 24".

Molded Clevis Hangers



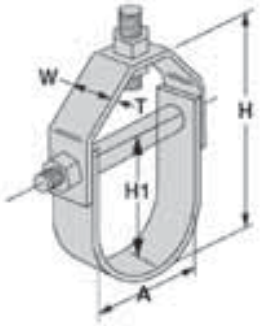
Part No.	Nominal Diameter	Max. Pipe O.D.	"A"	"B"	"C"	Hanger Rod	Load (lbs.)*
CVHPU-100	½ - 1	1	1.500	4.25	1.25	½	670
CVHPU-150	1¼ - 1½	1½	2.000	5.14			
CVHPU-200	1½ - 2	2	2.500	6.52			730
CVHPU-400	2½ - 4	4	5.125	10.00	1.50		1,150
CVHPU-600	4½ - 6	6	6.750	12.33			1,170

*Design load values shown represent a 3:1 safety factor.

Hand Lay-Up Clevis Hangers

Part No.	Size Range A (In.)	Dimensions (in.) T	H	H1	W	Hanger Rod	Trans Rod	Spreader Rod O.D.	Loads (lbs.)*
100-1500	1 – 1½	⅛	2¾	1⅞	1½	½	⅜	½	60
100-1501	1½ – 2		3½	2⅜					60
100-1502	2 – 2⅝		4¾	3	2				90
100-1503	2½ – 3¼		5½	3⅝					120
100-1504	3 – 3⅞	⅛	7	4¼	2	⅝			160
100-1505	4 – 5⅛	3/16	8½	5⅝					250
100-1506	6 – 7⅛		10⅞	7½	3				300
100-1507	8 – 9¼	¼	14	9¾					350
100-1508	10 – 11⅜	¼	18	12	4	⅝	½	¾	450
100-1509	12 – 13½		21½	14⅛	5				600
100-1510	14 – 15¾		24½	16½		¾			700
100-1511	16 – 18	⅜	27⅜	19½	6	¾	¾	1	750
100-1512	19 – 21		34½	22½					800
100-1513	21 – 22	½	35½	24					850
100-1514	22 – 24		41	28					900

*Design load values shown represent a 3:1 safety factor.

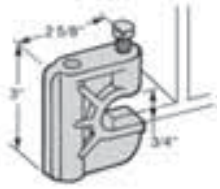


Beam Clamps

Aickinstrut beam clamps are available in two styles; molded and fabricated. The molded beam clamps are manufactured from glass-reinforced polyurethane and can accommodate ⅜", ½" and ⅝" hanger rod sizes. The molded beam clamps utilize the traditional "C" clamp style design. The fabrication beam clamps are manufactured from vinyl ester flat stock and utilize polyurethane bolts and channel nuts for clamping. Fabricated beam clamps are available for attaching to ¼", ⅜" and ½" thick beam flanges. Each fabricated beam clamp assembly includes four (4) ½" standard duty channel nuts, four (4) ½" Polyurethane bolts and two (2) attachment clips.

All Aickinstrut beam clamps allow easy attachment of threaded rod to "I" beams or other structural assemblies.

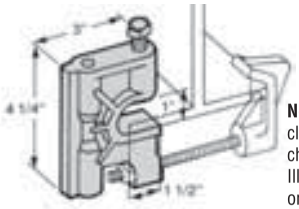
Molded Beam Clamps



Part No.	Size	Thread Shear (lbs.)*	Torque (ft./lbs.)
375PU-BC	⅜	400	10
500PU-BC	½		

*Design load values shown represent a 3:1 safety factor.

Cope-Glas Beam Clamps



Note: Beam clamp clip must be purchased separately. Illustration purpose only

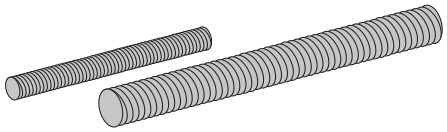
Part No.	Size	Thread Shear (lbs.)*	Torque (ft./lbs.)
RGBC-1	⅜	500	10
RGBC-2	½		
RGBC-3	⅝		

Beam Clip – 375PU-BCCLP (⅜")

Threaded Rod

Pultruded threaded rods are an excellent choice for hanging and fastening Aickinstrut Channel. These rods can also be used with either the Aickinstrut vinyl ester square nuts, polyurethane hex nuts, hex flange nuts and Aickinstrut channel nuts. All FRP threaded rod is manufactured from pultruded vinyl ester resin and is gray in color.

The standard rod lengths are 4' and 8'. Special lengths and threading are also available. Contact the factory for pricing and availability.

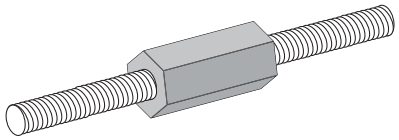


Part No.	Size	Weight	Thread Shear (lbs.)*	Torque (ft./lbs.)
200-3827	3/8-16	0.07	415	5
200-3828	1/2-13	0.12	570	10
200-3829	5/8-11	0.18	1,260	40
200-3830	3/4-10	0.28	1,700	50
200-3831	1-8	0.50	3,000	60

* Thread shear values shown represent a 3:1 safety factor.
* To order eight foot lengths, add suffix "-96" to part number (EX: 200-3827-96)

A-Konnector Rod Couplers

A-Konnectors provide an excellent means for extending Aickinstrut FRP all-thread rods beyond their standard lengths. A-Konnectors are manufactured from glass-reinforced polyurethane and are colored gray. A-Konnectors are packaged in bags containing 25 pieces.

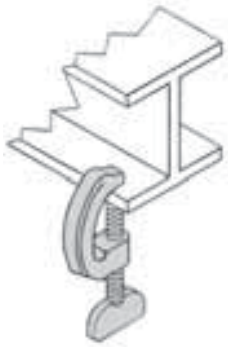


Part No.	Size	Length	Thread Shear (lbs.)*
200-3840	3/8-16	2 1/4	800
200-3841	1/2-13		870
200-3842	5/8-11		1,500
200-3843	3/4-10		

* Thread shear values shown represent a 3:1 safety factor.

Duraclamp C-Clamps

Duraclamps are glass-reinforced polyurethane C-Clamps that are designed to replace steel C-Clamps in areas where corrosion is a problem. The individual Duraclamp components can also be purchased separately.



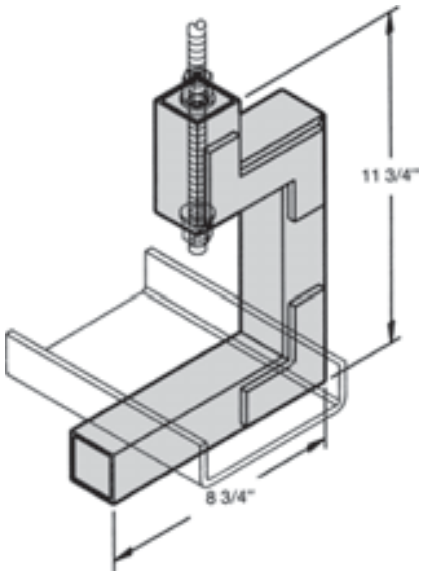
Part No.	Description	Thread Shear (lbs.)*	Torque (ft./lbs.)
390N-150	"C"-Clamp	25	17
390N-BLT	Bolt	N/A	
390N-CLP	"C"	25	N/A

*Design load values shown represent a 3:1 safety factor.
Note: Bolt Dimension is 5/8" x 2 1/2"

Channel Hangers

AIC-CH-P (Polyester)
AIC-CH-V (Vinyl Ester)

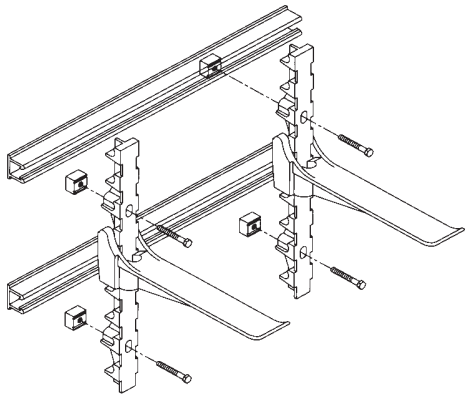
The Aickin-Channel Hanger is designed to support fiberglass structural "C" channel that is being used as a raceway system for cables, tubing or small diameter piping. The Aickin-Channel Hanger is available in either polyester or vinyl ester resin and is simply supported from a 1/2" FRP all-thread rod and beam clamp (not provided). The Channel Hanger will accommodate "C" channel width sizes 2" through 8".



Power-Rack Stanchions

The Power-Rack Stanchion is the new alternative to traditional iron cable stanchions used for utility and industrial cable supports. Made entirely from glass-reinforced nylon, these stanchions out-perform metallic supports against corrosion. The extended life-span of the Power-Rack Stanchions makes them the logical choice over metallic cable supports. The Power-Rack Stanchion is available in two different lengths and four different arm lengths. The unique interlocking design allows the arm to "lock" into nine different levels on the 14¼" stanchions and fourteen on the 17½" stanchion. Glass-reinforced polyurethane stanchions are available as a special order. Contact the factory for pricing and availability.

Dimensions – The stanchion back is designed with 9⁄16" wide x 15⁄16" long holes to accept fasteners for mounting. There are two mounting holes in the 21⅜" long stanchion and three mounting holes in the 33⅝16" long stanchion. Thickness at the slotted mounting holes is 1⅞". The mounting holes are spaced on 12" centers and require ½" diameter fasteners.



Installation – The Power-Rack Stanchions can be anchored into existing concrete structures using any good quality industrial anchoring system. For new concrete structures, the Power-Rack Stanchions can be mounted to Aickinstrut concrete embedment channel and attached with ½" channel nuts and ½"x 3" Fiberfast Bolts.

Fire Retardance – Power-Rack materials meet or exceed the requirements of UL94 HB.

Loading – The recommended allowable loads on Power-Rack Stanchions vary depending upon the position of the arm. Following the guidelines listed below will ensure a safe, reliable installation.

- Total load on any one arm should not exceed 800 lbs.
- The sum of the loads on any arm multiplied by their distances to the wall stanchion should not exceed 1200 in./lbs.

Example – A cable weighing 200 lbs. is positioned on an arm at a distance of 5" from the wall stanchion.

If the total load is less than 800 lbs and the sum of the load multiplied by their distances to the wall stanchion does not exceed 1200 in./lbs., then the system is adequate. In this case,

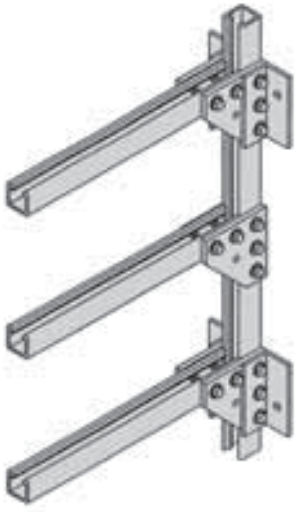
Total load (200<800 lbs) = OK

Tot. moment (200x5 in. = 1000<1200 in./lbs.) = OK

Part No.	Description	Weight	Load (lbs.)*
20N-ARM08	8" Arm	1.00	800
20N-ARM14	14¼" Arm	1.16	
20N-ARM17	17½" Arm	1.45	
20N-ARM23	23⅞" Arm	1.86	
20N-STA21	21⅜" Stanchion	1.49	N/A
20N-STA33	33⅝16" Stanchion	2.31	
*Design load values shown represent a 3:1 safety factor.			

Wall Brackets

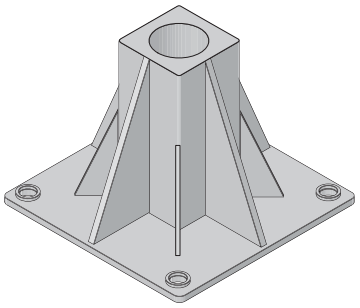
Aickin-Brackets are available in a wide variety of sizes and configurations. These wall brackets are made entirely from Aickinstrut material and are specifically designed to meet the customers requirements. They are ideal for customizing the support of piping, cables, tubing, conduits or cable trays. These brackets are available in either polyester or vinyl ester resin types and will work with all the Aickinstrut accessory items. Consult the factory for design, pricing and availability information.

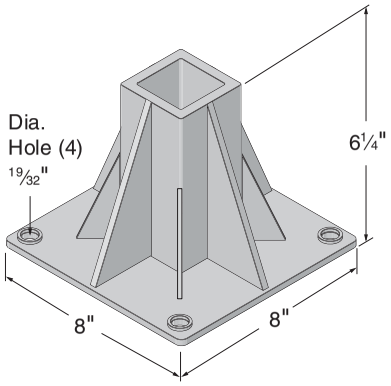


Heavy Duty Post Base

20PU-5852 ***(2" Square)***, 20PU-5852 RD ***(2" Round)***
20PU-5853 HD ***(1⅝" Sq.)***, 20PU-5854 HD ***(1½" Sq.)***

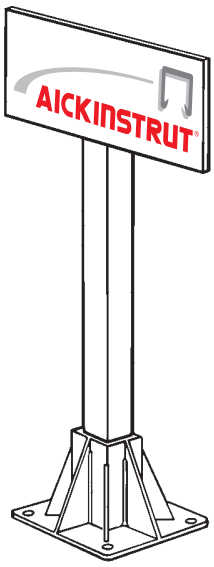
The Aickinstrut heavy duty post base is designed for applications that require a stronger base attachment than the standard Aickinstrut post base. Made from polyurethane, the heavy duty post base is available with four different openings: 1½", 1⅝", 2" square and 2" Schedule 80 round. The heavy duty post base is ideal for mounting fiberglass channel, handrails and instrument stands in corrosive environments. The standard color is gray, but special colors are available upon request.

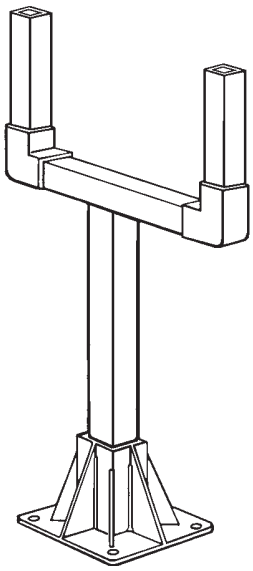




Instrument & Pipe Stands

Aickin-Instrument and Pipe Stands are available in polyester or vinyl ester resin types and are designed to meet specific customer requirements. These stands are ideal for supporting instruments and enclosures in corrosive environments. The stands utilize the Aickinstrut Heavy Duty Post Base and either 2" x 2" x 1/4" square tube or 2" Schedule 80 pipe to support the instruments or enclosures. These stands can be designed or configured to meet any application. Consult the factory for design, pricing and availability information.





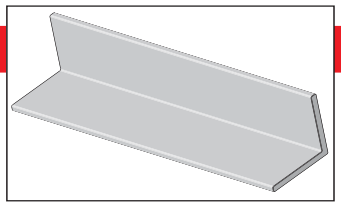
AICKINSHAPE® STRUCTURAL SHAPES

General purpose pultruded structural shapes can be used as a complement to Aickinstrut Channel Framing projects. The shapes are ideal for structural bracing, handrails, handrail kickplates, shims and supporting grating. Structural shapes are available in either polyester or vinyl ester resin and are provided in 20' lengths. Additional structural shapes not listed in this catalog are available. Contact the factory for pricing, availability and minimums. Special sizes and colors can be run based upon quantity.

NOTES

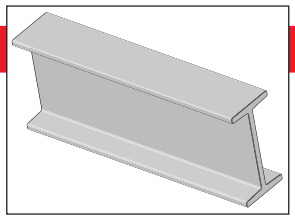
ST - Standard Isophthalic Polyester Resin; O = (Olive Green)
FR - Isophthalic Polyester Fire Retardant Resin; P = (Dark Gray)
VE - Vinyl Ester Fire Retardant Resin; V = (Beige)
■ Stock Item; ◆ Stocked in Yellow
In part numbers shown below, replace "X" with resin and color code (O, P, V).
I.E.: 18P-1200-20 Polyester Gray 2" x 1/4" Equal Leg Angle

Equal Leg Angle



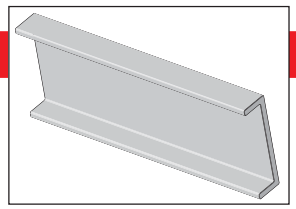
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
1 x 1/8	■	■	■	0.21	18X-1100-20
1 1/4 x 1/8	–	–	–	0.23	18X-1110-20
1 1/2 x 3/16	■	■	■	0.37	18X-1120-20
1 1/2 x 1/4	■	■	■	0.51	18X-1130-20
2 x 1/4	■	■	■	0.68	18X-1200-20
3 x 1/4	■	■	■	1.04	18X-1300-20
3 x 3/8	■	■	■	1.65	18X-1310-20
3 x 1/2	–	–	–	2.15	18X-1320-20
4 x 1/4	■	■	■	1.41	18X-1400-20
4 x 3/8	■	■	■	2.23	18X-1410-20
4 x 1/2	■	■	■	2.92	18X-1420-20
6 x 3/8	■	■	■	3.44	18X-1500-20
6 x 1/2	■	■	■	4.50	18X-1510-20

I-Beam



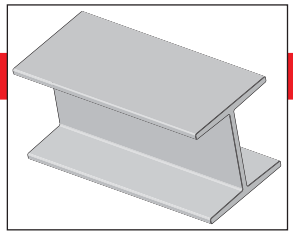
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
3 x 2 x 1 1/2 x 1/4	–	–	–	1.18	18X-2100-20
3 x 1 1/2 x 1/4	–	–	–	1.11	18X-2300-20
4 x 2 x 1/4	■	■	■	1.46	18X-2400-20
6 x 3 x 1/4	■	■	■	2.24	18X-2600-20
6 x 3 x 3/8	–	–	–	3.29	18X-2800-20
8 x 4 x 3/8	■	■	■	4.46	18X-2110-20
8 x 4 x 1/2	–	–	–	5.85	18X-2130-20
10 x 5 x 3/8	–	–	–	5.78	18X-2160-20
10 x 5 x 1/2	–	■	■	7.41	18X-2180-20
12 x 6 x 1/2	–	■	■	8.97	18X-2210-25
18 x 3/8 x 4 1/2 x 1/2	–	–	–	8.48	18X-2230-20
24 x 3/8 x 7 1/2 x 3/4	–	–	–	15.20	18X-2240-20

Channel



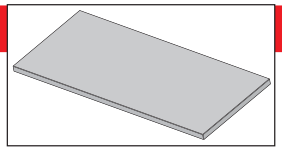
Size (In.)	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
2 x 9/16 x 1/8	■	■	–	0.25	18X-2916-20
3 x 7/8 x 1/4	■	■	–	0.77	18X-3078-20
3 x 1 x 1/4	■	■	■	0.87	18X-3114-20
3 x 1 1/2 x 1/4	–	■	■	1.07	18X-3112-20
3 x 1/2 x 1 3/16 x 1/8	–	–	–	0.65	18X-31316-20
4 x 1 1/8 x 1/4	■	■	■	1.11	18X-4118-20
4 x 1 3/8 x 3/16	■	■	■	0.86	18X-4138-20
6 x 1 5/8 x 1/4	■	■	■	1.64	18X-6158-20
6 x 1 11/16 x 3/8	■	■	■	2.52	18X-61116-20
8 x 2 3/16 x 3/8	■	■	■	3.40	18X-82316-20
10 x 2 3/4 x 1/2	■	■	■	5.65	18X-10234-20

Wide Flange I-Beam



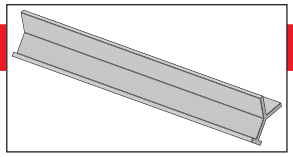
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
3 x 3 x 1/4	■	■	■	1.69	18X-2200-20
4 x 4 x 1/4	■	■	■	2.10	18X-2500-20
6 x 6 x 1/4	■	■	■	3.41	18X-2700-20
6 x 6 x 3/8	■	■	■	5.05	18X-2900-20
8 x 8 x 3/8	■	■	■	6.49	18X-2120-20
8 x 8 x 1/2	–	■	■	8.70	18X-2140-20
10 x 10 x 3/8	–	–	–	8.74	18X-2170-20
10 x 10 x 1/2	–	■	■	10.90	18X-2190-25
12 x 12 x 1/2	–	■	■	13.20	18X-2220-25

Flat Sheet



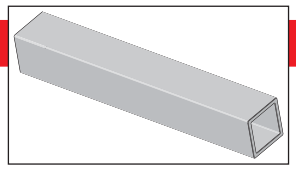
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
1/8 x 48 x 96	■	■	■	1.14	18X-4100
3/16 x 48 x 96	■	■	■	1.71	18X-4200
1/4 x 48 x 96	■	■	■	2.34	18X-4300
3/8 x 48 x 96	■	■	■	3.54	18X-4400
1/2 x 48 x 96	■	■	■	4.68	18X-4500
5/8 x 48 x 96	–	–	–	5.79	18X-4600
3/4 x 48 x 96	–	–	–	6.94	18X-4700
1 x 48 x 96	–	–	–	9.27	18X-4800

Embedment Angle



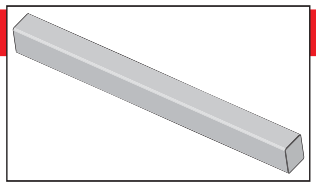
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
1 x 1 1/2 x 1/4	–	–	■	1.00	18X-111214-20
1 1/2 x 1 1/2 x 1/4	–	–	■	1.10	18X-11211214-20
2 x 1 1/2 x 1/4	–	–	■	1.20	18X-211214-20

Square Tube



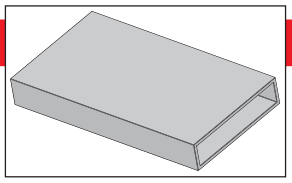
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
1 x 1/8	■	■	■	0.32	18X-3100-20
1 1/8 x 1/8	–	–	–	0.37	18X-3200-20
1 1/4 x 1/8	–	–	–	0.41	18X-3300-20
1 1/4 x 1/4	–	–	–	0.68	18X-3310-20
1 1/2 x 1/8	■	◆	◆	0.54	18X-3400-20
1 1/2 x 1/4	–	–	■	0.98	18X-3410-20
1 3/4 x 1/8	–	◆	◆	0.63	18X-3500-20
1 3/4 x 1/4	–	◆	◆	1.10	18X-3510-20
2 x 1/8	■	◆	◆	0.69	18X-3600-20
2 x 1/4	■	◆	◆	1.40	18X-3610-20
2 1/4 x 1/8	–	◆	–	0.83	18X-3800-20
2 1/4 x 1/4	–	–	–	1.56	18X-3810-20
2 1/2 x 1/4	–	◆	–	1.79	18X-3900-20
3 x 1/8	–	–	–	1.12	18X-3110-20
3 x 1/4	■	■	■	2.15	18X-3111-20
4 x 1/4	■	■	■	2.93	18X-3120-20
4 x 3/8	■	–	–	4.24	18X-3121-20
6 x 3/8	■	■	■	6.42	18X-3140-20
Toe Plate					
4 x 5/8 x 1/8	–	◆	◆	0.49	18X-3130-20

Square Bar



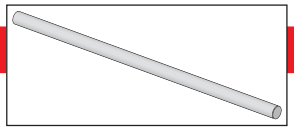
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
1 x 1	■	–	–	0.87	18X-5100-20
1 1/4 x 1 1/4	–	◆	–	1.31	18X-5125-20
1 1/2 x 1 1/2	–	◆	–	1.98	18X-5150-20
2 x 2	–	–	–	3.12	18X-5200-20

Rectangular Tube



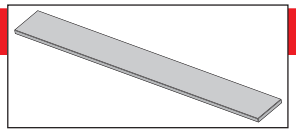
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
4 x 1 x 1/8	–	–	–	0.85	18X-4118-20
4 x 1/8 x 2 x 1/4	■	■	■	1.52	18X-418214-20
4 3/8 x 1 3/8 x 1/8 x 3/16	–	–	–	1.18	18X-438138-20
4 1/2 x 1 3/4 x 1/8 x 3/16	–	–	–	1.29	18X-412138-20
5 x 2 x 1/8	–	–	–	1.32	18X-5218-20
5 1/8 x 2 1/8 x 3/16	–	–	–	1.32	18X-518218-20
6 1/2 x 1/4 x 2 x 1/2	–	–	–	3.77	18X-612212-20
6 x 4 x 1/4	–	■	–		18X-6414-20

Round Rod



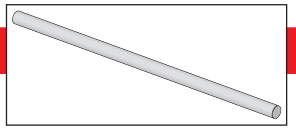
Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
1/8	■	–	–	0.01	18X-70018-20
3/16	■	–	–	0.02	18X-700316-20
1/4	■	–	–	0.04	18X-70014-20
5/16	■	–	–	0.07	18X-700516-20
0.35	–	–	–	0.08	18X-70035-20
3/8	■	–	■	0.09	18X-70038-20
1/2	■	–	■	0.17	18X-70012-20
5/8	■	–	■	0.27	18X-70058-20
3/4	■	–	■	0.39	18X-70034-20
13/16	–	–	–	0.46	18X-7001316-20
1	■	–	■	0.66	18X-70100-20
1 1/4	■	–	–	1.08	18X-70114-20
1 1/2	■	–	–	1.56	18X-70112-20
2	–	–	–	2.56	18X-70200-20
2 1/2	–	–	–	4.10	18X-70212-20
3	–	–	–	5.70	18X-70300-20

Flat Strip



Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
5/8 x 1/4	■	–	–	0.11	18X-605814-96
3/4 x 1/4	■	–	–	0.14	18X-603414-96
1 x 1/8	–	–	–	0.11	18X-6118-96
1 1/4 x 3/16	–	–	–	0.19	18X-6114316-96
1 1/2 x 3/8	–	–	–	0.50	18X-611238-96
1 1/2 x 1	–	–	–	1.32	18X-61121-96
1 3/4 x 1/4	■	–	–	0.38	18X-613414-96
2 x 1/2	–	–	–	0.88	18X-6212-96
2 x 1	–	–	–	1.76	18X-6210-96
2 1/2 x 3/16	–	–	–	0.34	18X-6212316-96
3 x 1/4	–	–	–	0.66	18X-6314-96
3 x 3/8	–	–	–	0.99	18X-6338-96
3 x 1/2	–	–	–	1.32	18X-6312-96
4 x 1/8	–	–	–	0.44	18X-6418-96
6 x 1/4	–	–	–	1.32	18X-6614-96
6 x 1/2	–	–	–	2.16	18X-6612-96

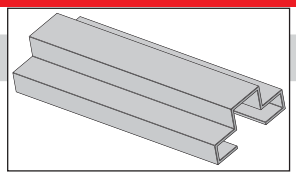
Round Tube



Size (In.)	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
1 x .100	–	–	–	0.22	18X-7100-20
1 x 1/8	■	■	–	0.25	18X-7118-20
1 1/4 x 3/32	–	–	–	0.27	18X-7114332-20
1 1/4 x 1/8	–	–	–	0.32	18X-711418-20
1 1/4 x 1/4	–	–	–	0.60	18X-711414-20
1 1/2 x 1/8	■	■	–	0.45	18X-711218-20
1 1/2 x 1/4	–	■	–	0.79	18X-711214-20
1 3/4 x 1/8	–	–	–	0.47	18X-713418-20
1 3/4 x 1/4	–	–	–	0.94	18X-713414-20
2 x 1/4	■	■	■	1.12	18X-7214-20
3 x.100	–	–	–	0.89	18X-7300-20
3 x 1/4	–	–	–	1.68	18X-7314-20
3 x 1/2	■	–	–	2.98	18X-7312-20
4.89 x 1/8	–	–	–	2.32	18X-7418-20
4.89 x 3/16	–	–	–	2.97	18X-74316-20

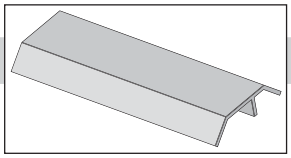
Special Shapes

Door Frame



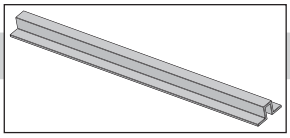
Profile/Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
5 3/4 x 2 5/8 x 3/16	–	–	–	1.60	18X-DF-20

Threshold



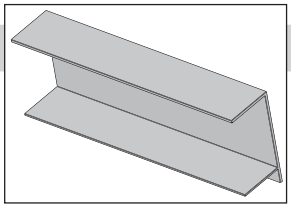
Profile/Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
5 1/2 x 1/4	–	–	–	1.05	18X-TH-20

Hat Section



Profile/Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
2 x 7/8 x .140	–	–	–	0.34	18X-HS-20

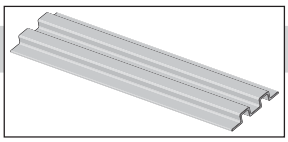
Flight Channel



Profile/Size	Resin			#/Lin. Ft.	Part No.
	ST	FR	VE		
3 x 6 x 1/8 x 3/16	■	–	–	1.31	18X-93618316-20
3 x 8 x 1/8 x 3/16	■	–	–	1.43	18X-93818316-20

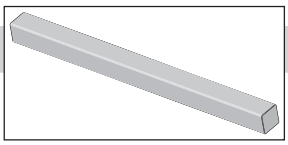
Handrail Components

Toe Plate†



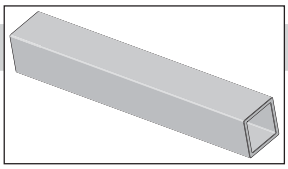
Size (in.)	#/Lin. Ft.	Part No.
4 x 5/8 x 1/8	0.49	18X-3130-20

Square Bar†



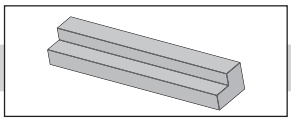
Size (in.)	#/Lin. Ft.	Part No.
1¼ x 1¼	1.31	18X*-5125-20
1½ x 1½	1.98	18X-5150-20

Square Tube†



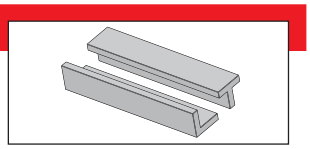
Size (in.)	#/Lin. Ft.	Part No.
1¼ x ¼	0.68	18X-3310-20
1½ x ⅛	0.54	18X-3400-20
1¾ x ⅛	0.63	18X-3500-20
1¾ x ¼	1.10	18X-3510-20
2 x ⅛	0.69	18X-3600-20
2 x ¼	1.40	18X-3610-20
2¼ x ⅛	0.83	18X-3800-20
2½ x ¼	1.69	18X-3900-20

Fixed Connector†



Size (in.)	#/Ea.	Part No.
4¼ x 1¼	0.87	AIC-FC-414
4½ x 1½	1.32	AIC-FC-412

Handrail Connectors



Fixed 90°

Size (In.)	Resin			#/Ea.	Part No.
	ST	FR	VE		
1¼	–	*†	–	0.87	AIC-FIXED-90-1-1/4
1½	–	*†	–	1.32	AIC-FIXED-90-1-1/2

Adjustable 90°

1¼	–	–	–		AIC-ADJ-90-1-1/4
1½	–	–	–		AIC-ADJ-90-1-1/2

Fixed "T"

1¼	–	–	–		AIC-FIXED-T-1-1/4
1½	–	–	–		AIC-FIXED-T-1-1/2

600-2200 - Aickinzap

Aickinzap is an acrylic spray that provides a corrosion resistant coating when applied to cut sections of Aickinstrut. Aickinzap is supplied in a 12 oz. can and is recommended for use as a sealant for Aickinstrut polyester and vinyl ester materials after cutting or drilling. Aickinzap is the quickest, most convenient method for sealing after fabrication.

600-1500 (Quart), 600-1600 (Gallon) - Aickincoat

Aickincoat is a "brush-on" corrosion resistant sealant that should be applied to all cut or drilled surfaces of fiberglass to seal exposed areas from corrosion. Aickincoat dries into a clear, hard, glossy coating that restores weathered fiberglass surfaces and provides an excellent barrier from ultraviolet degradation. It is available in quart and gallon cans.

Custom Fabrication and Promotional Material

Promotional materials are available for select individuals, including stocking distributors, end users, OEM's, contractors, specifying engineers, consultants and sales representatives. Please contact the factory for availability.

AICK-DIST-DISP

The Aickin Distributor Display is a counter top display for stocking distributors. This display features multiple channel sizes and materials, adjustable and rigid pipe straps, U-bolts, molded and fabricated channel fittings, post bases, clevis hangers and fasteners. All of these materials are then assembled to form a comprehensive, compact display which becomes an excellent sales tool.

AJPSS2 - Aickin Adjustable Pipe Clamp Sample

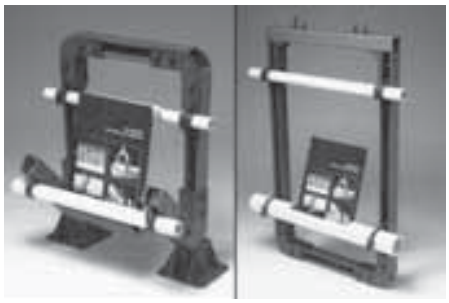
The Aickin Adjustable Pipe Clamp Sample is a desk top sample that displays the Aickin Adjustable Pipe Strap clamping a piece of PVC pipe onto a section of Aickinstrut Channel.

ARPS2 - Aickin Rigid Pipe Clamp Sample

The Aickin Rigid Pipe Clamp Sample is a desk top sample that displays the rigid pipe strap clamping a piece of PVC pipe onto a section of Aickinstrut Channel.

Aickin Distributor Literature Displays

(Hanging) AICK-LIT-DISP
(Counter Stand) AICK-LIT-DISP-CS



The Aickin Distributor Literature Display is offered in two designs; wall hanging and counter standing. The wall hanging design is meant to be hung from the two top U-bolts while the counter standing design is a free standing counter display. Both displays incorporate Aickinstrut channel in their design and utilize the PVC display pipe as the literature container.

Aickin Sample Box - AICK-SAMP-CART

The Aickin Sample Box is a convenient plastic carrying case with a complete sampling of the Aickinstrut product line.

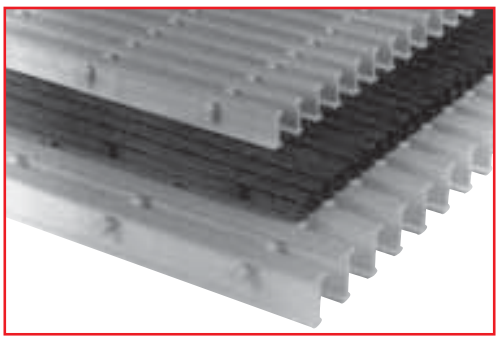
Each Sample Box includes:
PVC strut sample (20E-2000), Polyester strut sample (20P-2000), Polyester slotted strut sample (20P-1100), Vinyl ester strut sample (20V-1500), Polyester solid channel fitting (20V-2500), Vinyl ester grooved channel fitting (20V-2802), Saddle Clip (200-4226), Fiberfast bolts (250PU-000, 375PU-125 & 500PU-000), Fiberfast nuts (250PU-000, 375PU-125 & 500PU-CN), Square nut (500V-000), PVC washers (375E-999 & 500E-999), Standard duty channel nuts (375PU-CN & 500PU-CN), Heavy duty channel nut (500PU-CNHD), Adjustable pipe clamp (200-3110), Rigid pipe clamp (PCR-125), FRP threaded rod samples (200-3827 & 200-3828)

AICKINGRATE®

Aickingrate Fiberglass Grating was developed as a corrosion resistant alternative to traditional metallic grating. Aickingrate will not rust, resists corrosion, lasts longer than metal and is maintenance free. Aickingrate never requires painting and can be installed with standard hand tools.

Other valuable Aickingrate features include:

- Availability of polyester or vinyl ester fire retardant resin systems, which offer superior corrosion resistance, strength and fire protection.
- Applied grit anti-slip surface on molded grating, which provides superior traction.
- Panels are strong and flexible providing a comfortable working surface that enhances safety while reducing worker fatigue.
- Panels are lightweight, easy to install and easy to remove for maintenance.
- UV inhibitors are added to the base resin systems providing optimum protection from the effects of weathering. Pultruded grating is further enhanced with the addition of a synthetic surfacing veil.



Aickingrate pultruded and molded gratings are ideal for the following applications:

- Aquariums
- Chemical & Petrochemical
- Food & Beverage
- Marine
- Mining
- Offshore
- Plating
- Power Generation & Utilities
- Pulp & Paper
- Recreation & Pools
- Transportation
- Water & Wastewater

Aickingrate pultruded and molded gratings are practical, economical solutions for applications where metallic gratings are not well suited. Aickingrate offers the best solution for your industrial flooring needs.

Because Aickingrate is marketed with Aickinstrut Non-Metallic Strut Support Systems and Aickinshapes Non-Metallic Structural Shapes, the customer has the benefit of purchasing all of these items from a single source, thereby minimizing start-up and delivery delays.

Aickingrate stands ready to provide customer assistance through its network of distributors and mechanical sales representatives.

AICKINGRATE® Fiberglass Grating

Aickingrate molded grating is a one piece, glass-reinforced design available in standard sized 3′ x 10′ and 4′ x 12′ panels. Each panel is composed of non-flame retardant polyester resin, flame retardant polyester resin or vinyl ester resin and continuous fiberglass rovings for optimum strength and corrosion resistance. All Aickingrate molded grating is provided with an applied grit anti-skid surface. This anti-skid surface is applied onto the meniscus surface of each panel providing an extremely long lasting, effective, anti-skid surface. Standard meniscus surface grating is also available upon request.

Aickingrate molded grating does not rust, never requires painting and resists corrosion. The panels have a high strength-to-weight ratio and are maintenance free. They also are lightweight and can easily be installed without heavy equipment. Fabricating Aickingrate can easily be accomplished with standard tools.

Aickingrate is ideal for work platforms. The resiliency designed into each panel reduces worker leg and back pain and lowers overall worker fatigue resultingin increased productivity. These worker anti-fatigue benefits make Aickingrate ideal for platforms, catwalks, flooring, work stations and mezzanines.

Resin Systems

Polyester

The Aickingrate polyester resin system has two flame spread ratings. The fire retardant system has a rating of 25 or less based on the requirements of ASTM E 84. The non-fire retardant system is not rated. Both systems are designed for applications that will see moderate exposure to corrosive elements. These resin systems are ideal when a cost-effective, corrosion resistant, system is required.

Standard Colors: Green & Yellow

Special colors are available upon request.

Vinyl Ester

The Aickingrate vinyl ester resin system has a flame spread rating of 25 or less based on the requirements of ASTM E 84 **(contact the factory for applications that require a flame spread rating of 10 or less)**. It is designed to resist the highly corrosive acids and caustics found in the harshest chemical environments. This premium grade resin system is ideal in extremely harsh, wet, caustic conditions and will maintain its structural integrity at elevated temperatures. Aickingrate vinyl ester molded grating is the system to choose in extremely corrosive conditions.

Standard Colors: Orange & Dark Gray

Special colors are available upon request.

Special Optional Surfaces

The standard Aickingrate surface is an applied, sealed grit top. The other optional Aickingrate surface is a meniscus surface that also provides optimum skid resistance.

Meniscus

This "concave surface" grating provides excellent slip resistance and is recommended for light traffic applications.

Anti-Skid

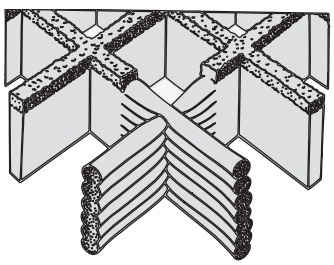
This "applied-grit" surface is ideal for high traffic applications that require superior skid resistance.

Loading and Deflection

The load & deflection data is intended for use only as a guide. The Aickingrate standard panel sizes are 3' x 10' and 4' x 12'. The bearing bars run across the panels making the span 3 or 4 feet. Once the design load and deflection are determined, you can calculate the max-imum allowable span from the tables.

LOADING CONSIDERATIONS

Occasionally, Aickingrate will be subjected to heavy loads from wheeled traffic. For these applications, it is not recommended to use Aickingrate where solid steel or hard rubber wheels can cause sharp impact or chipping of the embedded grit surface. For the same reason, avoid dropping or sliding heavy loads on Aickingrate.



Load & Deflection Application Data	Concentrated Load (lbs.)	Suggested Deflection (in.)
Occasional Foot Traffic (Inspections, etc.)	250	.250-.375
Workman with Tools (Maintenance)	300	.250-.375
Heavy Foot Traffic	400	.250-.375
Carts/Nonmotorized Vehicles	800	.250-.375
Motorized Traffic (Light)	1,500	.250-.375

FIBERGLASS

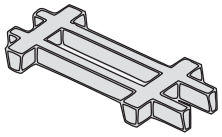
MOLDED GRATING SPECIFICATIONS

AICKINGRATE®

Grating Size

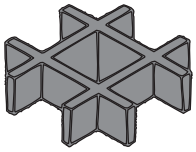
HEIGHT (MESH SIZE)

1" (1" X 4")



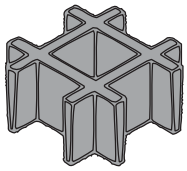
Panel Size:	**3' x 10' & 44" x 8'**	Space Between Bars	¾" x 3-⅝"
Panel Weight:	83 lbs. & 83 lbs.	Bar Thickness:	
Weight Per Ft.:	2.75 lbs. sq/ft	Bearing Bar	¼"
Open Area:	69%	Cross Bar	⅜"

1' (1-½" X 1-½")



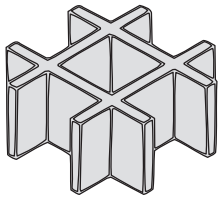
Panel Size:	**4' x 12', 4' x 10'**	Space Between Bars	1-¼" x 1-¼"
Panel Weight:	120 lbs. & 100 lbs.	Bar Thickness:	
Weight Per Ft.:	2.5 lbs. sq/ft	Bearing Bar	¼"
Open Area:	70%	Cross Bar	¼"

1-½" (1-½" X 1-½")



Panel Size:	**4' x 12', 4' x 10'**	Space Between Bars	1-¼" x 1-¼"
Panel Weight:	180 lbs. & 150 lbs.	Bar Thickness:	
Weight Per Ft.:	3.75 lbs. sq/ft	Bearing Bar	¼"
Open Area:	70%	Cross Bar	¼"

2" (2" X 2")



Panel Size:	**4' x 12', 4' x 10'**	Space Between Bars	1-¾" x 1-¾"
Panel Weight:	192 lbs. & 160 lbs.	Bar Thickness:	
Weight Per Ft.:	4.0 lbs. sq/ft	Bearing Bar	¼"
Open Area:	70%	Cross Bar	¼"

1. Material

1.1 All molded grating will be fiberglass roving reinforced and constructed from non-fire retardant polyester, fire retardant polyester or vinyl ester resin.

2. Composition

2.1 Glass content will be 35% by weight so as to achieve maximum corrosion resistance.

2.2 Fire-retardant grating will have a flame spread rating of 25 or less per the requirements of ASTM E 84.

2.3 Grating shall comply with all applicable provisions of the following flammability standards:

ASTM D-635	(Rate of Burning)
ASTM E 84	(Surface Burning)
UL 94 V0	(Flammability Standard)

2.4 Standard colors shall include the following:

Polyester: Green & Yellow
Vinyl ester: Orange & Dark Gray

2.5 Special colors are available upon customer request.

3. Structural Design

3.1 Grating shall have the following grid patterns:

1" x 4" (1" thick)
1½" x 1½" (1" thick)
1½" x 1½" (1½" thick)
2" x 2" (2"" thick)

3.2 Grating shall be provided in standard 3′ x 10′ & 4′ x 12′ panels.

3.3 Specially cut & fabricated grating sections will be available upon customer request.

3.4 Open areas will range from 69% to 70% depending on the selected grid pattern.

3.5 Standard surface shall be a sealed, applied grit top surface with meniscus surface available upon request.

3.6 Load and deflection values shall be as stated in this catalog.

3.7 Weights per sq/ft shall be as stated in this catalog.

4. General

4.1 Grating will be inspected prior to shipment and will be free from visual defects such as delaminations, blisters, surface crazing and voids.

4.2 Cut grating will be sealed prior to shipment.

4.3 Use of grating accessories shall be approved by the manufacturer and installed in accordance with the manufacturers' instructions.

4.4 Product substitutions other than Aickingrate must meet or exceed the performance standards set forth in this catalog.

4.5 Grating supplied shall be Aickingrate as manufactured by:
Aickinstrut/T.J. Cope

AICKINGRATE® Pultruded Grating

Aickingrate pultruded grating is constructed of pultruded "I" or "T" bars which are available in varying heights (1", 1-½" & 2"). Each pultruded bar is connected together with recessed tie bars and covered with an anti-skid, grit top surface to provide sure footing. Each pultruded bar incorporates a synthetic surfacing veil on its exterior. The surfacing veil provides a resin rich surface which allows the grating to withstand hostile environments and inhibit ultraviolet degradation. The standard panel size is 4' x 12'.

The pultruded grating is available in the following resin systems:

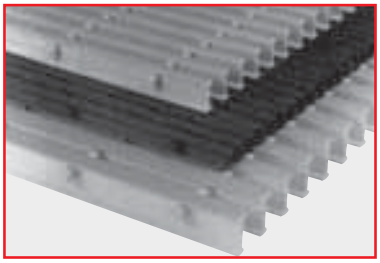
Polyester

This resin system offers a low flame spread rating of 15 or less and is designed for applications where there is moderate exposure to corrosive elements.

Vinyl Ester

This resin system offers a low flame spread rating of 15 or less and is designed for prolonged exposure in acidic and alkaline type environments.

Aickingrate pultruded grating is more corrosion resistant than conventional metal grating. The lightweight, maintenance free panels make it less expensive to install than metal grating. The low installation cost combined with the maintenance free life of pultruded grating make its overall life cycle costs lower than that of metal grating.



Aickingrate pultruded grating exceeds the requirements for gratings used in the following applications:

- Aquariums and Zoos
- Chemical
- Food and Beverage
- Offshore and Marine
- Petroleum Processing
- Plating Facilities
- Pulp and Paper
- Water and Wastewater

Typical uses for Aickingrate pultruded grating would include:

- Flooring
- Ramps
- Platforms
- Stairs
- Walkways
- Trench Covers
- Catwalks
- Assembly Lines

Aickingrate Pultruded Specifications

1. Material

All pultruded grating shall be constructed of glass reinforced, fire retardant polyester resin. Vinyl ester resin is available as a special order.

2. Composition

All pultruded glass reinforced grating shall have a synthetic veil applied on all exterior surfaces to improve weatherability and inhibit ultraviolet degradation. An ultraviolet stabilizer shall be incorporated in the resin formulation to further inhibit ultraviolet degradation.

Grating will have a flame spread rating of 15 per the requirements ASTM E 84.

Grating shall comply with all applicable provisions of the following flammability standards:

ASTM D-635 (Rate of Burning)
ASTM E 84 (Surface Burning)
UL 94 V0 (Flammability Standard)

2.4 Standard colors shall include the following:
Polyester (I-bar & T-bar): Yellow
Polyester (Wide T-bar): Dark Gray

2.5 Special colors are available upon customer request.

3. Structural Design

3.1 Grating shall have the following bar types and heights:
I-bar - (1", 1½" & 2" heights)
T-bar - (2" height)
Wide T-bar - (1" & 1½" heights)

3.2 Grating shall be provided in standard 4' x 12' panels.

3.3 Specially cut & fabricated grating sections are available upon customer request.

3.4 Standard available "open areas" will be the following:
I-bar - (40% & 60%)
T-bar - (33% & 50%)
Wide T-bar - (25% & 38%)

3.5 Special "open areas" are available upon customer request.

3.6 Grating shall be manufactured from thermally cured pultruded structural load and tie bar components.

3.7 Grating shall be provided with a recessed tie bar design and grit top surface for maximum skid resistance.

3.8 Grating shall be an assembled and bonded notched tie bar system to provide both a mechanical and bonded panel connection.

3.9 Load, deflection and panel weight values shall be as stated in this catalog.

4. General

4.1 Grating will be inspected prior to shipment and will be free from visual defects.

4.2 All cut ends will be sealed prior to shipment.

4.3 Grating shall be fully supported according to the manufacturer guidelines.

4.4 Use of grating accessories shall be approved by the manufacturer and installed in accordance with the manufacturers' instructions.

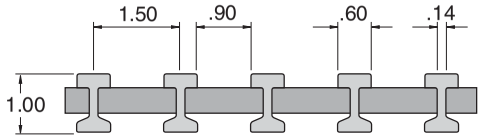
4.5 Product substitutions other than Aickingrate must meet or exceed the performance standards set forth in this catalog.

4.6 Grating supplied shall be Aickingrate as manufactured by: Aickinstrut/T.J. Cope

FIBERGLASS

'I' Bar Pultruded Grating

"I" Bar 1" THICK, 60% OPEN AREA



# of Bars/ft. of Width - 8
Load Bar Depth 1" Open Area 60%
Load Bar Centers 1-1/2" Approx. Weight 2.62 lbs./ft²

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

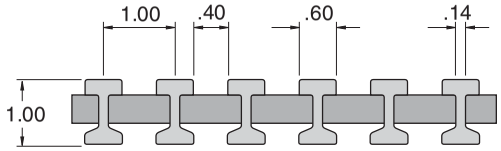
A=2.64 in² **I**=0.33 in⁴ **S**=0.63 in³
Average EI=1,700,000 lb/in² (Span ≥24")
A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus
Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	4576 (0.09")
	C	–	–	4576 (0.14")
18	U	–	–	3051 (0.25")
	C	–	–	4576 (0.40")
24	U	1059	1589	2288 (0.54")
	C	1331	1997	3833 (0.72")
30	U	458	686	1830 (1.00")
	C	716	1075	3067 (1.07")
36	U	241	362	1525 (1.58")
	C	453	680	2556 (1.41")
42	U	135	202	1252 (2.32")
	C	300	450	2190 (1.86")
48	U	87	131	958 (2.75")
	C	218	327	1917 (2.20")
54	U	50	75	757 (3.85")
	C	138	208	1704 (3.08")
60	U	30	45	613 (5.15")
	C	93	140	1533 (4.12")
66	U	18	27	507 (7.02")
	C	64	96	1394 (5.46")
72	U	13	19	426 (8.22")
	C	49	73	1278 (6.58")

U Uniform Load - lbs/ft²
C Concentrated Line Load - lbs/ft of Width

NOTES:
1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

"I" Bar 1" THICK, 40% OPEN AREA



# of Bars/ft. of Width - 12
Load Bar Depth 1" Open Area 40%
Load Bar Centers 1" Approx. Weight 3.41 lbs./ft²

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

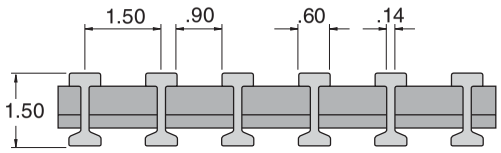
A=3.96 in² **I**=0.50 in⁴ **St**=0.96 in³
Average EI=2,500,000 lb/in² (Span ≥24")
A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus
Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	6864 (0.09)
	C	–	–	6864 (0.14)
18	U	–	–	4576 (0.25)
	C	–	–	6864 (0.40)
24	U	1589	2383	2432 (0.54)
	C	2000	3000	5750 (0.72)
30	U	686	1030	2746 (1.00)
	C	1075	1612	4600 (1.07)
36	U	362	543	2288 (1.58)
	C	958	1438	3833 (1.41)
42	U	200	300	1878 (2.32)
	C	442	662	3286 (1.86)
48	U	131	196	1438 (2.75)
	C	327	491	2875 (2.20)
54	U	74	111	1136 (3.85)
	C	208	312	2556 (3.08)
60	U	45	67	920 (5.15)
	C	140	209	2300 (4.12)
66	U	27	41	760 (7.02)
	C	96	144	2091 (5.46)
72	U	19	29	639 (8.22)
	C	73	109	1917 (6.58)

U Uniform Load - lbs/ft²
C Concentrated Line Load - lbs/ft of Width

NOTES:
1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

"I" Bar 1½" THICK, 60% OPEN AREA



# of Bars/ft. of Width - 8
Load Bar Depth 1-1/2" Open Area 60%
Load Bar Centers 1-1/2" Approx. Weight 2.83 lbs./ft²

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

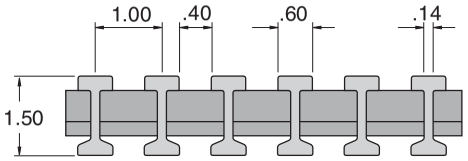
A=3.20 in² **I**=0.94 in⁴ **St**=1.20 in³
Average EI=4,600,000 lb/in² (Span ≥24")
A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus
Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	8190 (0.07)
	C	–	–	8190 (0.11)
18	U	–	–	5460 (0.17)
	C	–	–	8190 (0.28)
24	U	2925	–	4095 (0.35)
	C	3676	5515	6250 (0.43)
30	U	1232	1847	3276 (0.66)
	C	1923	2885	5000 (0.65)
36	U	666	1000	2730 (1.02)
	C	1247	1871	4167 (0.83)
42	U	357	535	2041 (1.43)
	C	780	1170	3571 (1.15)
48	U	219	329	1563 (1.78)
	C	548	822	3125 (1.43)
54	U	193	290	1852 (2.40)
	C	363	544	2778 (1.92)
60	U	81	122	1000 (3.09)
	C	253	380	2500 (2.47)
66	U	50	75	826 (4.08)
	C	179	268	2273 (3.18)
72	U	37	55	694 (4.71)
	C	138	208	2083 (3.77)

U Uniform Load - lbs/ft²
C Concentrated Line Load - lbs/ft of Width

NOTES:
1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

"I" Bar 1½" THICK, 40% OPEN AREA



# of Bars/ft. of Width - 6
Load Bar Depth 2" Open Area 50%
Load Bar Centers 2" Approx. Weight3.10 lbs./ft²

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

A=4.80 in² **I**=1.44 in⁴ **St**=1.80 in³
Average EI=7,000,000 lb/in² (Span ≥24")
A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus
Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	14,400 (0.07)
	C	–	–	12,285 (0.11)
18	U	–	–	8190 (0.17)
	C	–	–	12,285 (0.28)
24	U	4388	–	6143 (0.35)
	C	5515	8272	9375 (0.43)
30	U	1847	2771	4914 (0.66)
	C	2885	4327	7500 (0.65)
36	U	1000	1500	4095 (1.02)
	C	1871	2807	6250 (0.83)
42	U	535	803	3061 (1.43)
	C	1170	1754	5357 (1.15)
48	U	327	491	2344 (1.78)
	C	822	1234	4688 (1.43)
54	U	193	290	1852 (2.40)
	C	544	816	4167 (1.92)
60	U	122	182	1500 (3.09)
	C	380	569	3750 (2.47)
66	U	76	114	1240 (4.08)
	C	268	403	3409 (3.18)
72	U	55	83	1042 (4.71)
	C	207	311	3125 (3.77)

U Uniform Load - lbs/ft²
C Concentrated Line Load - lbs/ft of Width

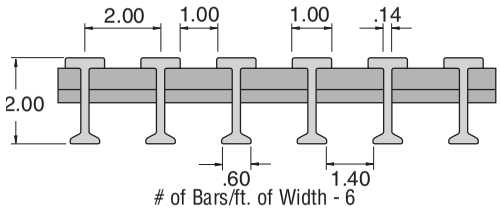
NOTES:
1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

FIBERGLASS

'T' Bar Pultruded Grating

AICKINGRATE

"T" Bar 2" THICK, 50% OPEN AREA



# of Bars/ft. of Width - 6

Load Bar Depth 2"
Load Bar Centers 2"
Open Area 50%
Approx. Weight3.10 lbs./ft²

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

A=3.20 in² **I**=1.68 in⁴ **St**=1.96 in³ **Sb**=1.47 in³

Average EI=7,600,000 lb/in² (Span ≥24")

A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus (Top, Bottom)

Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

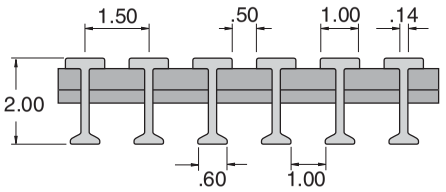
Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	10,800 (0.06)
	C	–	–	10,800 (0.10)
18	U	–	–	7200 (0.17)
	C	–	–	10,800 (0.27)
24	U	4737	–	5400 (0.29)
	C	5934	8900	10,800 (0.46)
30	U	2000	3000	4320 (0.54)
	C	3117	4676	8667 (0.69)
36	U	1071	1607	3600 (0.84)
	C	2000	3000	7222 (0.90)
42	U	553	829	3086 (1.40)
	C	1209	1814	6190 (1.28)
48	U	343	514	2700 (1.97)
	C	857	1286	5417 (1.58)
54	U	211	316	2140 (2.54)
	C	592	887	4815 (2.03)
60	U	137	206	1733 (3.16)
	C	428	642	4333 (2.53)
66	U	94	140	1433 (3.83)
	C	328	492	3939 (3.00)
72	U	71	106	1204 (4.24)
	C	266	399	3611 (3.39)

U Uniform Load - lbs/ft²
C Concentrated Line Load - lbs/ft of Width

NOTES:

1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

"T" Bar 2" THICK, 33% OPEN AREA



# of Bars/ft. of Width - 12

Load Bar Depth 2"
Load Bar Centers 1-1/2"
Open Area 33%
Approx. Weight 4.00 lbs./ft²

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

A=4.28 in² **I**=2.24 in⁴ **St**=2.61 in³ **Sb**=1.96 in³

Average EI=9,200,000 lb/in² (Span ≥24")

A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus (Top, Bottom)

Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	14,400 (0.06)
	C	–	–	14,400 (0.10)
18	U	–	–	9600 (0.17)
	C	–	–	14,400 (0.28)
24	U	6316	–	7200 (0.29)
	C	7784	11676	14,167 (0.45)
30	U	2667	4000	5760 (0.54)
	C	4167	6250	11,333 (0.68)
36	U	1429	2143	4800 (0.84)
	C	2668	4000	9444 (0.88)
42	U	737	1106	4114 (1.39)
	C	1613	2419	8095 (1.25)
48	U	458	686	3542 (1.94)
	C	1143	1714	7083 (1.55)
54	U	281	421	2798 (2.49)
	C	789	1184	6296 (1.99)
60	U	183	274	2267 (3.10)
	C	571	857	5667 (2.48)
66	U	125	187	1873 (3.75)
	C	438	657	5152 (2.94)
72	U	95	142	1574 (4.16)
	C	355	533	4722 (3.33)

U Uniform Load - lbs/ft²
C Concentrated Line Load - lbs/ft of Width

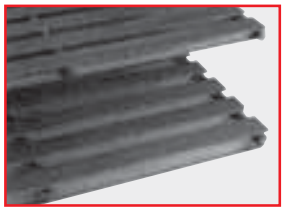
NOTES:

1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

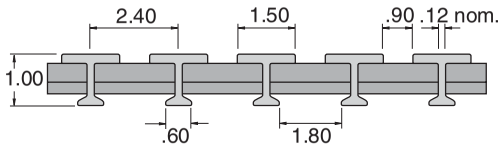
Aickingrate Wide T-Bar pultruded grating provides a lightweight, non-skid, durable alternative to metallic grating used for pedestrian walkway traffic.

The Aickingrate Wide T-Bar grit-top grating offers excellent protection for pedestrian traffic particularly in wet environments.

This low-cost grating is an excellent alternative to metal grating for wet areas with high volumes of foot traffic.



WIDE "T" Bar 1" THICK, 38% OPEN AREA

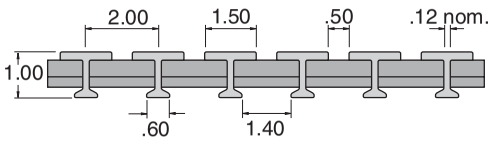


# of Bars/ft. of Width - 5

Load Bar Depth 1 — Open Area 38%

Load Bar Centers 2.4" — Approx. Weight 1.90 lbs./ft²

WIDE "T" Bar 1" THICK, 25% OPEN AREA



# of Bars/ft. of Width - 6

Load Bar Depth 1" — Open Area 25%

Load Bar Centers 2" — Approx. Weight 2.30 lbs./ft²

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

A=1.76 in² **I**=.23 in⁴ **S-top**=.35 in³ **S-bot**=.22 in³

Average EI=1,200,000 lb/in² (Span ≥24")

A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus (Top, Bottom)

Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	2730 (0.08)
	C	–	–	2730 (0.12)
18	U	–	–	1820 (0.22)
	C	–	–	2587 (0.34)
24	U	742	1113	1365 (0.46)
	C	933	1399	1940 (0.52)
30	U	312	468	1092 (0.87)
	C	491	737	1552 (0.79)
36	U	154	231	862 (1.40)
	C	290	435	1293 (1.12)
42	U	84	126	663 (1.89)
	C	184	276	1109 (1.50)
48	U	50	75	485 (2.43)
	C	125	188	970 (1.94)

U Uniform Load - lbs/ft²

C Concentrated Line Load - lbs/ft of Width

NOTES:

1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

LOAD TYPES

ENGINEERING PROPERTIES PER FT OF WIDTH

A=2.11 in² **I**=.27 in⁴ **S-top**=.42 in³ **S-bot**=.27 in³

Average EI=1,340,000 lb/in² (Span ≥24")

A=Cross Sectional Area **I**=Moment of Inertia **S**=Section Modulus (Top, Bottom)

Average EI=Modulus of Elasticity x Moment of Inertia (avg. value other varying spans)

Clear Span (in.)	Load Type	Load Required For a Specified Deflection (Note 2)		Max. Recom. Load (Note 1) All Resin Systems [Load (Deflection)]
		0.250"	0.375"	
12	U	–	–	3276 (0.08)
	C	–	–	3276 (0.12)
18	U	–	–	2184 (0.22)
	C	–	–	3104 (0.34)
24	U	890	1335	1638 (0.46)
	C	1119	1679	2328 (0.52)
30	U	374	562	1310 (0.87)
	C	589	884	1862 (0.79)
36	U	185	277	1035 (1.40)
	C	348	522	1552 (1.12)
42	U	100	150	760 (1.89)
	C	221	332	1330 (1.50)
48	U	60	90	582 (2.43)
	C	150	226	1164 (1.94)

U Uniform Load - lbs/ft²

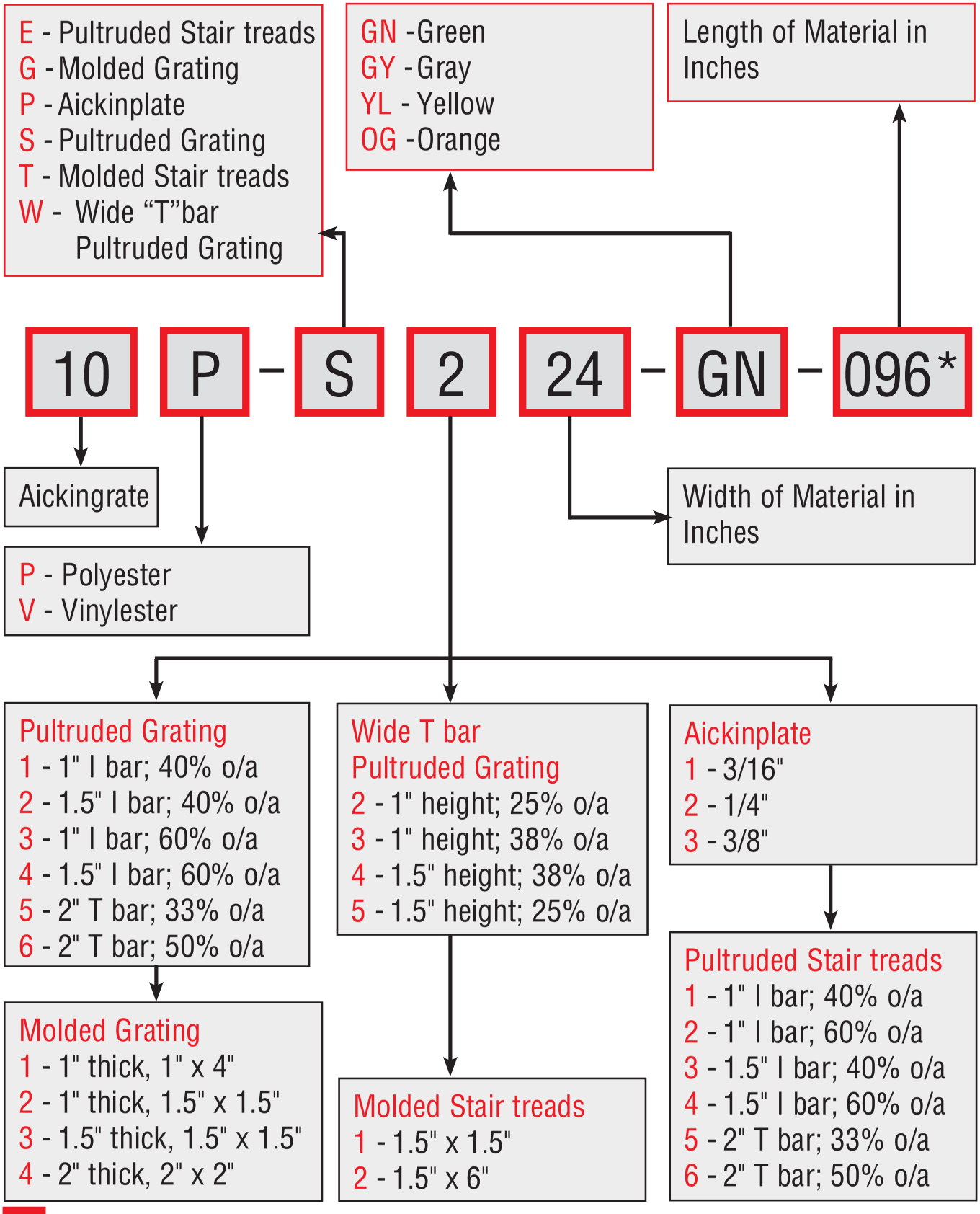
C Concentrated Line Load - lbs/ft of Width

NOTES:

1. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a minimum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

AICKINGRATE PART NUMBERS

To order Aickingrate, use the following part number scheme to create the correct part number.
* To order non-fire retardant polyester, add suffix "NFR" to end of part number.



Aikengrate Stair Trends are available in either molded or pultruded designs. Both designs incorporate an anti-skid, grit top surface.

Molded Stair Treads

Molded stair treads are available in the same resin formulations as the standard molded grating panels. Each panel incorporates an applied, grit surface with an extra-thick, dark colored nosing. This leading edge color contrast increases the stair tread visibility and prevents slips and falls on stairways.

All stair treads are 1½" thick and provided in a 1½" square mesh configuration. The standard stair tread panel size is 22½" x 120". Each panel weighs approximately 105 pounds.

Standard Colors: Green, Yellow, Gray and Orange

Special colors are available upon request.

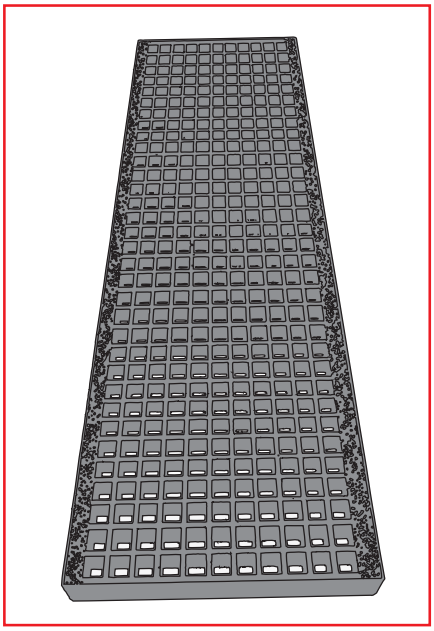
Aickingrate stair tread panels can be cut with the same tools that are used on the Aickingrate molded grating panels.

Use fiberglass or steel support angle, or wooden ledger..

Two standard hold-down clips bolt to angle support at each end. Use Aickingrate grating clips.

Leading edge in contrasting color for easy visual identification.

Use fiberglass or steel channel, or wooden stringer.



Panel size: 22-½" x 120"
Approx. Weight: 105 lbs.

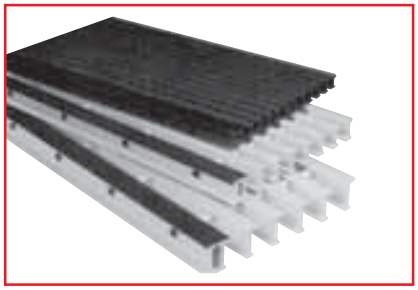
Pultruded Stair Treads

Pultruded stair treads incorporate the same performance characteristics as the Aickingrate pultruded grating panels. All stair treads are slip-resistant, non-conductive and offer a high level of safety, strength and corrosion resistance.

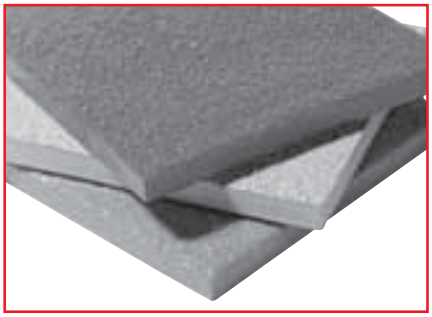
Pultruded stair treads are available in either polyester or vinyl ester resin types. The standard stair tread panel size is 1' x 10'. Stair treads are available in 1", 1½" & 2" depths. The available bar shapes are "I" bar and "T" bar. All pultruded stair treads incorporate a color contrast nosing to allow for quick and easy visual distinction, which prevents slips and falls.

Standard Colors:
Yellow (Polyester), Gray (Vinyl ester)

Tread Type	Concentrated Load (lbs.)	Span (in.)	18	24	30	36	42	48
		Span/150	.12	.16	.20	.24	.28	.32
1" Deep, I-Bar	250		.03	.08	.14	.22	.34	.46
60% Open Area	500		.07	.15	.28	.44	.68	.92
1.5" Deep, I-Bar	250		.01	.02	.04	.06	.09	.13
60% Open Area	500		.02	.04	.08	.11	.18	.26
2" Deep, T-Bar	250		.01	.02	.03	.04	.06	.09
50% Open Area	500		.02	.04	.06	.09	.12	.18
1" Deep, I-Bar	250		.02	.05	.10	.16	.24	.33
40% Open Area	500		.05	.11	.20	.32	.49	.65
1.5" Deep, I-Bar	250		.01	.01	.03	.04	.06	.09
40% Open Area	500		.02	.03	.05	.07	.12	.17
2" Deep, T-Bar	250		.01	.01	.02	.03	.05	.07
33% Open Area	500		.02	.03	.04	.06	.09	.14



AICKINPLATE



Aickinplate is a molded, non-skid fiberglass plate that offers an economical, safe solution for slippery walking surfaces. The non-skid surface provides excellent traction even when oil or other slippery liquids are present. Because Aickinplate is molded from fiberglass, it provides superior corrosion resistance and never requires painting. Aikinplate is a structural floor plate that is non-porous and cleans easily with water.

Aickinplate is easy to fabricate. It can be cut with masonry blades and drilled with standard carbide-tipped drill bits. The standard panel size is 4' x 8' and they are available in three thickness'; 3⁄16", 1⁄2" and 3⁄8". All panels will be constructed from both non-fire retardant or fire retardant polyester resin and fire retardant vinyl ester resins. A USDA approved, polyester resin Aickinplate is available.

Some typical Aickinplate applications would be:

- Fishing boat decks
- Packing plant floors
- Swimming pools
- Work platforms

Standard Colors:

Green, Gray, Yellow, & Orange

Special colors are available upon request.

Note: Install clips a maximum of every 48" and use at least 8 clips per 4' x 12' panel.

Capacity

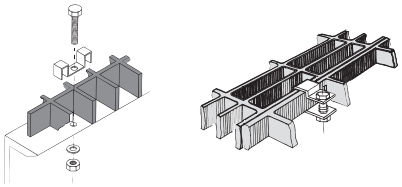
Aickinplate	Panel Weight	45 lbs.	12 (in.)	Use on flat
3⁄16"	Weight/Sq. Ft.	1.4 lbs.	18	solid surface only
			24	
Aickinplate	Panel Weight	60 lbs.	12 (in.)	199 lbs.
1⁄4"	Weight/Sq. Ft.	1.8 lbs.	18	98
			24	62
Aickinplate	Panel Weight	85 lbs.	12 (in.)	583 lbs.
3⁄8"	Weight/Sq. Ft.	2.6 lbs.	18	304
			24	203

Grating clips are specially designed to fasten and secure grating panels to support structures. All grating clips are made from 316 Stainless Steel.

Molded Grating Clips

M-Clips

Type M-clips secure panels to a support and restrain panel movement in all directions. M-Clips can also be installed with self-tapping screws when attaching to metal supports.



Part numbers	Aickingrate mesh configuration
M-1	1" thick, 1" x 4"
M-2	1" thick, 1½" x 1½"
M-3	1½" thick, 1½" x 1½"
M-4	2" thick, 2" x 2"

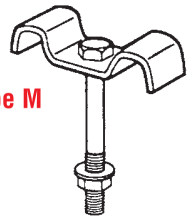
C-Clips

Used for joining two unsupported grating panel ends.

Part numbers	Grating panel thickness
C-1	1"
C-2	1½"
C-3	2"

Pultruded Grating Clips

Part numbers	Grating panel thickness
MI-4	"I" bar, 40% open area, 1" & 1½" thick
MI-6	"I" bar, 60% open area, 1" & 1½" thick
MT-3	"T" bar, 33% open area, 2" thick
MT-5	"T" bar, 50% open area, 2" thick
MTW-381	Wide "T" bar, 38% open area, 1" thick
MTW-3815	Wide "T" bar, 38% open area, 1½" thick



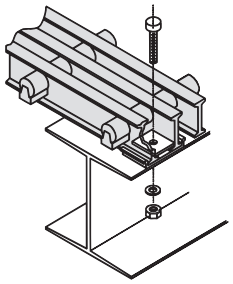
Type M

RT-Clips

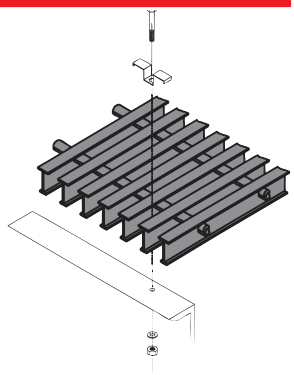
Part numbers RT-25

Grating panel thickness

Wide "T" bar, 25% open area, 1 & 1½" thick



Type RT

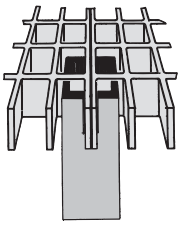


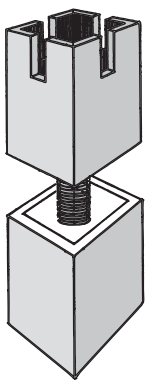
Type MI, MT, MTW

Molded Grating Floor Pedestals

Aickingrate floor pedestals are an economic method for providing an elevated Aickingrate molded flooring system. Pedestal supported flooring systems are extremely versatile and can be modified or moved to meet wash-down requirements. Pedestals are designed for a maximum height of 12 inches without braces.

Part numbers	Style
P-ADJ	Adjustable (5"-12")
P-STA	Stationary (3"-12")





Pedestal Placement Table for Aickingrate Molded Grating

Aickingrate Mesh Configuration	A 300 lbs. Concentrated Load will Produce a .250" Deflection with Pedestals Spaced as Indicated Below	A 300 lbs. Concentrated Load will Produce a Deflection indicated below with Pedestals Spaced		
		4' x 4'	3' x 3'	2' x 2'
1" Thick, 1" x 4"	27" x 27"	(1)	(1)	.200 in.
1" Thick, 1-½" x 1-½"	28" x 28"	(1)	(1)	.180 in.
1-½" Thick, 1-½" x 1-½"	48" x 48"	.250	.140	.065 in.
2" Thick, 2" x 2"	48" x 72"	.120	.080	.040 in.

FIBERGLASS

CORROSION-RESISTANCE GUIDE

The information contained in this table is intended to only be used as a guide for molded & pultruded grating. Because actual conditions may differ, the end-user must determine if the grating will withstand the intended environment.

Chemical Environment	% Concentration	Temp. °F	POLY	VE
Acetic Acid	50	Max.	C	C
Acetone	100	75	I	N
Alcohols	100	120	I	I
Aluminum	All	Max.	C	C
Aluminum Chloride	All	Max.	C	C
Aluminum Fluoride	20	75	I	I
Ammonium Hydroxide	30	75	I	N
Ammonium Salts - Neutral	All	120	C	S
Ammonium Salts - Aggressive	All	75	T	N
Aromatic Solvents	All	75	N	N
Barium Salts	All	Max.	C	C
Benzene	100	140	I	N
Black Liquor (Pulp Mill)	All	Max.	I	N
Bleach Liquor (Pulp Mill)	All	Max.	I	N
Calcium Hydroxide	25	Max.	S	I
Calcium Hypochlorite	All	Max.	I	N
Calcium Salts	All	Max.	C	C
Carbon Tetrachloride	100	75	S	N
Chlorinated Hydrocarbons	100	75	T	T
Chlorine Dioxide	Sat.	140	S	N
Chlorine Water	Sat.	120	I	N
Chlorine, Wet	Sat.	Max.	N	N
Chlorobenzene	100	75	N	N
Chlorobenzene	All	Up to 100	N	N
Chloroform	100	75	N	N
Chromic Acid	50	140	I	N
Citric Acid	All	Max.	C	C
Copper Cyanide Plating	All	125	S	I
Copper Salts	All	Max.	C	C
Crude Oil (Sweet or Sour)	All	Max.	C	C
Dichlorobenzene	100	75	N	N
Ethers		75	N	N
Ferric Chloride	100	Max.	C	C
Ferric Salts	All	Max.	C	C
Fluoride Salts + HCl	All	75	I	N
Fluosilicic Acid	10	75	S	I
Formaldehyde	37	150	S	I
Formic Acid	25	100	S	I
Fuel (Diesel, Jet, Gasoline)	All	100	C	C
Glycerine	100	Max.	C	C
Green Liquor (Pulp Mill)	All	Max.	I	N
Hydrobromic Acid	48	Max.	I	N
Hydrochloric Acid	10	Max.	S	S
Hydrochloric Acid	30	Max.	I	I
Hydrochloric Acid (Concentrated)	All	Up to 180	N	N

Chemical Environment	% Concentration	Temp. °F	POLY	VE
Hydrocyanic Acid	All	Max.	S	I
Hydrofluoric Acid	20	75	N	N
Hydrogen Peroxide	30	75	S	N
Lactic Acid	100	Max.	C	C
Lime Slurry	Sat.	Max.	C	C
Lithium Salts	All	Max.	C	C
Magnesium Salts	All	Max.	C	I
Maleic Acid	100	Max.	S	I
Mercury Chloride	100	Max.	C	C
Nickel Salts	All	Max.	C	C
Nitric Acid	20	120	I	I
Nitric Acid	35	100	I	N
Nitric Acid	40	Ambient	N	N
Nitric Hydrofluoric	20:2	75	N	N
Nitrous Acid	10	75	C	C
Ozone for Sewage Treatment		100	C	C
Perchloroethylene	100	75	I	N
Phenol	10	75	I	N
Phenol	88	Ambient	N	N
Phosphoric Acid	85	Max.	C	S
Phosphoric Acid, Super	115	Max.	S	N
Potassium Hydroxide	10	120	S	N
Potassium Salts	All	Max.	C	C
Silver Nitrate	100	Max.	C	C
Sodium Cyanide	All	75	S	I
Sodium Hydroxide	50	Max.	I	N
Sodium Hydroxide	10	Max.	N	N
Sodium Hypochlorite (Stable)	10	100	S	I
Sodium Salts-Neutral	All	Max.	C	C
Sodium Salts-Aggressive	All	75	T	N
Sulfur Dioxide	Sat.	Max.	S	S
Sulfuric Acid	25	Max.	S	I
Sulfuric Acid	50	Max.	S	N
Sulfuric Acid	75	100	I	N
Toluene	100	120	I	N
Trichloroethane 1,1,1	All	75	I	N
Trisodium Phosphate	50	Max.	I	N
Water (Fresh, Salt, Moderate, D.I.)	100	Max.	C	C
Wet Chlorine/Hydrochloric Acid)	10-20	Up to 350	N	N
White Liquor (Pulp Mill)	All	Max.	S	N
Zinc Chloride Plating	All	75	S	N
Zinc Salts	100	Max.	C	C

C=Continuous exposure of the grating to the Chemical Environment listed at the temperature listed.

S=Frequent exposure of the grating to splashes and spills from the Chemical Environment listed with that environment at the temperature listed.

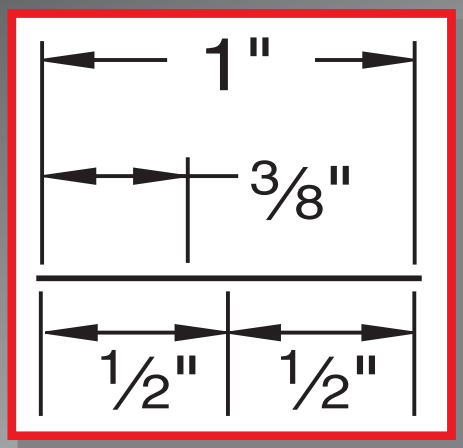
I=Infrequent exposure of the grating to splashes and spills from the Chemical Environment listed with that environment at the temperature listed and the spill immediately cleaned up or washed from the grating.

N=Not recommended for the concentrations and temperatures listed.

T=Test

Consult Aickingrate for corrosion recommendations at concentrations, temperatures or chemicals not listed in this guide.

Max. Temp. is 180°F for Vinylester 150°F for Polyester.



TECHNICAL DATA

Technical Data

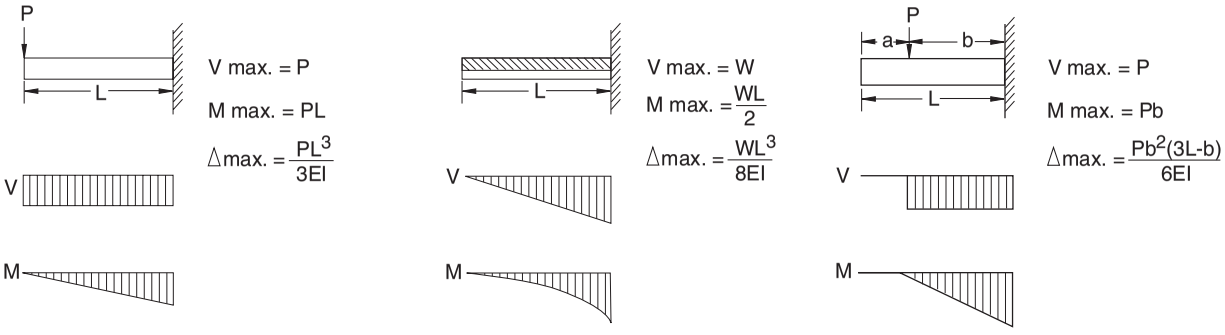
The information presented below is a direct reproduction from portions of the 8th Edition of THE MANUAL OF STEEL CONSTRUCTION by express permission of the American Institute of Steel Construction.

Beam Diagrams and Formulas (Nomenclature)

E	Modulus of Elasticity of steel at 29,000 ksi.
I	Moment of Inertia of Beam (inch^4).
Mmax	Maximum Moment (kip inch)
M1	Maximum moment in left section of beam (kip inch)
M2	Maximum moment in right section of beam (kip inch)
Mx	Moment at distance x from end of beam (kip inch)
P	Concentrated Load (kips)
R	End beam reaction for any condition of symmetrical loading (kips)
R1	Left end beam reaction (kips)
R2	Right end or intermediate beam reaction (kips)
V	Maximum vertical shear for any condition of symmetrical loading (kips)
V1	Maximum vertical shear in left section of beam (kips)
V2	Vertical shear at right reaction point, or to left of intermediate reaction point of beam (kips)
Vx	Vertical shear at distance x from end of beam (kips)
a	Measured distance along beam (inch)
b	Measured distance along beam which may be greater or less that “a” (inch)
L	Total length of beam between reaction points (inch)
W	Uniformly distributed load per unit of length (lbs)
x	Any distance measured along beam from left reaction (inch)
x1	Any distance measured along overhang section of beam from nearest reaction point(in).
Δmax	Maximum deflection (inch)
Δa	Deflection at point of load (inch)
Δx	Deflection at point x distance from left reaction (inch)

Beam Diagrams and Formulas (Cantilever Beams)

CANTILEVER BEAMS



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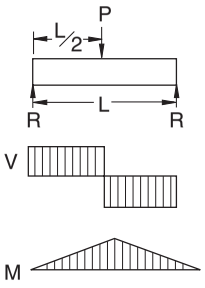
Beam Diagrams and Formulas (Simple Beams)

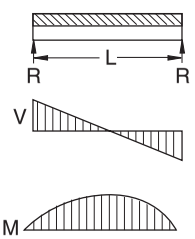


$R = \frac{P}{2}$

V max. $= \frac{P}{2}$

M max. $= \frac{PL}{4}$

Δmax. $= \frac{PL^3}{48EI}$

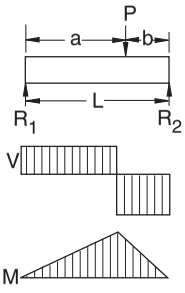


$R = \frac{W}{2}$

V max. $= \frac{W}{2}$

M max. $= \frac{WL}{8}$

Δmax. $= \frac{5WL^3}{384EI}$



$R_1 = \frac{Pb}{L}$

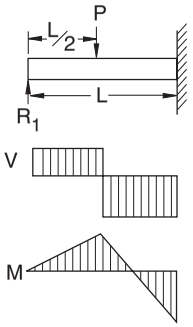
$R_2 = \frac{Pa}{L}$

V max. $= \frac{Pa}{L}$

M max. $= \frac{Pab}{L}$

Δmax. $= \frac{Pab(a+2b)\sqrt{3a(a+2b)}}{27EIL}$

Beam Diagrams and Formulas (Beams fixed at one end, supported at other)



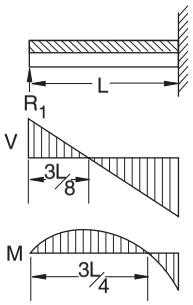
$R_1 = \frac{5P}{16}$

V max. $= \frac{11P}{16}$

M max. $= \frac{3PL}{16}$

Δmax. at x = 0.447L

Δmax. $= 0.009317\frac{PL^3}{EI}$



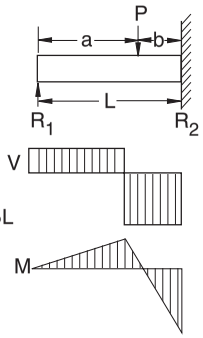
$R_1 = \frac{3W}{8}$

V max. $= \frac{5W}{8}$

M max. $= \frac{WL}{8}$

Δmax. at x = 0.4215L

Δmax. $= \frac{WL^3}{185EI}$



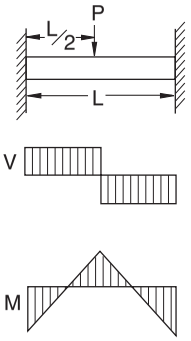
$R_1 = \frac{Pb^2}{2L^3}(a+2L)$

$R_2 = \frac{Pa}{2L^3}(3L^2-a^2)$

M at point of load = $R_1 a$

M at fixed end $= \frac{Pab}{2L^3}(a+L)$

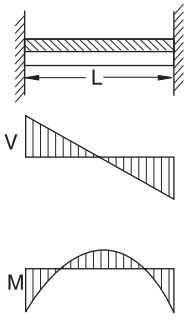
Beam Diagrams and Formulas (Beams fixed at both ends)



V max. $= \frac{P}{2}$

M max. $= \frac{PL}{8}$

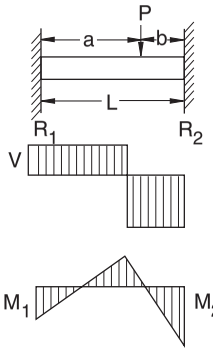
Δmax. $= \frac{PL^3}{192EI}$



V max. $= \frac{W}{2}$

M max. $= \frac{WL}{12}$

Δmax. $= \frac{WL^3}{384EI}$



$R_1 = \frac{Pb^2}{L^3}(3a+b)$

$R_2 = \frac{Pa^2}{L^3}(a+3b)$

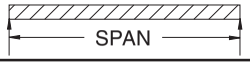
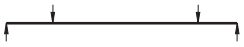
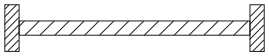
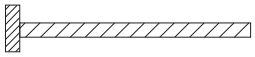
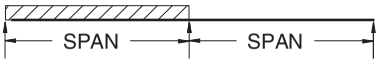
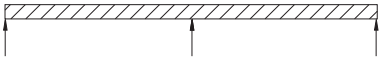
$M_1 = \frac{Pab^2}{L^2}$

$M_2 = \frac{Pa^2b}{L^2}$

POWER-STRUT®

Beam Load (Static) Conversion Factors

Power-Strut beam loads shown for varoius channels throughout this catalog are for single span, simple beams, with uniform loads. Loading or other support conditions can be calculated by multiplying the channel beam load by the appropriate factor listed below.

LOAD AND SUPPORT CONDITION	LOAD FACTOR	DEFLECTION FACTOR
1. Simple Beam, Uniform Load 	1.00	1.00
2. Simple Beam, Concentrated Load at Center 	0.50	0.80
3. Simple Beam, Two Equal Concentrated Loadcs at 1/4 pts 	1.00	1.10
4. Beam Fixed at Both Ends, Uniform Load 	1.50	0.30
5. Beam Fixed at Both Ends, Concentrated Load at Center 	1.00	0.40
6. Cantilever Beam, Uniform Load 	0.25	2.40
7. Cantilever Beam, Concentrated Load at End 	0.12	3.20
8. Continuous Beam, Two Equal Spans, Uniform Load on One Span 	1.30	0.92
9. Continuous Beam, Two Equal Spans, Uniform Load on Both Ends 	1.00	0.42
10. Continuous Beam, Two Equal Spans, Concentrated Load at Center of One Span 	0.62	0.71
11. Continuous Beam, Two Equal Spans, Concentrated Load at Center of Each Span 	0.67	0.48

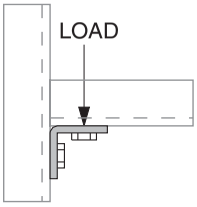
Example solutions

1.) To determine the load and deflection of a PS-200 simple beam 72" long, with a concentrated load at the center of span:
From the PS-200 Beam Load Chart (page 27), the maximum uniform load for a 72" span is 560# with a deflection of .50".
Multiply the above factors: Load = 560 x .50 = 280#
Defl. = .50 x .80 = .40"

2.) To determine the load and deflection of a PS-200-2T3 cantilever beam 24" long with a concetrated load at end:
From the PS-200-2T3 Beam Load Chart (page 27), the maximum uniform load for a 24" span is 3130# with a deflection of .03".
Multiply the above factors: Load = 3130# x .12 = 376#
Defl. = .03 x 3.20 = .096"

PS 603 – PS-200 1500#, PS-210 1000#

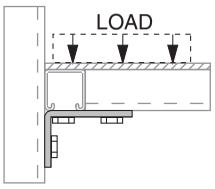
Channel	Load (lbs)
PS 200	1,500
PS 210	1,000



Both Ends Supported

PS 605 – PS-2001500, #PS-210 1000#

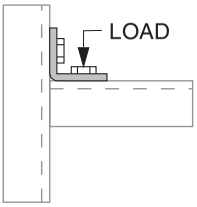
Channel	Load (lbs)
PS 200	1,500
PS 210	1,000



Both Ends Supported

PS 603 – PS-200 1000#, PS-210 650#

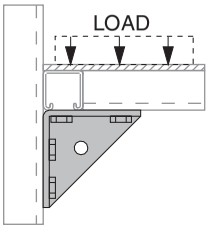
Channel	Load (lbs)
PS 200	1,000
PS 210	650



Both Ends Supported

PS 3373 - PS-200 3000#, PS-210 2000#

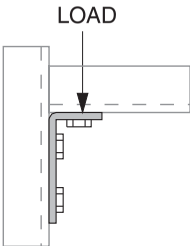
Channel	Load (lbs)
PS 200	3,000
PS 210	2,000



Both Ends Supported

PS 745 – PS-200 2000#, PS-210 1500#

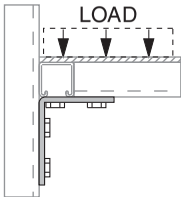
Channel	Load (lbs)
PS 200	2,000
PS 210	1,500



Both Ends Supported

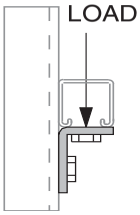
PS 607 – PS-200 2000#, PS-210 2000#

Channel	Load (lbs)
PS 200	2,000
PS 210	

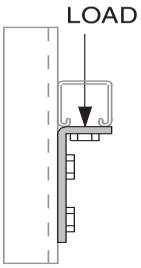


Both Ends Supported

PS 604 – 500#

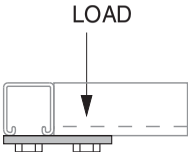


PS 606 – 500#



PS-601 - PS-210 1000#, PS-210 800#

Channel	Load (lbs)
PS 200	1,000
PS 210	800



Both Ends Supported

1.) Safety Factor = 2-½ based on ultimate strength of connection.

2.) Load Diagrams indicate design loads for 12 ga. (listed as PS-200) and for 14 ga. (listed as PS-210) channels.

Tables of Pipe Spacing

This chart, developed by Julius Getlan of Seelye Stevenson Value & Knect, consulting engineers, New York City, enables one to quickly determine the centerline-to-centerline dimension between any two size pipes on a rack. Select the smaller pipe size at top and select the other at the side of the table. Where the appropriate columns intersect, the dimension is given.

These factors are included in the dimensions given:

- O.D. of flanges and fittings.
- 1" insulation over flanges and fittings.
- All fractional dimensions less than ¼" were increased to the next larger ¼".
- Clear space between fittings as follows:
  1. 1" between piping 3" and smaller.
  2. 1½" between a pipe 3" and smaller and a pipe 4" or larger.
  3. 2" between piping 4" and larger.

Normal Pipe Dia.(In.)		Normal Pipe Diameter, Inches										
		¾"		1"			1¼"			1½"		
		T	S	T	F	S	T	F	S	T	F	S
¾	T	4¾	–	–	–	–	–	–	–	–	–	–
	S	4½	4¼									
1	T	5	4¾	5¼								
	F	6	5¾	6¼	7¼							
	S	4¾	4½	5	6	4½						
1¼	T	5¼	5	5½	6½	5	5½					
	F	6¼	6	6½	7½	6¼	6¾	7¾				
	S	4¾	4½	5	6	4½	5¼	6¼	4¾			
1½	T	5¼	5	5½	6½	5¼	5¾	6¾	5¼	5¾		
	F	6½	6¼	6¾	7¾	6¼	6¾	8	6½	7	8	
	S	5	4¾	5¼	6¼	4¾	5¼	6	5	5½	6½	5
2	T	5¾	5½	6	7	5½	6	7¼	5¾	6¼	7¼	5¾
	F	7	6¾	7¼	8¼	6¾	7¼	8½	7	7½	8½	7
	S	5¼	5	5½	6½	5	5½	6¾	5¼	5¾	6¾	5¼
2½	T	6	5¾	6¼	7¼	6	6½	7½	6	6½	7¾	6¼
	F	7½	7¼	7¾	8¾	7¼	7¾	9	7½	8	9	7½
	S	5½	5¼	5¾	6¾	5¼	5¾	7	5½	6	7	5½
3	T	6¼	6	6½	7½	6¼	6¾	7¾	6¼	6¾	8	6½
	F	7¾	7½	8	9	7½	8	9¼	7¾	8¼	9¼	7¾
	S	5¾	5½	6	7	5½	6	7¼	5¾	6¼	7¼	5¾
4	T	7½	7¼	7¾	8¾	7¼	7¾	9	7½	8	9	7½
	F	9	8¾	9¼	10¼	8¾	9¼	10½	9	9½	10½	9
	S	6¾	6½	7	8	6½	7	8¼	6¾	7¼	8¼	6¾
5	T	8	7¾	8¼	9¼	7¾	8¼	9½	8	8½	9½	8
	F	9½	9¼	9¾	10¾	9¼	9¾	11	9½	10	11	9½
	S	7¼	7	7½	8¼	7	7½	8¾	7¼	7¾	8¾	7¼
6	T	8¾	8½	9	10	8½	9	10¼	8¾	9¼	10¼	8¾
	F	10	9¾	10¼	11¼	9¾	10¼	11½	10	10½	11½	10
	S	7¾	7½	8	9	7½	8	9¼	7¾	8¼	9¼	7¾
8	T	8¾	9½	10	11	9¾	10½	11¼	9¾	10¼	11½	10
	F	11¼	11	11½	12½	11	11½	12¾	11¼	11¾	12¾	11¼
10	T	11¼	11	11½	12½	11	11½	12¾	11¼	11¾	12¾	11¼
	F	12½	12¼	12¾	13¾	12¼	12¾	14	12½	13	14	12½
12	T	12¼	12	12½	13½	12	12½	13¾	12¼	12¾	13¾	12¼
	F	14	13¾	14¼	15¼	13¾	14¼	15½	14	14½	15½	14

T – denotes threaded IPS pipe.
F – denotes flanged fittings on pipe.
S – denotes soldered or brazed tubing.

Tables of Pipe Spacing (cont.)

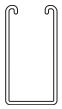
Nominal Pipe Dia. (In.)		Nominal Pipe Diameter, Inches											
		2"			2½"			3"			4"		
		T	F	S	T	F	S	T	F	S	T	F	S
2	T	6½	–	–	–	–	–	–	–	–	–	–	–
	F	7¾	9										
	S	6	7¼	5½									
2½	T	7	8¼	6½	7¼								
	F	8¼	9½	7¾	8¾	10							
	S	6¼	7½	5¾	6¾	8	6						
3	T	7¼	8½	6¾	7½	9	7	7¾					
	F	8½	9¾	8	9	10¼	8¼	9¼	10½				
	S	6½	7¾	6	7	8¼	6¼	7¼	8½	6½			
4	T	8¼	9½	7¾	8¾	10	8	9	10¼	8¼	10		
	F	9¾	11	9¼	10¼	11½	9½	10½	11¾	9¾	11½	13	
	S	7½	8¾	7	8	9¼	7¼	8¼	9½	7½	9¼	10¾	8½
5	T	8¾	10	8¼	9¼	10½	8½	9½	10¾	8¾	10¼	12	9¾
	F	10¼	11½	9¾	10¾	12	10	11	12¼	10¼	12	13½	11¼
	S	8	9¼	7½	8½	9¾	7¾	8¾	10	8	9¾	11¼	9
6	T	9½	10¾	9	10	11¼	9¼	10¼	11½	9½	11¼	12¾	10½
	F	10¾	12	10¼	11¼	12½	10½	11½	12¼	10¾	12½	14	11¾
	S	8½	9¾	8	9	10¼	8¼	9¼	10½	8½	10¼	11¾	9½
8	T	10¾	12	10½	11	12½	10½	11¼	12¾	10¾	12½	14	11¾
	F	12	13¼	11½	12½	13¾	11¾	12¾	14	12	13¾	15¼	13
10	T	12	13¼	11½	12½	13¾	11¾	12¾	14	12	13¾	15¼	13
	F	13¼	14½	12¾	13¾	15	13	14	15¼	13¼	15	16½	14¼
12	T	13	14¼	12½	13½	14¾	12¾	13¾	15	13	14¾	16¼	14
	F	14¾	16	14¼	15¼	16½	14½	15½	16¾	14¾	16½	18	15¾

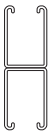
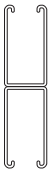
Nominal Pipe Dia. (In.)		Nominal Pipe Diameter, Inches											
		5"			6"			8"		10"		12"	
		T	F	S	T	F	S	T	F	T	F	T	F
5	T	11	–	–	–	–	–	–	–	–	–	–	–
	F	12½	14										
	S	10¼	11¾	9½									
6	T	11¾	13¼	11	12½								
	F	13	14½	12¼	13¼	15							
	S	10¾	12¼	10	11½	12¾	10½						
8	T	13	14½	12¼	13¾	15	12¾	14¾					
	F	14¼	15¾	13½	15	16¼	14	16¼	17 ½				
10	T	14¼	15¾	13½	15	16¼	14	16¼	17½	17½			
	F	15½	17	14¾	16¼	17½	15¼	17½	18¾	18¾	20		
12	T	15¼	16¾	14½	16	17¼	15	17¼	18½	18½	19¾	19½	
	F	17	18¼	16¼	17¾	19	16¾	14	20¼	20¼	21½	21¼	29

T – denotes threaded IPS pipe.
F – denotes flanged fittings on pipe.
S – denotes soldered or brazed tubing.

POWER-STRUT®

Minimum Size Power-Strut Channel - To Comply with NFPA 13 Table 2-6.1 5(a) 1996 Edition

Channel Size	Sect. Mod. (in^3)
 **PS-200** 1⅝" x 1⅝" x 12 ga.	.202
 **PS-150** 1⅝" x 2⁷⁄₁₆" x 12 ga.	.391
 **PS-100** 1⅝" x 3¼" x 12 ga.	.628

Channel Size	Sect. Mod. (in^3)
 **PS-150 2T3** 1⅝" x 4⅞" x 12 ga.	1.153
 **PS-100 2T3** 1⅝" x 6½" x 12 ga.	1.716

Section Modulus Required for Trapeze Members ($in.^3$)

PS-200 PS-150

Span of Trapeze	Pipe Size 1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"	10"
1 ft. 6 in.	0.08	0.09	0.09	0.09	0.10	0.11	0.12	0.13	0.15	0.18	0.24	0.32
	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.15	0.18	0.22	0.30	0.41
2 ft. 0 in.	0.11	0.12	0.12	0.13	0.13	0.15	0.16	0.17	0.20	0.24	0.32	0.43
	0.11	0.12	0.12	0.13	0.15	0.16	0.18	0.20	0.24	0.29	0.40	0.55
2 ft. 6 in.	0.14	0.14	0.15	0.16	0.17	0.18	0.20	0.21	0.25	0.30	0.40	0.54
	0.14	0.15	0.15	0.16	0.18	0.21	0.22	0.25	0.30	0.36	0.50	0.68
3 ft. 0 in.	0.17	0.17	0.18	0.19	0.20	0.22	0.24	0.26	0.31	0.36	0.48	0.65
	0.17	0.18	0.18	0.20	0.22	0.25	0.27	0.30	0.36	0.43	0.60	0.82
4 ft. 0 in.	0.22	0.23	0.24	0.25	0.27	0.29	0.32	0.34	0.41	0.48	0.64	0.87
	0.22	0.24	0.24	0.26	0.29	0.33	0.36	0.40	0.48	0.58	0.80	1.09
5 ft. 0 in.	0.28	0.29	0.30	0.31	0.34	0.37	0.40	0.43	0.51	0.59	0.80	1.08
	0.28	0.29	0.30	0.33	0.37	0.41	0.45	0.49	0.60	0.72	1.00	1.37
6 ft. 0 in.	0.33	0.35	0.36	0.38	0.41	0.44	0.48	0.51	0.61	0.71	0.97	1.30
	0.34	0.35	0.36	0.39	0.44	0.49	0.54	0.59	0.72	0.87	1.20	1.64
7 ft. 0 in.	0.39	0.40	0.41	0.44	0.47	0.52	0.55	0.60	0.71	0.83	1.13	1.52
	0.39	0.41	0.43	0.46	0.51	0.58	0.63	0.69	0.84	1.01	1.41	1.92
8 ft. 0 in.	0.44	0.46	0.47	0.50	0.54	0.59	0.63	0.68	0.81	0.95	1.29	1.73
	0.45	0.47	0.49	0.52	0.59	0.66	0.72	0.79	0.96	1.16	1.61	2.19
9 ft. 0 in.	0.50	0.52	0.53	0.56	0.61	0.66	0.71	0.77	0.92	1.07	1.45	1.95
	0.50	0.53	0.55	0.59	0.66	0.74	0.81	0.89	1.08	1.30	1.81	2.46
10 ft. 0 in.	0.56	0.58	0.59	0.63	0.68	0.74	0.79	0.85	1.02	1.19	1.61	2.17
	0.56	0.59	0.61	0.65	0.74	0.82	0.90	0.99	1.20	1.44	2.01	2.74

PS-100 PS-150 2T3 PS-100 2T3 Exceeds Section Modulus for Channel Shown Above

Top values are for Schedule 10 pipe; bottom values are for Schedule 40 Pipe.

Electrical Metallic Tubing Data

Nom. Size EMT Conduit	OD Conduit	Conduit Wt. lbs./ft	Approx. Max Wt. (lbs.ft.) Conduit and Conductor Not Lead Covered
½	0.706	0.29	0.54
¾	0.922	0.45	1.16
1	1.163	0.65	1.83
1¼	1.510	0.96	2.96
1½	1.740	1.11	3.68
2	2.197	1.41	4.45
2½	2.875	2.15	6.41
3	3.500	2.60	9.30
3½	4.000	3.25	12.15
4	4.500	3.90	15.40

Application Engineering Data – Conduit Spacings

Spacings in inches between centers of conduits. The light face figures are the minimum dimensions to provide clearance between locknuts. The more liberal spacings printed in bold face type should be used whenever possible.

Size	Size												
	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"	4½"	5"	6"
½"	1 3/16	–	–	–	–	–	–	–	–	–	–	–	–
	1 3/8												
¾"	1 5/16	1 7/16											
	1½	1 5/8											
1"	1½	1 5/8	1¾										
	1¾	1 7/8	2										
1¼"	1¾	1 7/8	2	2¼									
	2	1⅛	2¼	2½									
1½"	1 15/16	2 1/16	2 3/16	2 7/16	2 9/16								
	2⅛	2¼	2 3/8	2 5/8	2¾								
2"	2 3/16	2 5/16	2½	2¾	2 7/8	3⅛							
	2 3/8	2½	2¾	3	3⅛	3 3/8							
2½"	2 7/16	2 9/16	2¾	3	3⅛	3 3/8	3 5/8						
	2 5/8	2¾	3	3¼	3 3/8	3 5/8	4						
3"	2 13/16	2 15/16	3 1/16	3 5/16	3 7/16	3¾	4	4 5/16					
	3	3⅛	3 3/8	3 5/8	3¾	4	4⅜	4¾					
3½"	3⅛	3¼	3 3/8	3 5/8	3¾	4 1/16	4 5/16	4 5/8	4 15/16				
	3 3/8	3½	3 5/8	3 7/8	4	4⅜	4 5/8	5	5⅜				
4"	3 7/16	3 9/16	3 11/16	3 15/16	4 1/16	4⅜	4 5/8	4 15/16	5¼	5 9/16			
	3¾	3 7/8	4	4¼	4⅜	4¾	5	5⅜	5⅝	6			
4½"	3¾	3 7/8	4	4¼	4⅜	4 5/8	4 7/8	5¼	5 9/16	5 7/8	6⅛		
	4	4⅛	4¼	4½	4¾	5	5¼	5⅝	6	6¼	6½		
5"	4⅛	4¼	4⅜	4⅝	4¾	5	5¼	5 9/16	5 7/8	6 3/16	6½	6 13/16	
	4⅜	4½	4⅝	4 7/8	5	5⅜	5⅝	6	6¼	6⅝	7	7¼	
6"	4¾	4 7/8	5	5¼	5⅜	5⅝	5 7/8	6 3/16	6½	6 13/16	7⅛	7 7/16	8⅛
	5	5⅛	5¼	5½	5⅝	6	6¼	6⅝	7	7¼	7⅝	8	8⅝

Steel Rigid Conduit Data

Nom. Size Rigid Conduit	OD Conduit	OD Coupling	Wt. Conduit W/C Pkg. lbs./ft	Approx. Max Wt.(lbs./ft.) Conduit and Conductor	
				Lead Covered	Not Lead Covered
½"	0.840	1.010	0.80	1.17	1.04
¾"	1.050	1.250	1.09	1.75	1.40
1"	1.315	1.525	1.65	2.62	2.35
1¼"	1.660	1.869	2.15	4.31	3.58
1½"	1.900	2.155	2.58	5.89	4.55
2"	2.375	2.650	3.52	8.53	7.21
2½"	2.875	3.250	5.67	11.51	10.22
3"	3.500	3.870	7.14	16.51	14.51
3½"	4.000	4.500	8.60	19.05	17.49
4"	4.500	4.875	10.00	24.75	21.48
5"	5.563	6.000	13.20	35.87	30.83
6"	6.625	7.200	17.85	50.69	43.43

Maximum weight equals weight of rigid conduit plus weight of heaviest conductor combination as specified by the 1996 edition of the "National Electric Code Handbook."

Intermediate Metal Conduit Data

Nom. Size Rigid Conduit	OD Conduit	OD Coupling	Wt. Conduit W/C Pkg. lbs./ft	Approx. Max Wt.(lbs./ft.) Conduit and Conductor	
				Lead Covered	Not Lead Covered
½"	0.815	1.010	0.60	0.97	0.84
¾"	1.029	1.250	0.82	1.48	1.13
1"	1.290	1.525	1.16	2.13	1.86
1¼"	1.638	1.869	1.50	3.66	2.93
1½"	1.883	2.115	1.82	5.13	3.79
2"	2.360	2.650	2.42	7.43	6.11
2½"	2.857	3.250	4.28	10.12	8.83
3"	3.476	3.870	5.26	14.63	12.63
3½"	3.971	4.500	6.12	16.57	15.01
4"	4.466	4.875	6.82	21.57	18.30

1 Cubic ft. of water weighs 62.35 lbs.

1 Gallon US weighs 8.335 lbs.

Steel Pipe Data – Schedule 40 & 80

Nominal Pipe Size	Sch. No.	O.D.	Wall Thick	Wt./Ft.	Wt. of Water/Ft
3/8"	40	0.675	0.091	0.567	0.083
	80		0.126	0.738	0.061
1/2"	40	0.840	0.109	0.850	0.132
	80		0.147	1.087	0.101
3/4"	40	1.050	0.133	1.130	0.230
	80		0.154	1.473	0.186
1"	40	1.315	0.133	1.678	0.374
	80		0.179	2.171	0.311
1 1/4"	40	1.660	0.140	2.272	0.647
	80		0.199	2.996	0.555
1 1/2"	40	1.900	0.145	2.717	0.882
	80		0.200	3.631	0.765
2"	40	2.375	0.154	3.652	1.452
	80		0.218	5.022	1.279
2 1/2"	40	2.875	0.203	5.790	2.072
	80		0.276	7.660	1.834
3"	40	3.500	0.216	7.570	3.200
	80		0.300	10.250	2.860
3 1/2"	40	4.000	0.226	9.110	4.280
	80		0.318	12.510	3.850
4"	40	4.500	0.237	10.790	5.510
	80		0.337	14.980	4.980
5"	40	5.563	0.258	14.620	8.660
	80		0.375	20.780	7.870
6"	40	6.625	0.280	18.970	12.510
	80		0.432	28.570	11.290
8"	40	8.625	0.322	28.550	21.600
	80		0.500	43.390	19.800
10"	40	10.750	0.365	40.480	34.100
	80		0.593	64.400	31.100
12"	40	12.750	0.406	53.600	48.500
	80		0.687	88.600	44.000
14"	40	14.000	0.437	63.000	58.500
	80		0.750	107.000	51.200
16"	40	16.000	0.500	83.000	76.500
	80		0.843	137.000	69.700
18"	40	18.000	0.563	105.000	97.200
	80		0.937	171.000	88.500
20"	40	20.000	0.593	123.000	120.400
	80		1.031	209.000	109.400
24"	40	24.000	0.687	171.000	174.200
	80		1.218	297.000	158.200
30"	20	30.000	0.500	158.000	286.000
36"	API	36.000	0.500	190.000	417.000

Technical Data

Copper Tube Data

Type L					
Tube Size	Nom O.D. Tubing	O.D.	Wall Thick	Wt./Ft. Lbs.	Wt. of Water/Ft. Lbs.
1/4"	3/8"	0.375	0.030	0.126	0.034
3/8"	1/2"	0.500	0.035	0.198	0.062
1/2"	5/8"	0.625	0.040	0.285	0.100
5/8"	3/4"	0.750	0.042	0.362	0.151
3/4"	7/8"	0.875	0.045	0.455	0.209
1"	1 1/8"	1.125	0.050	0.655	0.357
1 1/4"	1 3/8"	1.375	0.055	0.884	0.546
1 1/2"	1 5/8"	1.625	0.060	1.140	0.767
2"	2 1/8"	2.125	0.070	1.750	1.341
2 1/2"	2 5/8"	2.625	0.080	2.480	2.064
3"	3 1/8"	3.125	0.090	3.330	2.949
3 1/2"	3 5/8"	3.625	0.100	4.290	3.989
4"	4 1/8"	4.125	0.110	5.380	5.188
5"	5 1/8"	5.125	0.125	7.610	8.081
6"	6 1/8"	6.125	0.140	10.200	11.616
8"	8 1/8"	8.125	0.200	19.290	20.289
10"	10 1/8"	10.125	0.250	30.100	31.590
12"	12 1/8"	12.125	0.280	40.400	45.426

Type K					
Tube Size	Nom O.D. Tubing	O.D.	Wall Thick	Wt./Ft. Lbs.	Wt. of Water/Ft. Lbs.
1/4"	3/8"	0.375	0.035	0.145	0.032
3/8"	1/2"	0.500	0.005	0.269	0.055
1/2"	5/8"	0.625	0.049	0.344	0.094
5/8"	3/4"	0.750	0.049	0.418	0.144
3/4"	7/8"	0.875	0.065	0.641	0.188
1"	1 1/8"	1.125	0.065	0.839	0.337
1 1/4"	1 3/8"	1.375	0.065	1.040	0.527
1 1/2"	1 5/8"	1.625	0.072	1.360	0.743
2"	2 1/8"	2.125	0.083	2.060	1.310
2 1/2"	2 5/8"	2.625	0.095	2.920	2.000
3"	3 1/8"	3.125	0.109	4.000	2.960
3 1/2"	3 5/8"	3.625	0.120	5.120	3.900
4"	4 1/8"	4.125	0.134	6.510	5.060
5"	5 1/8"	5.125	0.160	9.670	8.000
6"	6 1/8"	6.125	0.192	13.870	11.200
8"	8 1/8"	8.125	0.271	25.900	19.500
10"	10 1/8"	10.125	0.338	40.300	30.423
12"	12 1/8"	12.125	0.405	57.800	43.675

Spacing of Hangers for Copper Tubing

Tubing Size	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
Span in Ft.	6	8	8	10	10	10	12	12	12	12	12	14	14	18	19

Spacing of Hangers for Steel Pipe

Nominal Pipe Size, Inches	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20	24
Maximum Span, Ft.*	5	6	7	7	9	10	11	12	13	14	16	17	19	2	23	25	27	28	30	32
Recommended Hanger Rod Sizes	3/8	3/8	3/8	3/8	3/8	3/8	1/2	1/2	1/2	5/8	5/8	3/4	7/8	7/8	7/8	1	1	1 1/4	1 1/2 or Trapeze	

The above spacing and capacities are based on pipe filled with water.
Additional valves and fittings increase the load and therefore closer hanger spacing is required.

* Many codes and specifications state “pipe hangers must be spaced every 10 ft., regardless of size”. Follow local specifications.

PVC Plastic Pipe Data – Schedule 40 & 80

Nom. Tube Size	Sch. No.	O.D.	Wall Thick	Wt./Ft. Lbs.	Wt. of Water/ Ft.Lbs.
1/8"	40	0.405	0.068	0.043	0.025
	80		0.095	0.055	0.016
1/4"	40	0.540	0.088	0.074	0.045
	80		0.119	0.094	0.031
3/8"	40	0.675	0.091	0.100	0.083
	80		0.126	0.129	0.061
1/2"	40	0.840	0.109	0.150	0.132
	80		0.147	0.150	0.101
3/4"	40	1.050	0.113	0.199	0.230
	80		0.154	0.259	0.186
1"	40	1.315	0.133	0.295	0.374
	80		0.179	0.382	0.311
1 1/4"	40	1.660	0.140	0.400	0.647
	80		0.191	0.527	0.555
1 1/2"	40	1.990	0.145	0.478	0.882
	80		0.200	0.639	0.765
2"	40	2.375	0.154	0.643	1.452
	80		0.218	0.884	1.279

Nom. Tube Size	Sch. No.	O.D.	Wall Thick	Wt./Ft. Lbs.	Wt. of Water/ Ft.Lbs.
2 1/2"	40	2.875	0.203	1.020	2.072
	80		0.276	1.350	1.834
3"	40	3.500	0.216	1.333	3.200
	80		0.300	1.804	2.860
3 1/2"	40	4.000	0.226	1.598	4.280
	80		0.318	2.195	3.850
4"	40	4.500	0.237	1.899	5.510
	80		0.337	2.636	4.980
5"	40	5.563	0.258	2.770	8.660
	80		0.375	4.126	7.870
6"	40	6.625	0.280	3.339	12.150
	80		0.432	5.028	11.290
8"	40	8.625	0.322	5.280	21.600
	80		0.500	8.023	19.800
10"	40	10.750	0.366	7.505	34.100
	80		0.593	11.894	31.100
12"	40	12.750	0.406	10.023	48.500
	80		0.687	16.365	44.000

Spacing of Hangers for PMC Plastic Pipe

Sch. 40	Support Spacings in Feet at Temperatures Shown Above									
Pipe Size	20°F	40°F	60°F	80°F	100°F	110°F	120°F	130°F	140°F	150°F
1/2"– 3/4"	5.00	4.75	4.50	4.25	4.00	3.75	3.33	3.00	2.66	2.00
1"– 1 1/4"	5.50	5.25	5.00	4.66	4.33	4.00	3.75	3.33	2.80	2.25
1 1/2" – 2"	5.80	5.50	5.25	5.00	4.66	4.33	3.80	3.50	3.00	2.50
2 1/2"	6.66	6.33	6.00	5.50	5.25	4.80	4.50	4.00	3.50	2.80
3"	6.80	6.50	6.25	5.80	5.50	5.25	4.75	4.25	3.66	3.00
4"	7.33	7.00	6.50	6.25	5.80	5.50	5.00	4.50	3.80	3.25
6"	7.80	7.50	7.00	6.80	6.33	5.80	5.33	4.80	4.25	3.50

Sch. 40	Support Spacings in Feet at Temperatures Shown Above									
Pipe Size	20°F	40°F	60°F	80°F	100°F	110°F	120°F	130°F	140°F	150°F
1/2" – 3/4"	5.75	5.50	5.25	4.80	4.50	4.33	3.80	3.50	3.00	2.50
1"	6.33	6.00	5.75	5.33	5.00	4.60	4.33	3.80	3.33	2.75
1 1/4" – 1 1/2"	6.66	6.33	6.00	5.66	5.25	4.80	4.50	4.00	3.50	3.00
2"	7.00	6.50	6.25	6.00	5.50	5.12	4.75	4.33	3.66	3.12
2 1/2"	7.80	7.50	7.00	6.66	6.33	5.80	5.33	4.75	4.25	3.33
3"	8.20	7.75	7.33	7.00	6.50	6.00	5.50	5.00	4.33	3.50
4"	8.66	8.25	7.80	7.33	6.80	6.33	5.80	5.25	4.66	3.75
6"	9.80	9.33	8.80	8.33	7.80	7.33	6.50	6.00	5.12	4.25

Cast Iron Pipe Data

Nom. Tube Size	Class	O.D.	Wall Thick	Wt./ Ft.	Wt. of Water Ft. Lbs.
3"	150	3.96	0.32	12.20	3.73
4"	150	4.80	0.35	16.40	5.72
6"	150	6.90	0.38	25.70	12.80
8"	150	9.05	0.41	36.70	23.10
10"	150	11.10	0.44	48.70	35.50
12"	150	13.20	0.48	62.90	51.00
14"	150	15.30	0.51	78.80	69.30
16"	150	17.40	0.54	95.00	90.30
18"	150	19.50	0.58	114.70	114.00
20"	150	21.60	0.62	135.90	141.50
24"	150	25.80	0.73	190.40	201.00
30"	150	32.00	0.85	277.30	312.00
36"	150	38.30	0.94	368.90	449.00
42"	150	44.50	1.05	479.10	612.00
48"	150	50.80	1.14	595.20	803.00

Mechanical Joint Pipe Class 150. Approximately same weight for Bell & Spigot. Flange cast iron pipe add weight of flanges.

Nom. Pipe Size	O.D	Wall Thick	Wt./Ft. Lbs.	Wt. of Water/Ft. Lbs.
1½"	1.84	0.12	0.64	0.89
2"	2.34	0.14	0.94	1.45
3"	3.41	0.17	1.60	3.19
4"	4.53	0.20	2.60	5.79
6"	6.66	0.24	4.70	12.78
Heavy Schedule				
1"	1.31	0.16	0.60	0.35
1½"	1.84	0.17	0.87	0.76
2"	2.34	0.17	1.10	1.36
3"	3.41	0.20	2.00	3.06
4"	4.53	0.26	3.40	5.44
6"	6.66	0.33	6.30	12.42

Spacing of Hangers for glass pipe support every 8-10 ft. Pad all hangers. Use only clevis or trapeze, do not tie down pipe.

Load Carrying Capacities of Threaded Hot Rolled Steel Rod

Conforming To ASTM A575 And A576

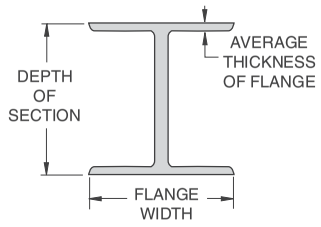
Nominal Rod Dia.	Root Area Sq. (In.)	Maximum Safe Load, Pounds 650° (lbs.)
⅜"	0.068	730
½"	0.126	1,350
⅝"	0.202	2,160
¾"	0.302	3,230
⅞"	0.419	4,480
1"	0.552	5,900

Low Carbon Steel
Fy = 32,000 psi minimum
Ft = 52,000 psi minimum

Threaded Rod Loads for Structural Applications
(Based on AISC, Steel Construction Manual, ASD, 9th Edition. Per AISC, Allowed Tensile Stress = 0.33 * F_u)

Nominal Dia.	Nominal Area In^2	Allowed Tension Load Lbs
¼	0.049	840
⅜	0.110	1,890
7/16	0.150	2,570
½	0.196	3,360
⅝	0.307	5,260
¾	0.442	7,580
⅞	0.601	10,310
1	0.785	13,470

I-Beam - "W" Shape

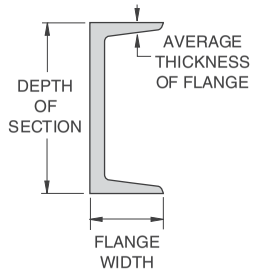


Depth of Section	Wt/ Foot	Flange Width	Avg. Flange
5"	16	5"	0.360"
	19		0.430"
6"	12	4"	0.280"
	16	4"	0.405"
	20	6"	0.365"
	25		0.455"
8"	13	4"	0.255"
	15		0.315"
	18	5¼"	0.330"
	21		0.400"
	24	6½"	0.400"
	28		0.465"
	31	8"	0.435"
	35		0.495"
	40	8⅛"	0.560"
	48		0.685"
	58	8¼"	0.810"
	67		0.935"
10"	15	4"	0.270"
	17		0.330"
	19		0.395"
	22	5¾"	0.360"
	26		0.440"
	30		0.510"
	33	8"	0.435"
	39		0.530"
	45		0.620"
	49	10"	0.560"
	54		0.615"
	60	10⅛"	0.680"
	68		0.770"
	77	10¼"	0.870"
	88		0.990"
	100	10⅜"	1.120"
	112		1.250"
12"	16	4"	0.265"
	19		0.350"
	22		0.425"
	26	6½"	0.380"
	30		0.440"
	35	6⅝"	0.520"
	40	8"	0.515"
	45		0.575"
	50	8⅛"	0.640"
	53	10"	0.575"
	58		0.640"
	65	12"	0.605"
	72		0.670"

Depth of Section	Wt/ Foot	Flange Width	Avg. Flange
12" (Cont.)	79	12⅛"	0.735"
	87		0.810"
	96		0.900"
	106	12¼"	0.990"
	120	12⅜"	1.105"
	136		1.250"
	152	12½"	1.400"
	190	12⅝"	1.735"
14"	22	5"	0.335"
	26		0.420"
	30	6¾"	0.385"
	34		0.455"
	38		0.515"
	43	8"	0.530"
	48		0.595"
	53		0.660"
	61	10"	0.645"
	68		0.720"
	74	10⅛"	0.785"
	82		0.855"
	90	14½"	0.710"
	99	14⅝"	0.780"
	109		0.860"
	120		0.940"
	132	14¾"	1.030"
	145	15½"	1.090"
	159	15⅝"	1.190"
	176		1.310"
	193	15¾"	1.440"
	211		1.560"
	233	15⅞"	1.720"
	257	16"	1.890"
	283	16⅛"	2.070"
	311	16¼"	2.260"
	342	16⅜"	2.470"
	370	16½"	2.660"
	398	16⅝"	2.845"
	426	16¾"	3.035"
16"	26	5½"	0.345"
	31		0.440"
	36	7"	0.430"
	40		0.505"
	45		0.565"
	50	7⅛"	0.630"
	57		0.715"
	67	10¼"	0.665"
	77		0.760"
	89	10⅜"	0.875"

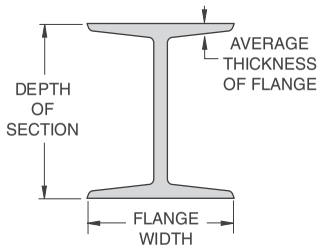
Depth of Section	Wt/ Foot	Flange Width	Avg. Flange
18"	40		0.525"
	46		0.605"
	50	7½"	0.570"
	55		0.630"
	60		0.695"
	65	7⅝"	0.750"
	71		0.810"
	76	11"	0.680"
	86	11⅛"	0.770"
	97		0.870"
	106	11¼"	0.940"
	119		1.060"
21"	44	6½"	0.450"
	50		0.535"
	57		0.650"
	62	8¼"	0.615"
	68		0.685"
	73		0.740"
	83	8⅜"	0.835"
	93		0.930"
	111	12⅜"	0.875"
	122		0.960"
	147	12½"	1.150"
24"	55	7"	0.505"
	62		0.590"
	68	9"	0.585"
	76		0.680"
	84		0.770"
	94	9⅛"	0.875"
	104	12¾"	0.750"
	117		0.850"
	131	12⅞"	0.960"
	146		1.090"
	162	13"	1.220"
27"	84	10"	0.640"
	94		0.745"
	102		0.830"
	114	10⅛"	0.930"
	146	14"	0.975"
	161		1.080"
	178	14⅛"	1.190"
30"	99	10½"	0.670"
	108		0.760"
	116		0.850"
	124		0.930"
	132		1.000"
	173	15"	1.065"
	191		1.185"
	211	15⅛"	1.315

Channels – American Standard



Depth of Section	Weight/ Foot	Flange Width	Avg. Flange Thickness
3"	4.10	1⅜"	0.273"
	5.00	1½"	
	6.00	1⅝	
4"	5.40	1⅝"	0.296"
	7.25	1¾"	
5"	6.70	1¾"	0.320"
	9.00	1⅞"	
6"	8.20	1⅞"	0.343"
	10.50	2"	
	13.00	2⅛	
7"	9.80	2⅛"	0.366"
	12.25	2¼"	
	14.75		
8"	11.50	2¼"	0.390"
	13.75	2⅜"	
	18.75	2½"	
9"	13.40	2⅜"	0.413"
	15.00	2½"	
	20.00	2⅝"	
10"	15.30	2⅝"	0.436"
	20.00	2¾"	
	25.00	2⅞"	
	30.00	3"	
12"	20.70	3"	0.501"
	25.00		
	30.00	3⅛"	
15"	33.90	3⅜"	0.650"
	40.00	3½"	
	50.00	3¾"	
18"	42.70	4"	0.625"
	45.80		
	51.90	4⅛"	

I-Beams – "S" Shape



Depth of Section	Weight/ Foot	Flange Width	Avg. Flange Thickness
3"	5.70	2⅜"	0.260"
	7.50	2½"	
4"	7.70	2⅝"	0.293"
	9.50	2¾"	
5"	10.00	3"	0.326"
	14.75	3¼"	
6"	12.50	3⅜"	0.359"
	17.25	3⅝"	
7"	15.30	3⅝"	0.392"
	20.00	3⅞"	
8"	18.40	4"	0.426"
	23.00	4⅛"	
10"	25.40	4⅝"	0.491"
	35.00	5"	
12"	31.80	5"	0.544"
	35.00	5⅛"	
	40.80	5¼"	0.659"
	50.00	5½"	
15"	42.90	5½"	0.622"
	50.00	5⅝"	
18"	54.70	6"	0.691
	70.00	6¼"	
20"	66.00	6¼"	0.795
	75.00	6⅜"	
	86.00	7"	0.920
	96.00	7¼"	
24"	80.00	7"	0.871
	90.00	7⅛"	
	100.00	7¼"	
	106.00	7⅞"	1.090
	121.00	8"	

Unit Conversions

English to Metric			Metric to English		
To Convert From	**To**	**Multiply By**	**To Convert From**	**To**	**Multiply By**
Length					
Inch [in]	Millimeter [mm]	**25.400 000**	Millimeter [mm]	Inch [in]	**0.039 370**
Foot [ft]	Meter [m]	**0.304 800**	Meter [m]	Foot [ft]	**3.280 840**
Yard [yd]	Meter [m]	**0.914 400**	Meter [m]	Yard [yd]	**1.093 613**
Mile (U.S. Statute) [mi]	Kilometer [km]	**1.609 347**	Kilometer [km]	Mile (U.S. Statute) [mi]	**0.621 370**
Area					
Square Inch [in^2]	Square Millimeter [mm^2]	**645.16**	Square Millimeter [mm^2]	Square Inch [in^2]	**0.001550**
Square Foot [ft^2]	Square Meter [m^2]	**0.092 903**	Square Meter [m^2]	Square Foot [ft^2]	**10.763 915**
Square Yard [yd^2]	Sqare Meter [m^2]	**0.836 127**	Sqare Meter [m^2]	Square Yard [yd^2]	**1.195 991**
Square Mile [mi^2] (U.S. Statute)	Square Kilometer [km^2]	**2.589 998**	Square Kilometer [km^2]	Square Mile [mi^2] (U.S. Statute)	**0.386 101**
Acre	Square Meter [m^2]	**4,046.873**	Square Meter [m^2]	Acre	**0.000 247**
Acre	Hectare	**0.404 687**	Hectare	Acre	**2.471 046**
Volume					
Cubic Inch [in^3]	Cubic Millimeter [mm^3]	**16,387.06**	Cubic Millimeter [mm^3]	Cubic Inch [in^3]	**0.000061**
Cubic Foot [ft^3]	Cubic Meter [m^3]	**0.028 317**	Cubic Meter [m^3]	Cubic Foot [ft^3]	**35.314 662**
Cubic Yard [yd^3]	Cubic Meter [m^3]	**0.764 555**	Cubic Meter [m^3]	Cubic Yard [yd^3]	**1.307 950**
Gallon (U.S. Liquid) [gal]	Litre [l]	**3.785 412**	Litre [l]	Gallon (U.S. Liquid) [gal]	**0.264 172**
Quart (U.S. Liquid) [qt]	Litre [l]	**0.946 353**	Litre [l]	Quart (U.S. Liquid) [qt]	**1.056 688**
Mass					
Ounce (Avoirdupois) [oz]	Gram [g]	**28.349 520**	Gram [g]	Ounce (Avoirdupois) [oz]	**0.035 274**
Pound (Avoirdupois) [lb]	Kilogram [kg]	**0.453 592**	Kilogram [kg]	Pound (Avoirdupois) [lb]	**2.204 624**
Short Ton	Kilogram [kg]	**907.185**	Kilogram [kg]	Short Ton	**0.00110**
Force					
Ounce-Force	Newton [N]	**0.278 014**	Newton [N]	Ounce-Force	**3.596 941**
Pound-Force [lbf]	Newton [N]	**4.448 222**	Newton [N]	Pound-Force [lbf]	**0.224 809**
Bending Moment					
Pound-Force-Inch [lbf-in]	Netwon-Meter [N-m]	**0.112 985**	Netwon-Meter [N-m]	Pound-Force-Inch [lbf-in]	**8.850 732**
Pound-Force-Foot [lbf-ft]	Newton-Meter [N-m]	**1.355 818**	Newton-Meter [N-m]	Pound-Force-Foot [lbf-ft]	**0.737 562**
Pressure, Stress					
Pound-Force per Square Inch [lbf/in^2]	Kilopascal [kPa]	**6.894 757**	Kilopascal [kPa]	Pound-Force per Square Inch [lbf/in^2]	**0.145 038**
Foot of Water (39.2 F)	Kilopascal [kPa]	**2.988 980**	Kilopascal [kPa]	Foot of Water (39.2 F)	**0.334 562**
Inch of Mercury (32 F)	Kilopascal [kPa]	**3.386 380**	Kilopascal [kPa]	Inch of Mercury (32 F)	**0.295 301**
Energy, Work, Heat					
Foot-Pound-Force [ft-lbf]	Joule [J]	**1.355 818**	Joule [J]	Foot-Pound-Force [ft-lbf]	**0.737 562**
British Thermal Unit [Btu]	Joule [J]	**1,055.056**	Joule [J]	British Thermal Unit [Btu]	**0.000948**
Calorie [cal]	Joule [J]	**4.186 800**	Joule [J]	Calorie [cal]	**0.238 846**
Kilowatt Hour [kW-h]	Joule [J]	**3,600,000**	Joule [J]	Kilowatt Hour [kW-h]	**2.78^{-7}**
Power					
Foot-Pound-Force /Second [ft-lbs/s]	Watt [W]	**1.355 818**	Watt [W]	Foot-Pound-Force /Second [ft-lbs/s]	**0.737 562**
British Thermal Unit /Hour [Btu/h]	Watt [W]	**0.293 071**	Watt [W]	British Thermal Unit /Hour [Btu/h]	**3.412 142**
Horsepower (550 Ft. Lbf/s) [hp]	Kilowatt [kW]	**0.745 700**	Kilowatt [kW]	Horsepower (550 Ft. Lbf/s) [hp]	**1.341 022**
Angle					
Degree	Radian [rad]	**0.017 453**	Radian [rad]	Degree	**57.295 788**
Temperature					
Degree Fahrenheit [F]	Degree Celsius [C]	**(F° -32)/1.8**	Degree Celsius [C]	Degree Fahrenheit [F]	**1.8xC°+32**

Metal Framing Part Number Index

Metal Framing Components

Metal Framing Part Number Index

Metal Framing, Power-Angle & Fiberglass Framing Part Number Index

Fiberglass Framing & Structural Shapes Part Number Index

POWER-STRUT®

Fiberglass Structural Shapes & Fiberglass Grating Part Number Index & Keyword Index

Keyword Index

Keyword Index

Keyword Index

Keyword Index

We reserve the right to make specification changes without notice.

While every effort has been made to assure the accuracy of information contained in this catalog at the time of publication, we cannot accept responsibility for inaccuracies resulting from undetected errors or omissions.

ALLIED ELECTRICAL™ Group

Allied Electrical Conduit

Steel Conduit
- Rigid (GRC)
- IMC

Aluminum Conduit
- Rigid
- Aluminum Elbows
- Aluminum Couplings

Steel EMT
- True Color™ EMT
- Fire Alarm™
- Blue EMT
- E-Z Pull® EMT

Kwik Products
- Kwik-Fit® EMT (built-in set-screw coupling)
- Kwik-Couple® IMC/GRC (built-in 3 piece rotating coupling)
- Kwik-Fit® Compression EMT (built-in compression fitting)

PVC
- Rigid PVC
- Schedule - 40 & 80 Products
- EB/DB Duct
- Fittings, Spacers, & Accessories

AFC Cable Systems®

AC & MC Cable
- MC TUFF® Lightweight Steel (MC) Cable
- MC TUFF® IG (MC) Cable with Isolated Ground
- MC-Lite® Metal Clad Aluminum (MC) Cable
- HCF-90® & HCF-Lite®
- AC-90® & AC-Lite®
- Fire Alarm/Control Cable™
- Home Run Cable®
- Parking Deck/Lot Cable™
- Super Neutral Cable®

Flexible Conduit
- LIQUID-TUFF™ Liquid-Tight Flexible Conduit
- Full and Reduced Wall Flexible Metal Conduit

Fittings
- EMT Steel Compression & Set-Screw Fittings
- Liquid-Tight Metallic & Non-Metallic Fittings
- MC/AC Cable Connectors

AFC Accessories
- Lighting, Power, & Appliance Whips
- Temp-Lites®
- Bare Armored Ground

ACS/Uni-Fab
- Modular Lighting Systems
- Raised Floor Assemblies
- Pre-Fab Assemblies
- Custom Fabrication

Power-Strut® Framing Systems

Channel
- Steel Channel
- Aluminum Channel
- Stainless Steel Channel
- Fiberglass Channel
- Junior Strut

Fittings & Accessories
- Strut Brackets
- Strut Fittings
- Pipe Clamps
- Threaded Rods
- Fiberglass Fittings
- Junior Strut Fittings
- Concrete Inserts
- Power-Angle® Slotted Angles

Finishes
- Pre-Galvanized Channel
- Power-Green® Channel
- Hot-Dip Galv. Channel
- Power-Gold™ Channel

Cope® Cable Tray Systems

Aluminum Tray
- Aluminum Ladder Tray
- Aluminum Hat Tray
- Aluminum Trof Tray
- Aluminum Channel
- Aluminum Fittings

Steel Tray
- Steel Ladder Tray
- Steel Hat Tray
- Steel Trof Tray
- Steel Channel
- Steel Fittings

Fiberglass Tray
- Cope-glas™ Fiberglass Tray
- Fiberglass Fittings

Wire Basket
- CAT-TRAY™ Wire Basket
- CAT-TRAY™ Accessories

Center Hung Tray
- Centipede® Center Hung Tray
- Centipede® Accessories

Other Cope Products
- Cable Channel

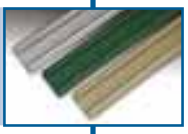
POWER-STRUT®

POWER-STRUT® Framing Systems
Family of Innovative Products

- CHANNELS

- BRACKETS & INSERTS

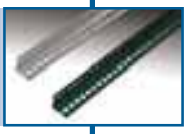
- VARIETY OF FINISHES



- PLATES

- CLAMPS

- POWER-ANGLE®
  Slotted Angles



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